

**National Aeronautics and  
Space Administration  
&  
Moon to Mars Program**

**Economic Impact Study**



August 2020

The Nathalie P. Voorhees Center for  
Neighborhood and Community Improvement,  
University of Illinois at Chicago

## Acknowledgements

**The Nathalie P. Voorhees Center for Neighborhood and Community Improvement (Voorhees Center)** is an applied research and technical assistance unit in the College of Urban Planning and Public Affairs at the University of Illinois at Chicago. Its mission is to promote quality of life and wellbeing by assisting and working with local organizations, government entities and other stakeholders in efforts to understand and develop communities.

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We wish to thank everyone at the Marshall Space Flight Center and NASA headquarters who contributed to the completion of this study. Special thanks to Jason Shoemate and Gary Willis for their effective management and coordination of this effort. Clarifications provided by Ms. Alesyn Lowry to our many inquiries about technical data and information were invaluable. We also thank everyone who provided feedback on the content and presentation of the report at various stages of the study.



## EXECUTIVE SUMMARY

This study is an assessment of the economic impacts of the National Aeronautics and Space Administration (NASA) and the Moon to Mars Program (M2M) for the Fiscal Year 2019. The assessment consists of two parts. The first part presents the estimation of NASA impacts on the U.S. as a whole, fifty (50) states, and the District of Columbia (DC). The second part analyzes economic impacts attributable to the M2M program on the same set of regions. The purpose of the economic impact assessment is to quantify the changes in employment, income, levels of business activity, and government revenue throughout the entire economy that result from NASA's activities and that of the M2M program.

### National Aeronautics and Space Administration (NASA)

The National Aeronautics and Space Administration (NASA) supports hundreds of thousands of jobs and contributes hundreds of millions of dollars of tax base for states and the nation. This report tracks and details economic impact of NASA expenditures across the United States, in the fifty states, and Washington, DC for the Fiscal Year 2019. The report estimates the economic benefits generated directly by NASA along with the very substantial additional economic activity created through the purchasing actions, labor income, and consumption spending that follow from the operations of the NASA centers and programs.

At the national level, NASA directly employs 18,694 civil servants (corresponding to 17,022 full-time equivalent (FTE) jobs), paying \$2.9 billion in annual wages and benefits (Fiscal Year 2019). Yet NASA's economic impact goes well beyond its immediate employment footprint. Wide-ranging benefits are created for local and state economies as well as the U.S. economy as a whole as NASA contracts for goods and services boost activity throughout in the economy. The nearly \$19.3 billion in contracting activity originating from NASA is very diverse, involving varied sets of manufacturing and service production sectors.<sup>1</sup>

The impact estimates reported in this study are the sum of three channels of economic impact: (1) the direct contribution of NASA's own activities<sup>2</sup>; (2) indirect (contracting) activities within NASA's U.S. supply chain; and (3) the induced effect that results as federal civil servants at NASA facilities, employees of contractors, and employees within the supply chain of those contractors spend their wages in the wider consumer economy.<sup>3</sup> Some highlights of the economic impacts that occur throughout the national economy from the activities of NASA include:

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<sup>1</sup> NASA contracting activity and labor income adds up to approximately \$22.2 billion (note that procurement activity is inclusive of PCard purchases).

<sup>2</sup> The economic activities carried out directly by NASA civil servants only. These do not include goods and services provided by NASA contractors.

<sup>3</sup> We used IMPLAN's industry and geography specific induced multipliers. The model we constructed uses a separate induced multiplier for every pair of industries that capture impacts of labor income spending occurring in any given sector on any other sector.

- The total amount of employment sustained by NASA across the U.S. is 312,630 jobs.<sup>4</sup>
- At the national level, NASA supports labor income of \$23.7 billion per year and total economic output of \$64.3 billion annually. The approximately \$75,657 in average annual labor income per job is nearly 20% greater than the average across the U.S. (\$62,977). The difference between average labor income (including wages and benefits) for a NASA civil servant (\$155,370) and the U.S. average (\$62,977) is much more significant (145% greater), indicating the highly skilled, high-paid nature of NASA jobs compared to the average job in the U.S. economy.
- NASA generates an estimated \$6.9 billion in federal, state, and local tax revenues throughout the U.S. annually.
- For every FTE job located at a NASA facility, more than 17 additional jobs are supported throughout the U.S. economy. For each million dollars of labor income earned by NASA civil service employees, an additional \$7 million of labor income is generated in the U.S. And for each million dollars worth of output produced by NASA, an additional \$7.7 million of output—consisting of both intermediary inputs and consumption goods and services—is produced throughout the national economy. These figures are boosted by the large volume of procurement spending administered through NASA.<sup>5</sup>
- The top ten most impacted sectors account for around half of total NASA impacts. Scientific research and development services and management consulting services are the most affected sectors—nearly a quarter of total NASA impacts are concentrated in these two sectors.
- NASA impacts are concentrated geographically as well. The top ten most impacted states account for 92 percent of total NASA impacts. These states are California, Texas, Alabama, Maryland, Florida, Virginia, Colorado, Ohio, Arizona, and Utah. Impacts on Mississippi, Washington, DC, Massachusetts, Louisiana, New York, Indiana, New Mexico, and Pennsylvania are also significant. Figures 1 and 2 below illustrate the employment and output impacts of NASA across the states.
- Finally, approximately 22% of overall NASA agency impacts in the U.S. are attributable to the M2M program.<sup>6</sup> It is still early in the M2M program; consequently, the contribution is expected to grow larger with the addition of other elements beyond 2019. The M2M program-specific employment accounts for 2.4% of overall NASA employment impacts

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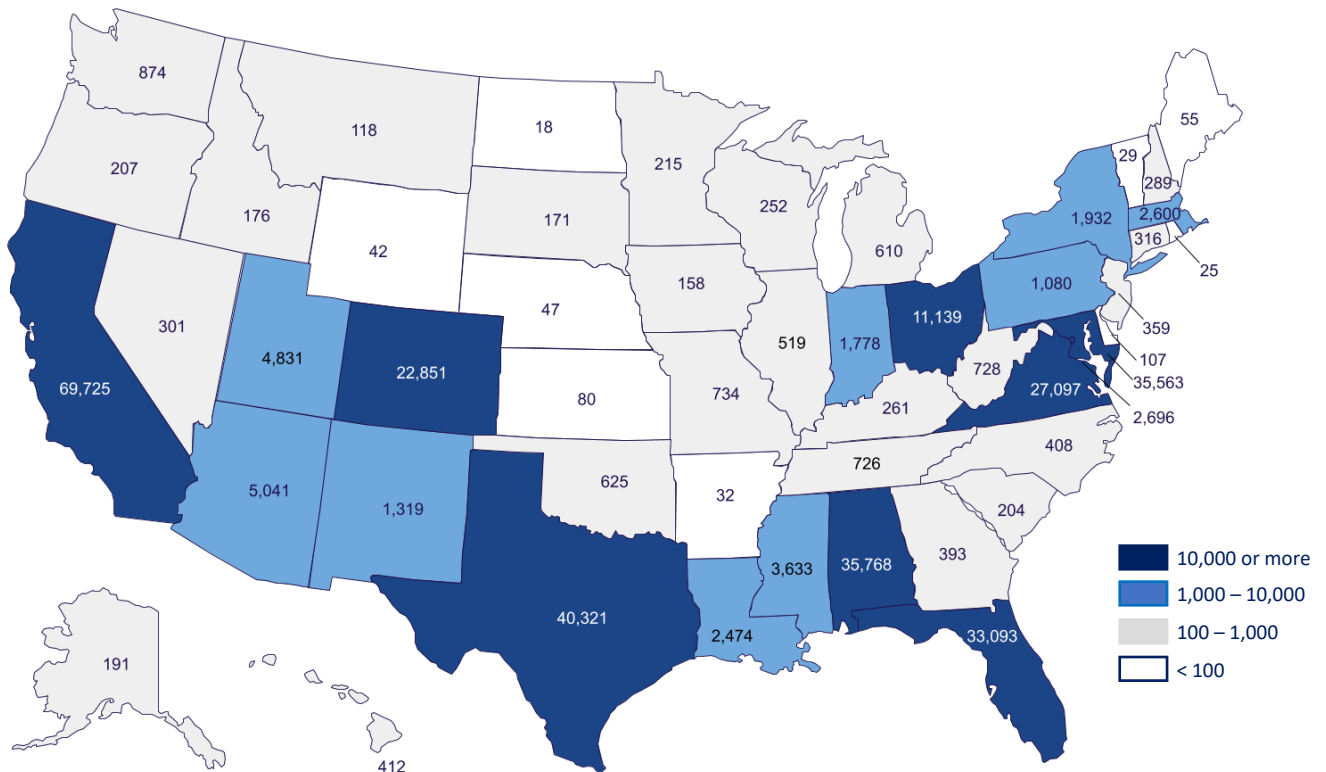
<sup>4</sup> Jobs are reported as an annualized combination of full- and part-time jobs based on the average output per employee for a given industry.

<sup>5</sup> The multipliers reported here are larger than is typical for this kind of study because of the volume of NASA contracting activity, all of which is classified as indirect impact. Additional multipliers calculated in the “conventional” way are reported in the Appendix. Two sets of multipliers are presented: one set for NASA employment and one for NASA procurement spending.

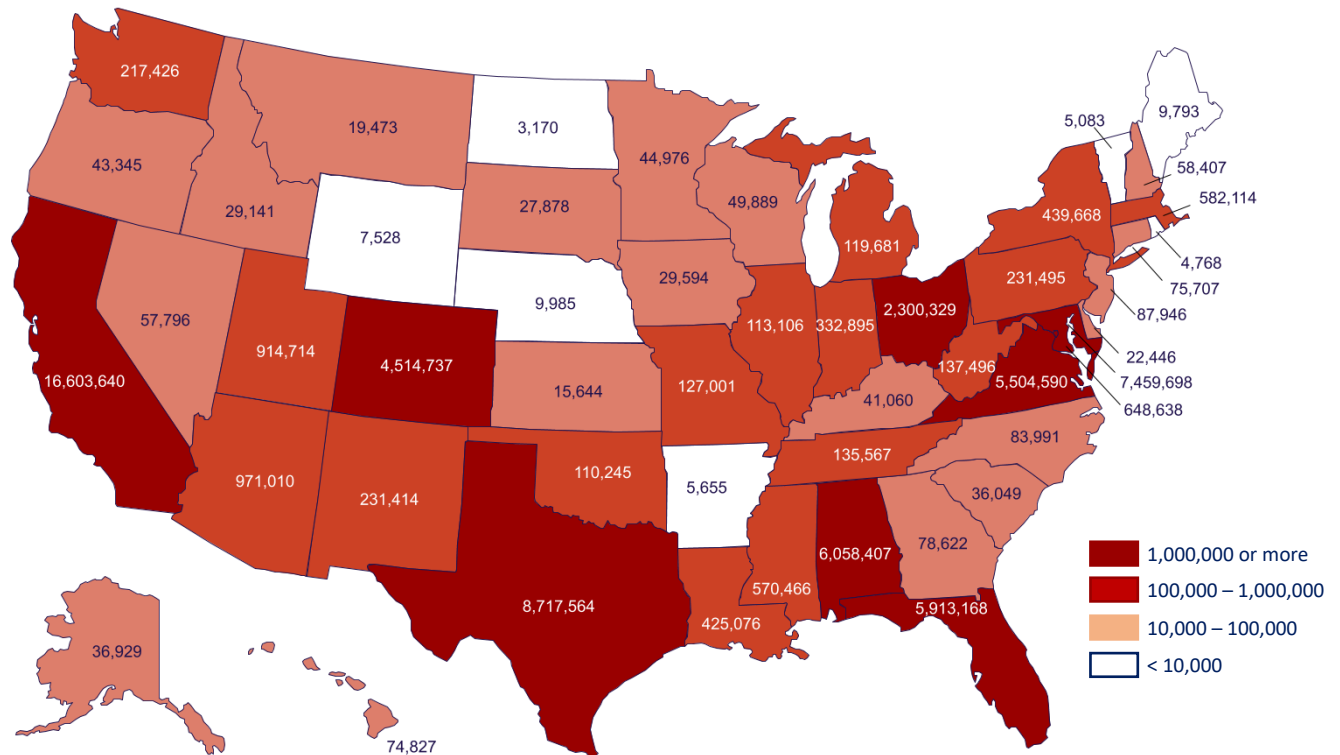
<sup>6</sup> NASA impacts are inclusive of all M2M impacts discussed in the following pages.

while M2M program-related procurement accounts for 19.7% of overall NASA employment impacts. As for economic outputs, the M2M program-specific employment accounts for 3.5% of overall NASA output impacts, while M2M program-related procurement accounts for 18.7% of overall NASA output impacts. The reason the M2M program employment's share of overall NASA output impacts is larger than its share of overall NASA employment impacts is that average output per employee is higher for civil servants than it is for aerospace supply chain employees.

**Figure 1: NASA Employment Impacts by State (employment consists of combination of full and part-time jobs)**



**Figure 2: NASA Output Impacts by State (in \$ thousands)**



## Moon to Mars (M2M) Program

NASA's Moon to Mars program is focusing on returning humans to the Moon and cislunar space, with eventual missions to Mars and beyond. NASA has developed a phased approach for this activity, starting with robotic lunar landers and progressing to human activity in cislunar space, the lunar surface, then eventually to Mars and beyond. With this program, NASA plans to:

- Fully support integration, testing, and the first flights of the Space Launch System (SLS) and Orion crew capsule, NASA-developed systems required to get to the Moon quickly and safely,
- Complete assembly of the U.S. elements of, and begin supplying and operating from, the Lunar Gateway - establishing the exploration infrastructure orbiting the Moon,
- Demonstrate key exploration technologies, including precision landing, cryogenic fluid management, in-situ resource utilization, and surface nuclear power to support sustainable lunar exploration and future missions to Mars,
- Utilize commercial lunar landers to deliver NASA science instruments and exploration technology demonstration payloads to the lunar surface,
- Launch a Mars Sample Return mission as early as 2026 and initiate a Mars Ice Mapper mission,
- Ensure investments in the required capabilities, workforce, and facilities needed to guarantee safety and mission success.

NASA's Moon to Mars (M2M) program employs hundreds of highly paid skilled professionals, and the U.S. Government channels billions of dollars of federal spending on M2M into the states in the form of contracts. At the national level, NASA directly employs 5,563 civil servants (3,155

FTEs) to support the M2M program, paying more than \$520 million in annual wages and benefits. It is still early in the M2M program; consequently, the share of M2M program in NASA activities is anticipated to grow larger with the addition of other elements beyond 2019. The M2M program's economic impact goes well beyond its immediate economic footprint represented by the employment of M2M-assigned NASA civil servants. Wide-ranging benefits are created for the local and state economies as well as the U.S. economy as its contracting for goods and services boosts economic activity elsewhere in the country. The \$4.4 billion in M2M contracting activity originating from NASA headquarters and centers involves almost every major category of manufacturing or service production. M2M contracts to firms, government agencies, and academia not only support the U.S. aerospace industry but also result in advanced development and innovative solutions in areas including materials, structures, avionics, software, and analysis techniques.

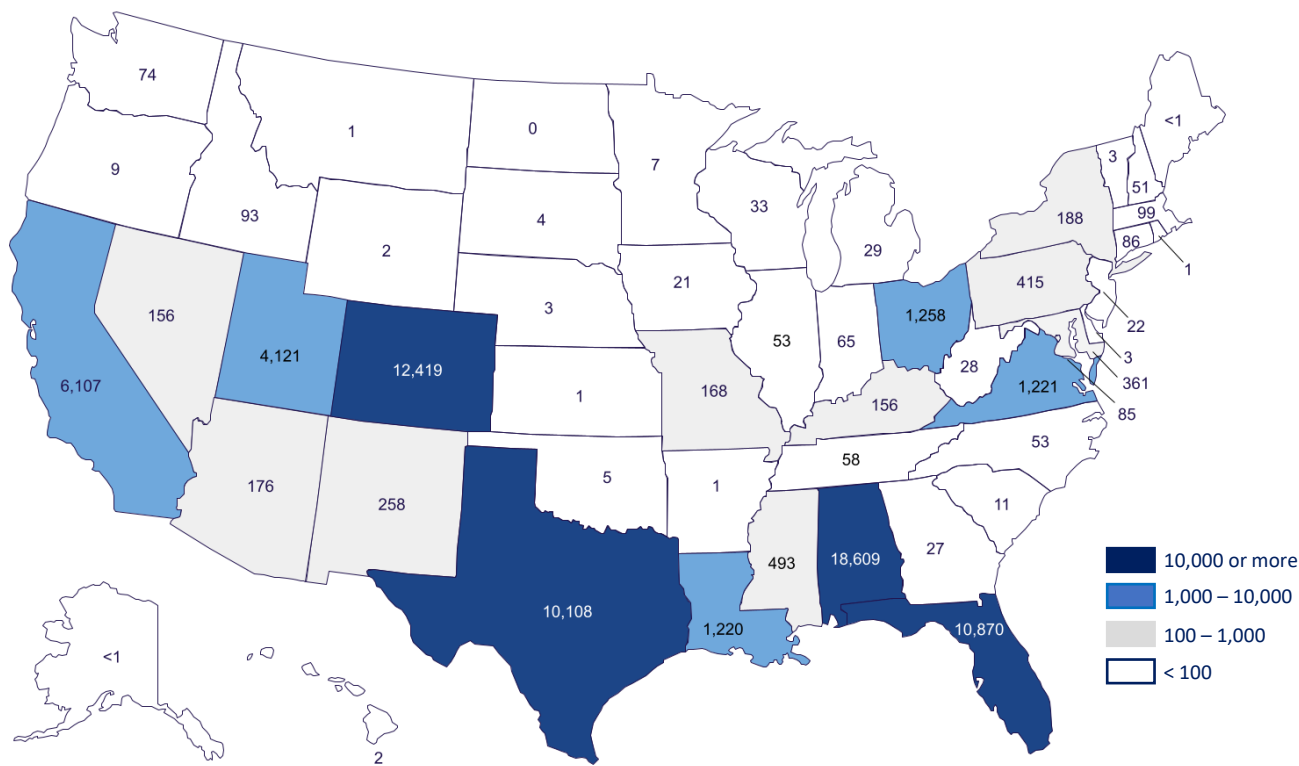
Some highlights of the economic impacts that occur throughout the national economy from M2M activities include:

- The total amount of employment generated by M2M activities across the U.S. is more than 69,200 jobs.<sup>7</sup>
- The M2M program supports labor income of \$5.2 billion per year and total economic output of \$14.1 billion annually.
- The M2M program generates an estimated \$1.5 billion in federal, state, and local tax revenues throughout the U.S. each year.
- For every (FTE) civil service job located at NASA centers related to M2M, nearly 21 additional jobs are supported throughout the U.S. economy. For each million dollars of labor income earned by M2M-assigned NASA employees, an additional \$9 million of labor income is generated in the U.S. And for each \$1 million worth of output produced by the M2M program, an additional \$9.4 million of output—consisting of both intermediary inputs and consumption goods and services—is produced throughout the national economy. These figures are exceptionally large because of the extremely high volume of procurement spending relative to civil service employment.
- Finally, Figures 3 and 4 below illustrate the employment and output impacts of the M2M program across the states. Alabama, Colorado, Florida, Texas, California, Utah, Ohio, Virginia, Louisiana, and Mississippi are the most impacted states, respectively. These ten states account for 96 percent of all M2M-related impacts. As a share of overall NASA impacts, M2M program impacts are heavily concentrated in some states. More than half of overall NASA impacts in Utah, Colorado, and Alabama are attributable to the M2M program (Figure 5).

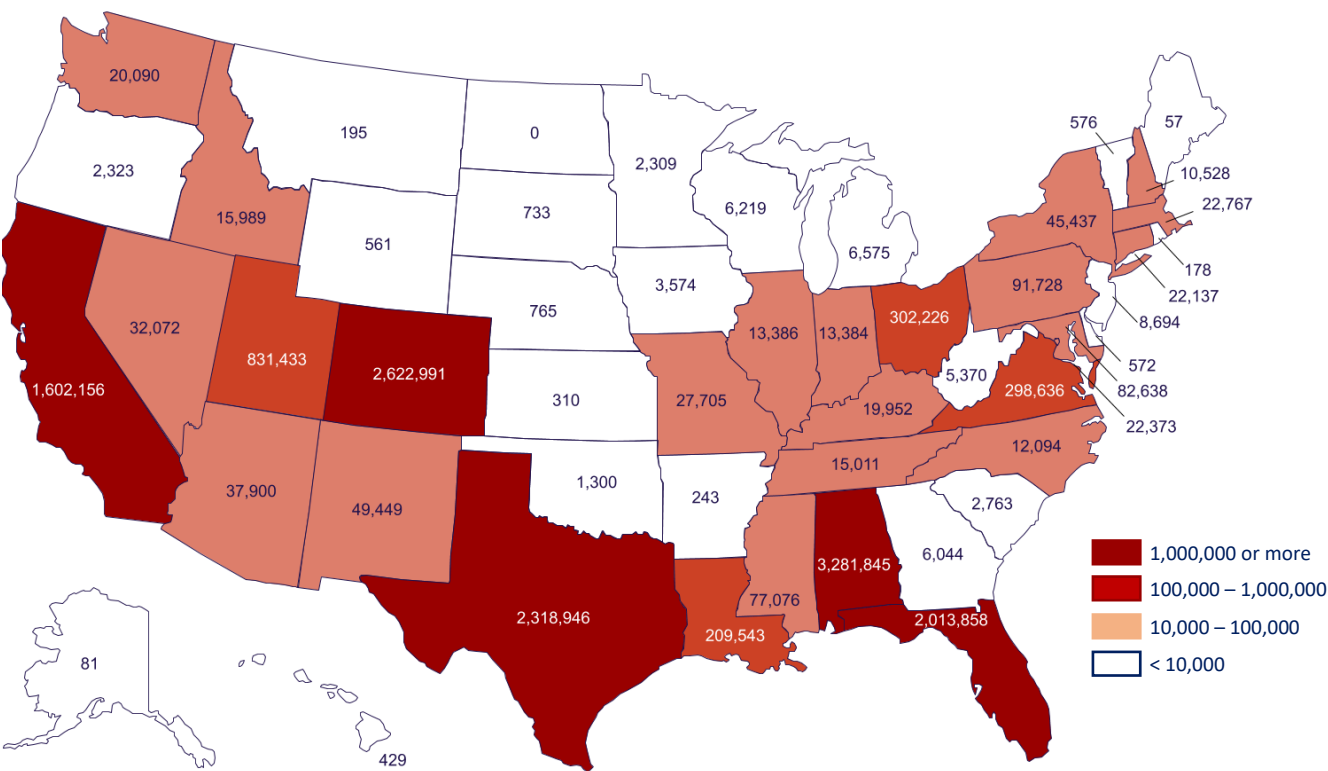
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<sup>7</sup> M2M impacts are completely a subset of NASA impacts discussed in the previous page.

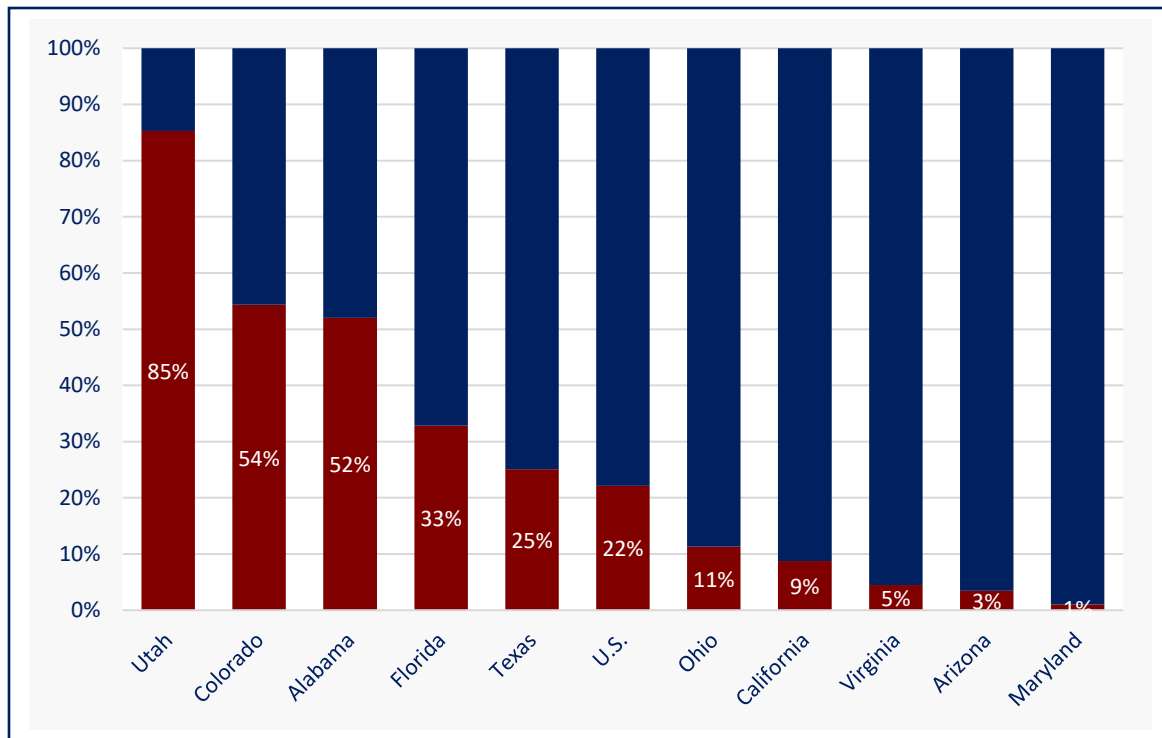
**Figure 3: M2M Employment Impacts by State (employment consists of combination of full and part-time jobs)**



**Figure 4: M2M Output Impacts by State (in \$ thousands)**



**Figure 5: The Share of M2M Program Impacts in Overall NASA Impacts by Top Ten States (employment, based on FY 2019)**



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## 1. INTRODUCTION

This study is an assessment of the economic impacts of the National Aeronautics and Space Administration (NASA) and the Moon to Mars (M2M) Program for the Fiscal Year 2019. The assessment consists of two parts. The first part presents the estimation of NASA impacts on the U.S. as a whole, fifty (50) states, and the District of Columbia (DC). The second part analyzes economic impacts attributable to the M2M program on the same set of regions. The purpose of the economic impact assessment is to quantify the changes in employment, income, levels of business activity, and government revenue throughout the entire economy that result from NASA's activities and the M2M program.

An input-output modeling framework is used to estimate the impacts. We utilize IMPLAN (IMpact analysis for PLANning) software and 2018 industry data, the most current dataset available at the initiation of the study (See Box 1). We present direct, indirect, and induced employment impacts along with output, labor income, and tax revenue impacts for each of the geographic regions mentioned above (See Boxes 2 and 3 for definitions).

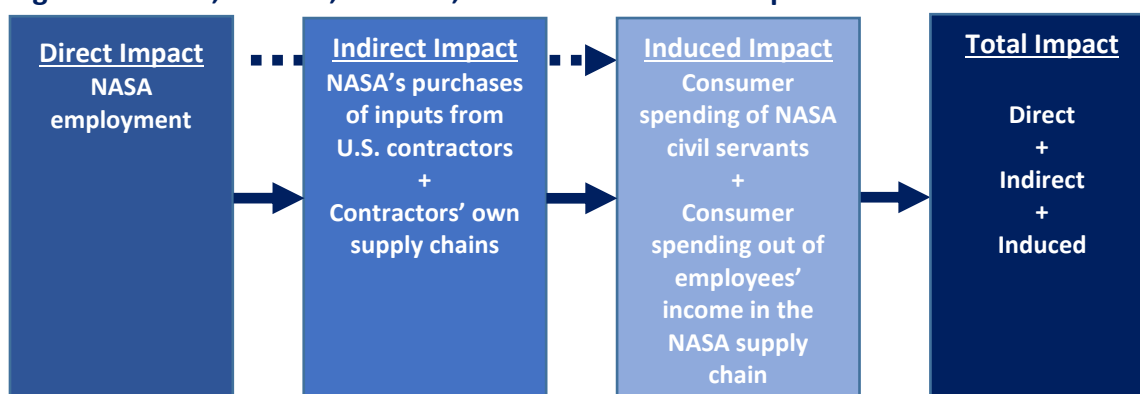
### **Box 1: IMPLAN Industry Data**

We used 2018 industry data (economic modeling data from IMPLAN), FY2019 NASA procurement, and FY2019 NASA labor income data (provided by NASA). The economic modeling data are the estimates of industry-to-industry purchasing and spending interactions that are produced by IMPLAN. Regarding potential impacts on results if we were to use 2019 model data, the implications are not likely to be significant. This is so because IMPLAN model data updates are relatively minor except for every five years when the company makes substantial changes to its database based on the benchmark input-output (I-O) accounts developed by the Bureau of Economic Analysis (BEA). (And even then, most industry supply and purchasing relationships are quite consistent over time, only a few industries change substantially more rapidly.). The 2018 data we used in this study incorporates the latest updated industry statistics and benchmark I-O accounts of BEA. Given the 2018 data incorporates the latest benchmark I-O table and updated industry statistics, 2019 data would not impact the estimates provided in this study significantly.

Benchmark I-O accounts are one of the major elements of the U.S. national and industry economic accounts. They provide detailed statistics on economic processes and relationships, and they provide essential information for other economic accounts. They are used to set the level of GDP in the NIPAs (national income and product accounts), and they provide commodity detail on the composition of the final-use categories. In addition, they provide information on what industries use to produce their output and on what commodities are produced by each industry. The benchmark I-O accounts consist of make tables, use tables, and direct and total requirements tables. They are prepared at about 5-year intervals, primarily from Economic Census data.

**Box 2: Types of Economic Impact**

- **Direct impacts** – the activity or event to be assessed, typically specified as a change in demand for the output of an industry or a change in an industry’s employment.
- **Indirect impacts** – economic activity resulting from the increase or decrease in input purchases within the region by the industry directly impacted in response to the change in demand or employment. In the context of this study, indirect effects are the purchases of goods and services by government agencies and private industry tenants as well as by the industries that supply them. Examples include an aerospace firm carrying out contract work for NASA and that aerospace firm’s purchases of electronic components and engineering consulting services from other firms to enable its own production.
- **Induced impacts** – economic activity resulting from all affected industries paying wages and benefits to their employees and allocating profit to their owners, some portion of which is spent within the region on consumer goods and services.
- **Total impacts** – the sum of direct, indirect, and induced impacts (see Figure 1).

**Figure 1: Direct, Indirect, Induced, and Total Economic Impacts.**

**Note:** This figure is adapted from Oxford Economics (2015). Analogous illustration is applicable to M2M Impact Model as well.

The modeling approach adopted in this study is to represent outcomes of complex economic relations in aggregate form to enable ready connections between impact-generating event categories and their impacts. Accordingly, beside the estimates of the total economic impacts, our report provides impact multiplier factors (or multipliers for short) for different types of outcomes (see Box 4) that can be used to quickly assess the total scope and sectoral impact of relatively small employment and procurement changes in the future. The shift in the triggering or direct event—such as an increase in employment or a decrease in procurement amount—can simply be multiplied by the relevant outcome multiplier to produce an estimate of the total effect magnitude (direct, indirect, and induced). This procedure is appropriate for situations in which major economic features and relationships, such as employee location patterns and industry purchasing linkages, are not expected to change. Small shifts are generally appropriate, but large changes in the economy may alter inter-industry relationships and require



model reevaluation. (The threshold where changes shift from small to large is determined by analyst judgment.)

**Box 3: Types of Economic Activity**

- **Employment** – the annual average of monthly jobs in the economy/industry. The number consists of both *full-time and part-time* jobs.
- **Labor Income** – total of all forms of employment income for a year, including employee compensation (wages and benefits) and proprietor income.
- **Value Added** – the difference between an industry's, or an establishment's, total output and the cost of its intermediate inputs for a year. Value added is, equivalently, payment to labor (employee compensation) and rent to capital (profit) plus business taxes. Value added is a measure of the contribution to gross domestic product (at the national, state, or local scale) made by an individual producer, industry, or sector. Direct value added is calculated using the estimated ratios of value added-to-employee in the following industries: (i) guided missile and space vehicle manufacturing, (ii) propulsion units and parts for space vehicles and guided missiles.
- **Output** – the value of annual industry production. Output is reported in producer prices, separating margins such as for wholesale distribution, transportation, and retail into those respective industries. Production at NASA facilities has three components: (1) The direct output component represents the value of all activities at NASA (research and development, production, and management), including both those outputs that are sold to consumers (final consumption) and those that are inputs into further production (intermediary products and services). Direct output is calculated using the estimated ratios of output-to-employee in the following industries: (i) guided missile and space vehicle manufacturing, (ii) propulsion units and parts for space vehicles and guided missiles (2) The indirect component is the value of the goods and services produced in industries that supply the activities at NASA facilities, and the value of the goods and services that are in the supply chain of those industries. (3) The induced component is the value of goods and services, both intermediary and final consumption, that are produced in response to labor income spending of employees in all affected industries. Please note that the term production as used here is not equivalent to product as used in Gross Domestic Product or Value Added (see above).
- **Tax Revenues** – the annual taxes collected by federal, state, and local governments through income, payroll, import, corporate, and property taxes, as well as some forms of licenses. Tax revenue estimates are generated from the application of average (per capita and per employee) tax rates and license fees averaged across multiple jurisdictions within a study region and should be treated as only rough approximations.



**Box 4: Multipliers**

- **Employment multiplier** – the estimated ratio of the change in total local employment to the change in direct employment. For example, an employment multiplier of 3.00 indicates that the creation of 1 direct new job is expected to support 2 additional jobs in the local economy, for a total impact of 3 new jobs.
- **Income multiplier** – the estimated ratio of the change in total income throughout the local economy to the change in income from direct employment. It is calculated analogously to the employment multiplier. For example, an income multiplier of 2.75 indicates that a \$1.00 change in income in the industry directly affected by the events being considered is expected to result in an additional income of \$1.75 throughout the local economy, for a total income impact of \$2.75.
- **Value added multiplier** – the estimated ratio of the change in total value added throughout the local economy to the change in value added from direct employment. The value added multiplier is calculated analogously to the employment, income, and output multipliers.
- **Output multiplier** – the estimated ratio of the change in total output (i.e., gross sales and additions to inventory) throughout the economy to the change in output from direct employment. The output multiplier is calculated analogously to the employment, income, and value added multipliers.

**1.1. National Aeronautics and Space Administration (NASA)<sup>1</sup>**

The National Aeronautics and Space Administration (NASA) is responsible for unique scientific and technological achievements in human spaceflight, aeronautics, space science, and space applications that have had widespread impacts on our nation and the world. Established in 1958, NASA has been the center of U.S. civil aerospace research and development for more than half a century.

In addition to agency leadership (Headquarters), NASA has research and flight centers and facilities with unique capabilities:

**NASA Research and Flight Centers**

- Ames Research Center (IT, fundamental aeronautics, bio and space science technologies)
- Armstrong Flight Research Center (Flight research)
- Glenn Research Center (Aeropropulsion and communications technologies)
- Goddard Space Flight Center (Earth, the solar system, universe observations, and space communications and navigation)
- Johnson Space Center (Human space exploration)
- Kennedy Space Center (Prepare and launch missions around the Earth and beyond)

<sup>1</sup> Information is obtained from <https://www.nasa.gov/content/nasa-history-overview> and [https://www.nasa.gov/about/org\\_index.html](https://www.nasa.gov/about/org_index.html)

- Langley Research Center (Aviation, space technology and Earth science)
- Marshall Space Flight Center (Space transportation and propulsion technologies)
- Stennis Space Center (Rocket propulsion testing and remote sensing technology)
- Goddard Institute for Space Studies (Broad study of global climate change)

#### ***NASA Facilities and Labs***

- Jet Propulsion Laboratory (Robotic exploration of the solar system)
- Katherine Johnson Independent Verification and Validation Facility (Provides safety and cost-effectiveness for mission critical software)
- Michoud Assembly Facility (Manufacture and assembly of critical hardware for exploration vehicles)
- NASA Engineering and Safety Center (Independent testing, analysis, and assessments of NASA's high-risk projects)
- NASA Safety Center (Development of personnel, processes and tools needed for the safe and successful achievement of strategic goals)
- NASA Shared Services Center (Financial management, human resources, information technology, and procurement)
- Wallops Flight Facility (Suborbital Research Programs)
- NASA Goddard Institute for Space Studies (New York)
- NASA Sands Test Facility (Dona County, New Mexico)

Results from NASA's research and development activities ripple throughout the national economy, supporting high-tech industries and creating or sustaining tens of thousands of knowledge-intensive jobs. In addition, NASA invests in economically valuable technologies that help the nation maintain its competitive advantage. NASA develops hundreds of new technologies each year and transfers thousands of products, services, and processes to private businesses. These transfers improve U.S. businesses productivity and global competitiveness. Given the multidimensional nature of the benefits originating from NASA facilities, no single metric can capture the returns from its activities. This report focuses on NASA's economic impacts that can be reliably and precisely quantified through economic input-output models.

### **1.2. Moon to Mars (M2M) Program<sup>2</sup>**

The Moon to Mars program is focusing on returning humans to the Moon and cislunar space, with eventual missions to Mars and beyond. NASA has developed a phased approach for this activity, starting with robotic lunar landers and progressing to human activity in cislunar space, the lunar surface, then eventually to Mars and beyond. With this program, NASA plans to achieve:

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<sup>2</sup> Information is obtained from [https://www.nasa.gov/sites/default/files/atoms/files/fy2021\\_congressional\\_justification.pdf](https://www.nasa.gov/sites/default/files/atoms/files/fy2021_congressional_justification.pdf)

- Fully support integration, testing, and the first flights of the Space Launch System (SLS) and Orion crew capsule, NASA-developed systems required to get to the Moon quickly and safely,
- Complete assembly of the U.S. elements of, and begin supplying and operating from, the Lunar Gateway - establishing the exploration infrastructure orbiting the Moon,
- Demonstrate key exploration technologies, including precision landing, cryogenic fluid management, in-situ resource utilization, and surface nuclear power to support sustainable lunar exploration and future missions to Mars,
- Utilize commercial lunar landers to deliver NASA science instruments and exploration technology demonstration payloads to the lunar surface,
- Launch a Mars Sample Return mission as early as 2026 and initiate a Mars Ice Mapper mission,
- Ensure investments in the required capabilities, workforce, and facilities needed to guarantee safety and mission success.

### ***Deep Space Exploration Systems***

The Human Landing System program will utilize commercial partnerships to develop and jointly deploy an integrated landing system to transport humans to and from the lunar surface. NASA expects its commercial partners will heavily leverage NASA technology and expertise throughout the development process, leading to an integrated lunar transportation system that will deliver humans to the lunar surface in 2024, and develop and demonstrate a more sustainable HLS for subsequent crewed missions. NASA is leading the way by preparing to carry humans farther into deep space than ever before. The Space Launch System (SLS), the Orion Crew Capsule, and Exploration Ground Systems (EGS) together represent a critical piece of the Moon to Mars campaign, and the Artemis program. All three programs will conduct readiness reviews prior to the potential launch of Artemis I, while preparing and upgrading necessary systems for the launches of Artemis II and III. NASA will continue to develop the Gateway, conducting project level design reviews of the Power and Propulsion Element (PPE) and the Habitation and Logistics Outpost (HALO), and continuing development of program-level functions such as avionics, flight software, and future capabilities such as in-space refueling. NASA will use the Gateway infrastructure as part of a broader strategy to enable long term exploration and utilization of the Moon and its surface. Advanced Cislunar and Surface Capabilities and Advanced Exploration Systems will focus on supporting lunar technology development efforts, including flight and surface elements, life support systems, and crew health improvement.

### ***Exploration Technology***

Research and development of new technologies and capabilities lays the groundwork for enhancing and enabling lunar and deep space exploration. Exploration Technology will continue to focus its activities toward lunar and deep space exploration, enabling NASA's

workforce, in concert with industry and academia, to develop innovative ways to further humankind's space exploration from conception to testing to spaceflight. The Exploration Technology request supports the Lunar Surface Innovation Initiative as well as other technology research and development projects along the entire Technology Readiness Level spectrum that align with NASA exploration needs and support commercial expansion in space. The Lunar Surface Innovation Initiative serves as a catalyst for lunar surface technology development priorities such as: surface power, in situ resource utilization (ISRU), autonomous operations, and extreme environment technology. During 2021, the Space Technology Mission Directorate (STMD) aims to deliver the Solar Electric Propulsion in support of the Power and Propulsion Element of Gateway, to complete testing and initiate a flight demonstration of the Laser Communications Relay Demonstration mission, and to continue to advance Space Nuclear technologies to support the Moon to Mars campaign.

### ***Scientific Exploration***

Another critical element of exploration comes from NASA's Science Mission Directorate (SMD), which will continue its efforts to explore and enhance scientific discovery. The Moon to Mars effort within Science is made up of the Lunar Development and Exploration Program (LDEP), the Mars 2020 rover, and future Mars robotic missions including the Mars Sample Return mission and Mars Ice Mapper. Future Mars robotic exploration will support decadal science objectives as well as lay the groundwork for future manned missions to Mars. NASA is developing a series of instruments, experiments, and other payloads for robotic lunar missions to the surface of the Moon, which will launch using the Commercial Lunar Payload Services (CLPS) project. NASA is utilizing innovative acquisition approaches to engage U.S. industry capabilities as the Agency moves toward human exploration of the lunar surface. NASA intends to also work with international partners in this endeavor, delivering meaningful scientific exploration and technology development work in a cost-effective way.

### ***Mission Support***

The technology capabilities and processes pioneered by the Artemis effort will enable the first intrepid crews of the new space age to travel safely to and from the surface of the Moon, mature sustainability on the Moon, and land on the surface of Mars. This will enable new scientific discoveries and promote new technologies, research, and the systems needed to sustain living in deep space for the benefit of all humankind. It will serve as an inspiration to the world and solidify the United States' preeminence in space exploration, making a human presence on the Moon and beyond an expectation, not a dream.

## **1.3. Report Organization**

The extensive activities of NASA and the unique capabilities of the Moon-to-Mars program encompass significant research and development (R&D) as well as

manufacturing in aerospace and related industries that require the hiring of thousands of highly skilled scientists and engineers. NASA expends millions of dollars in many states in the form of direct employment and contracts with private sector vendors. This infusion of federal spending in the form of labor income and procurement in turn supports thousands of additional jobs and millions of dollars of state and local government tax revenues across the country. This study quantifies these economic impacts and analyzes their significance for the economies involved.

The report is organized as follows. Immediately following this introduction, Section 2 surveys the pertinent literature and provides a brief theoretical background for the modeling process, describing the steps taken to conduct the economic impact analysis. Section 3 describes the data used in the study, examining NASA employment at various research and flight centers (including information related to labor income and employee residences) along with contract awards originating from NASA and those related to the M2M program (including the geographic distribution of these contracts). Understanding the data is key to understanding the approach and for interpreting the results of the economic impact analysis. Section 4 discusses the modeling approach, employing data and software from IMPLAN. Section 5 examines additional issues surrounding the impact estimates, focusing largely on the geographic designation of impact regions and the specification of economic activities and events—the inputs into the models. These two sections (4 and 5) detail the modifications we made to the basic IMPLAN model and the most important assumptions that underlie the impact estimates, as well as the rationales behind them. Finally, Section 6 provides estimates of the economic impacts generated by NASA and the M2M program and analyzes the meaning of these impacts for the economies involved.

## 2. LITERATURE SURVEY

### 2.1. The Conceptual Bases of Economic Impact Analysis

Economic impact analysis involves applying a change in final demand to a descriptive economic model and then analyzing the resulting changes in the economy. A concise definition of impact analysis is that it is an assessment of the overall changes in an economy that occur as a result of one or more changes in specific economic activities (IMPLAN, 2004).

Export base theory (also termed economic base theory) provides the conceptual foundation for input-output economic impact assessment models. The first of two fundamental concepts that undergird export base theory is that an area's economy can be divided into two types of economic units: (1) basic and (2) non-basic. The basic sector is defined as those firms that sell goods and services to markets outside the local area. The revenue received by basic sector firms for their exports of goods and services is termed basic income. The remainder of the area's economy consists of those firms that supply goods and services to customers within the area. These firms are referred to as the non-basic sector or sometimes as *residential* or *local trade and service* activities.

The second key concept of export base theory is that the level of non-basic activity in an area is determined by the level of basic activity, and a given change in the level of basic activity brings about a predictable change in the level of non-basic activities. This relationship is known as the *multiplier* effect. Thus, export base theory emphasizes external demand for the products of the basic sector as the principal force determining change in an area's level of economic activity (Leistritz, 1994).

The basis for the multiplier effect is the interdependence of (or linkages between) the basic and non-basic sectors within an area's economy. As the basic sector expands, it requires more inputs (for example, labor and supplies). Some of these inputs are purchased from local firms and households. As the firms in the non-basic sector expand their sales to the basic sector, they too must purchase more inputs, their suppliers in turn must increase their own input purchases, and so on. Increased wages and salaries paid to labor and management in the basic sector, together with similar increases in the non-basic sector, lead to increases in the incomes of area households. Some of this additional income is spent locally for goods and services, some is saved, and some leaves the area economy as payments for imported goods and services (or as additional tax payments to government). To the extent that additional income is spent locally for goods and services, the output of local firms increases further, resulting in additional cycles of input purchases, income increases and consumption expenditures. This cycle of spending and re-spending within the local economy is the basis of the multiplier effect (Leistritz & Murdock, 1981). The magnitude of the multiplier effect is determined by the proportions of a given dollar of additional input purchases and a given dollar of income spent locally.

High multiplier values are associated with high levels of local purchases and spending, which typically reflect a diversified, relatively self-sufficient economy. Larger regions tend to have higher multiplier values.

## **2.2. The Principles of Economic Impact Analysis**

To begin the process of estimating economic impacts, it is important to identify the counterfactual scenario against which the specific changes in economic activity are contrasted (Drucker 2015). For example, if local industries are expected to increase their activity due to a rise in demand for their products or services, the source of that demand—the economic agent or agents seeking the additional products or services—could be considered to have made a choice versus seeking a different set of products or services, or obtaining them instead from industries in a different location. In this study, wherein the federal employees' labor income at NASA facilities and the procurement originating from NASA constitute the changes in economic activity that are examined, we consider these changes relative to a hypothetical situation of zero NASA employment and procurement activity. Although this counterfactual of no activity is unrealistic on a nationwide basis in that the federal government resources currently applied to NASA would likely be expended for other tasks or through different federal agencies, a hypothetical baseline scenario of zero replacement activity is a common strategy for impact analyses seeking to obtain measures of the entire economic impact of a particular institution and its associated activities. For smaller geographic regions, such as a state, the counterfactual scenario of zero activity is more realistic because there is no reason to suppose that the allocation of federal resources in the absence of the NASA would concentrate in that specific state. This principle applies to the M2M program as well.

After determining the counterfactual scenario, the next step is to identify the topic or topics of concern as a set of economic events defined by expenditures. These expenditures constitute the initial changes that stimulate further activity throughout the economy. The actions and the economic activity they stimulate together comprise the impacts. Although impact modeling software (such as IMPLAN) provides a framework to conduct an analysis of economic impacts, each stage of an analysis should be carefully scrutinized to make sure it is logical. Procedures and assumptions ought to be validated prior to entry into the model (IMPLAN, 2004). Furthermore, understanding how an industry and the various parts of its supply chain respond to changes in demand and judging the validity of the assumptions made as part of operationalizing a regional input–output model are essential to usefully interpreting the outputs of an economic impact model (Drucker, 2015; Low & Isserman, 2009). The key assumptions and their implications are detailed in the following sections of the report.

Economic impact analysis is a projection process, and the figures generated should be regarded as reasonable approximations and estimates rather than as accurate predictions. There are several points in the conduct of an economic impact analysis where



modeling choices and underlying assumptions substantially affect the final results. To avoid inadvertent errors or misapplications, economic impact analyses should include clear documentation of the procedures applied to obtain the initial events modeled, key underlying assumptions, and the rationales for both (Crompton *et al.*, 2001).

### **2.3. The Importance of Economic Impact Analysis to Public Policy Making**

Economic impact assessment has developed as a pragmatic approach that attempts to bring appropriate concepts and tools from regional economics and public finance to bear on problems of concern to policy makers (Leistritz, 1994). Practitioners use impact analysis for different purposes. For example, it might be used to measure the impacts of a new factory moving into an area. Governments use impact analysis to inform and guide policy decisions and planning. Researchers use impact analysis to study relationships among different elements in an economy (IMPLAN, 2004).

The increasing demand for economic impact analyses by public agencies can be explained in two ways. First, economic impact assessments are sought by policy makers and resource managers because they address issues that are key to a wide variety of decisions. For example, in determining whether to designate certain public lands as wilderness areas, land managers may need to consider the economic and fiscal impacts of alternative land uses (e.g., wilderness versus ranching or mining). When large-scale mining and resource development projects have been proposed, the local economic and fiscal impacts often have been one of the principal topics of debate.

Second, as state and local governments become more heavily involved in economic development efforts, economic impact analysis tools can be useful in establishing priorities for incentive programs. While a number of states are now using selected measures of direct economic impact (most commonly the number of jobs created) as criteria in awarding financial support, the total economic impact (including secondary effects) is probably a more meaningful criterion (Leistritz, 1994). This also explains why a key purpose of economic impact studies is to measure the economic return to residents (Crompton *et al.*, 2001). Public interest in economic impacts is ultimately a concern about people and their standard of living (Siegfried *et al.*, 2007).



## 3. DATA ANALYSIS

### 3.1. Description of NASA Data

NASA supplied information about activities at NASA headquarters and research and flight centers including salary, benefits, and total labor income in all 50 states as well as in DC. These data contain places of residence for NASA employees living in different states (with all individual identifiers removed). Procurement data for NASA list contract amounts awarded to vendors located in different parts of the country with a brief description of the activity or service that vendors were awarded to carry out for NASA. NASA provides funding not only to private sector firms, but also to colleges and universities, federal government agencies, and civic organizations in the form of research and development contracts as well as grants. Both the recipients and the types of activity contracted by NASA are diverse; the latter involves most of the categories of manufacturing or service industries recognized by the IMPLAN software.

NASA provided M2M-specific procurement data, listing suppliers and corresponding dollar amounts for the program's contractors. In addition to the geographical location of each of these suppliers, including overseas vendors, the items purchased and services provided by these vendors were detailed. Similar to NASA, the contracting activity attributable to the M2M program is diverse in terms of the type of economic activity and vendor locations. The M2M-specific contracting activity originating from NASA is related mostly to scientific research and development services, facilities support services, professional and technical services, software development, and electronic and precision equipment repair and maintenance.

All of the data and outputs of this economic impact analysis pertain to Fiscal Year 2019 (October 1, 2018, through September 31, 2019).

### 3.2. NASA Activities

#### 3.2.1. NASA Employment

NASA employs 18,694 civil servants (17,022 FTEs, see Box 5).<sup>3</sup> Most of the NASA labor force is concentrated in Maryland, Texas, Virginia, Alabama, and Florida (Table 1 and Figure 2). According to FTE counts, those five states account for approximately 74% of total NASA employment. Because impact estimates are based on expenditures, it is important to examine the labor income shares that correspond to the employment figures in each region.<sup>4</sup> The same set of states accounts for the largest portion of labor income earned. As we present in the results (Section 6), the concentration of NASA employment and labor income in those states listed above translates into greater

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<sup>3</sup> Throughout this report, NASA employment refers only to federal civil servants, and does not include on-site contractors.

<sup>4</sup> Unless otherwise mentioned, all monetary values correspond to 2019 dollars.

estimated household spending and larger economic impacts relative to the other regions examined.

**Box 5: Civil Servant Employee Counts vs. Full-time Equivalents (FTEs)**

We used FTEs instead of the count of civil servants in the analysis for two reasons. First, given that there are different labor hours/labor income associated with different headcounts in different states, using FTEs provides a more accurate way to compare the share of NASA employment across states. Second, because economic impacts are a function of labor income and changes in labor income are more directly related to FTEs, we used FTEs rather than headcounts. For example, it is possible for labor income to remain the same while the number of employees (civil servant headcounts) decreases. However, changes in FTEs would reflect those changes in labor income and thus will allow the analyst and the reader to more accurately assess the anticipated changes in associated economic impacts.

**Table 1: NASA's Labor Force and Associated Labor Income.<sup>5</sup>**

State	Employment		Labor Income	
	Jobs (FTE <sup>6</sup> )	%	Income (\$ thousands)	%
Alabama	2,214	13.0	365,050	12.6
Alaska	2	<0.1	131	<0.1
Arizona	14	0.1	2,538	0.1
Arkansas	1	<0.1	158	<0.1
California	1,679	9.9	308,027	10.6
Colorado	32	0.2	5,589	0.2
Connecticut	4	<0.1	604	<0.1
Delaware	5	<0.1	819	<0.1
Washington, DC	281	1.7	50,301	1.7
Florida	2,021	11.9	317,406	10.9
Georgia	14	0.1	1,885	0.1
Hawaii	<1	<0.1	63	<0.1
Idaho	1	<0.1	185	<0.1
Illinois	15	0.1	1,466	0.1
Indiana	9	<0.1	867	<0.1
Iowa	2	<0.1	270	<0.1
Kansas	2	<0.1	326	<0.1
Kentucky	11	0.1	1,087	<0.1
Louisiana	182	1.1	29,616	1.0
Maine	2	<0.1	368	<0.1
Maryland	3,117	18.3	560,544	19.3

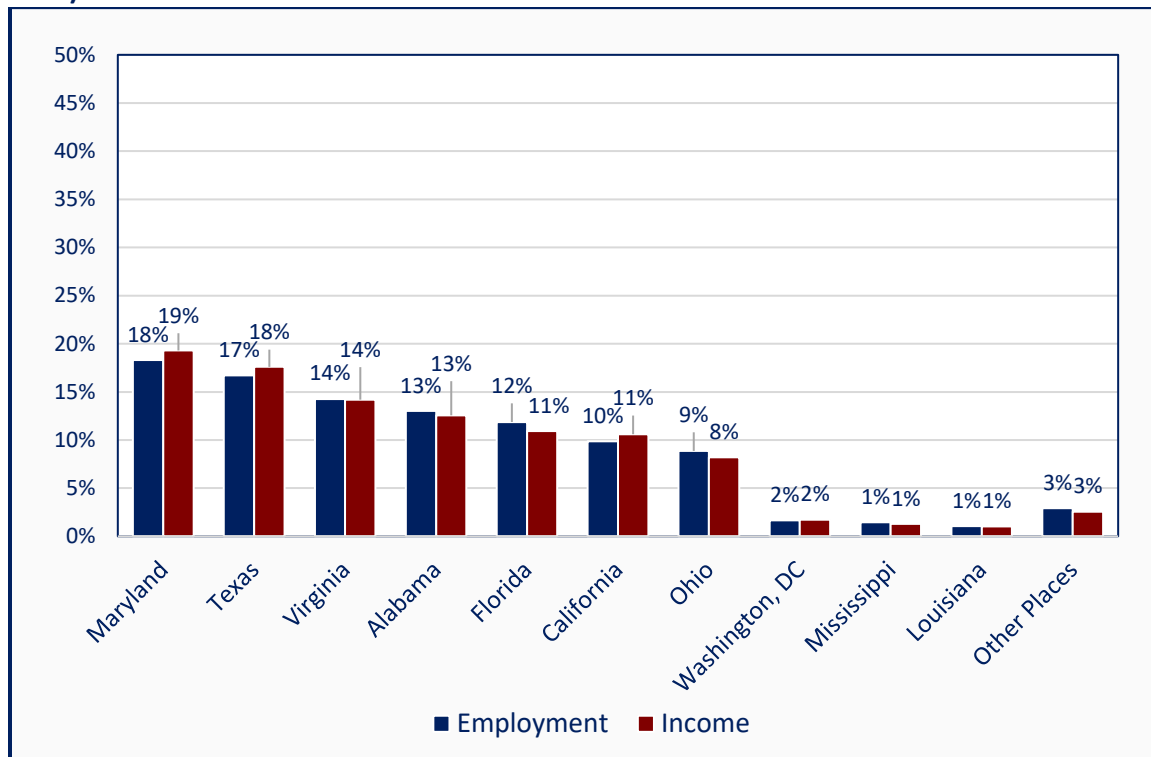
<sup>5</sup> Due to rounding decimals, column and row totals may not equal the sums of cell values. This caveat applies to all tables with numerical values throughout the report.

<sup>6</sup> The acronym FTE stands for "full-time equivalent".

Massachusetts	11	0.1	1,695	0.1
Michigan	10	0.1	1,297	<0.1
Minnesota	5	<0.1	491	<0.1
Mississippi	248	1.5	37,204	1.3
Missouri	7	<0.1	815	<0.1
Montana	<1	<0.1	10	<0.1
Nebraska	1	<0.1	53	<0.1
Nevada	3	<0.1	405	<0.1
New Hampshire	3	<0.1	352	<0.1
New Jersey	14	0.1	1,804	0.1
New Mexico	78	0.5	12,202	0.4
New York	44	0.3	6,892	0.2
North Carolina	20	0.1	2,851	0.1
North Dakota	0	0.0	0	0.0
Ohio	1,509	8.9	238,477	8.2
Oklahoma	5	<0.1	587	<0.1
Oregon	5	<0.1	777	<0.1
Pennsylvania	28	0.2	4,546	0.2
Rhode Island	1	<0.1	51	<0.1
South Carolina	9	0.1	1,331	<0.1
South Dakota	2	<0.1	186	<0.1
Tennessee	52	0.3	8,573	0.3
Texas	2,843	16.7	511,093	17.6
Utah	6	<0.1	908	<0.1
Vermont	1	<0.1	212	<0.1
Virginia	2,429	14.3	412,227	14.2
Washington	7	<0.1	1,237	<0.1
West Virginia	53	0.3	8,403	0.3
Wisconsin	11	0.1	1,155	<0.1
Wyoming	2	<0.1	378	<0.1
Other Places	7	<0.1	967	<0.1
<b>United States</b>	<b>17,022</b>	<b>100.0</b>	<b>2,904,480</b>	<b>100.0</b>

**Note:** Labor income includes regular salary, over-time payments, holiday payments, OPC (Other Personnel Costs: awards, lump sum payments, bonuses, and permanent change-of-station costs), and benefits.

**Figure 2: Shares of NASA Labor Force and Labor Income in Top Ten States (based on FTEs).**



### 3.2.2. NASA Procurement

NASA procurement refers to contracts for goods and/or services originating from NASA headquarters and individual NASA space and flight centers. In Fiscal Year 2019, NASA allocated nearly \$19.3 billion in expenditures to vendors in 50 states, the District of Columbia, and Puerto Rico and the United States Virgin Islands. Of this amount, \$4.4 billion is specific to the M2M program, accounting for around 23% of total NASA procurement spending. California is the largest recipient state, accounting for approximately \$5.2 billion, or nearly 27% of NASA's total procurement spending.

One feature differentiates NASA procurement spending from NASA employment. First, NASA procurement expenditures are more geographically dispersed. Whereas five states account for more than 81% of NASA employment, 69% of NASA procurement is sourced from the top five states. These different concentrations have implications for the magnitude of the impact estimates attributable to NASA employment and procurement. (Note that on-site contractor employees are not considered directly; the impacts of these contractors are captured through procurement expenditures.)

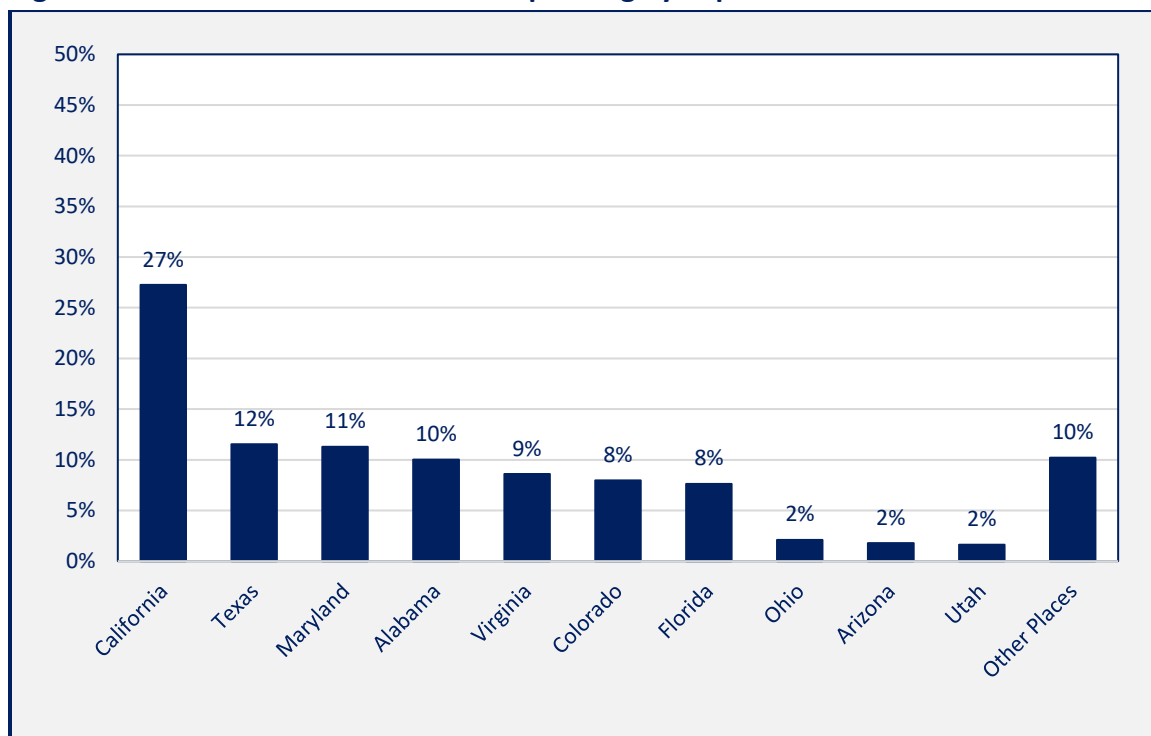
**Table 2: NASA Procurement.**

State	Amount (\$thousands)	%
Alabama	1,933,185	10.0
Alaska	17,225	0.1
Arizona	343,764	1.8
Arkansas	2,253	<0.1
California	5,253,710	27.2
Colorado	1,535,120	8.0
Connecticut	30,046	0.2
Delaware	8,099	<0.1
Washington, DC	309,057	1.6
Florida	1,471,654	7.6
Georgia	24,575	0.1
Hawaii	30,725	0.2
Idaho	13,373	0.1
Illinois	33,554	0.2
Indiana	131,879	0.7
Iowa	12,216	0.1
Kansas	6,068	<0.1
Kentucky	13,755	0.1
Louisiana	116,643	0.6
Maine	3,215	<0.1
Maryland	2,178,727	11.3
Massachusetts	213,696	1.1
Michigan	39,040	0.2
Minnesota	14,179	0.1
Mississippi	203,304	1.1
Missouri	41,800	0.2
Montana	8,572	<0.1
Nebraska	4,323	<0.1
Nevada	23,260	0.1
New Hampshire	23,024	0.1
New Jersey	30,162	0.2
New Mexico	82,166	0.4
New York	152,067	0.8
North Carolina	27,023	0.1
North Dakota	1,582	<0.1
Ohio	406,390	2.1
Oklahoma	43,820	0.2
Oregon	16,305	0.1

Pennsylvania	75,471	0.4
Rhode Island	1,762	<0.1
South Carolina	12,483	0.1
South Dakota	13,371	0.1
Tennessee	28,911	0.1
Texas	2,226,193	11.5
Utah	310,754	1.6
Vermont	1,904	<0.1
Virginia	1,656,259	8.6
Washington	87,989	0.5
West Virginia	50,383	0.3
Wisconsin	15,838	0.1
Wyoming	3,210	<0.1
Other Places	857	<0.1
<b>United States</b>	<b>19,284,940</b>	<b>100.0</b>

**Note:** Procurement figures are inclusive of PCard purchases that are estimated to have occurred in a given state. “Geographic location” information was missing for PCard purchases in the data we received; therefore, we assumed that PCard expenditure has the same geographic location distribution as the NASA procurement spending.

**Figure 3: Share of NASA Procurement Spending by Top Ten States.**



### 3.3. Moon-to-Mars (M2M) Program Activities

#### 3.3.1. NASA Employment for the M2M Program

NASA directly employs 5,563 civil servants (3,155 FTEs) to support the M2M program.<sup>7</sup> The majority of employees who work on the program reside in Alabama, Texas, and Florida; the three states account for more than 72% of the FTE jobs for the M2M program. Relatively small but notable numbers of employees live in Ohio, Virginia, and California, whereas other states' shares of the M2M labor force are minimal (Table 3 and Figure 4).

**Table 3: NASA's M2M Program Labor Force and Associated Labor Income.**

State	Employment		Labor Income	
	Jobs (FTE)	%	Income (\$ thousands)	%
Alabama	864	27.4	138,436	26.6
Alaska	0	0.0	0	0.0
Arizona	1	<0.1	147	<0.1
Arkansas	0	0.0	0	0.0
California	162	5.1	31,400	6.0
Colorado	6	0.2	966	0.2
Connecticut	1	<0.1	62	<0.1
Delaware	0	0.0	0	0.0
Washington, DC	5	0.2	772	0.1
Florida	624	19.8	98,998	19.0
Georgia	2	0.1	305	0.1
Hawaii	0	0.0	0	0.0
Idaho	<1	<0.1	19	<0.1
Illinois	4	0.1	326	0.1
Indiana	1	<0.1	53	<0.1
Iowa	0	0.0	0	0.0
Kansas	<1	<0.1	9	<0.1
Kentucky	3	0.1	242	<0.1
Louisiana	44	1.4	6,991	1.3
Maine	0	0.0	0	0.0
Maryland	55	1.7	9,725	1.9
Massachusetts	2	0.1	202	<0.1
Michigan	2	0.1	212	<0.1
Minnesota	1	<0.1	49	0.0
Mississippi	40	1.3	6,040	1.2

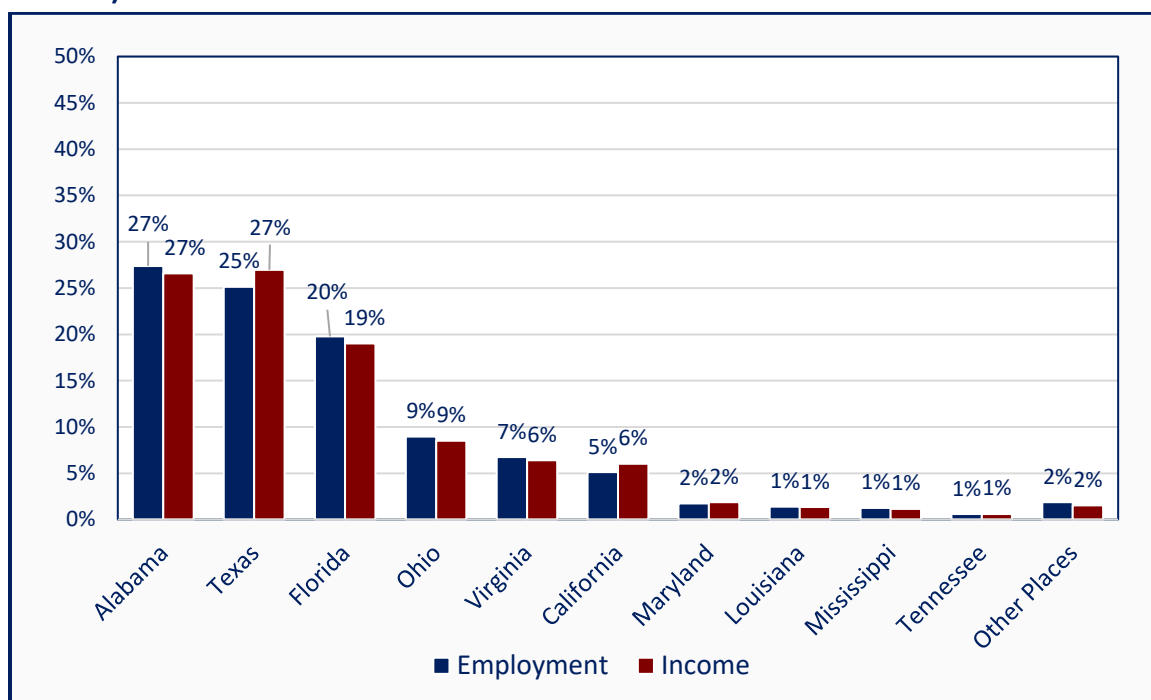
<sup>7</sup> Throughout this report, the M2M labor force figures refer only to federal civil servants, and do not include on-site contractors.

Missouri	2	0.1	201	<0.1
Montana	0	0.0	0	0.0
Nebraska	0	0.0	0	0.0
Nevada	0	0.0	0	0.0
New Hampshire	0	0.0	0	0.0
New Jersey	2	0.1	186	<0.1
New Mexico	7	0.2	1,004	0.2
New York	4	0.1	397	0.1
North Carolina	3	0.1	381	0.1
North Dakota	0	0.0	0	0.0
Ohio	282	9.0	44,317	8.5
Oklahoma	1	<0.1	144	<0.1
Oregon	1	<0.1	109	<0.1
Pennsylvania	3	0.1	290	0.1
Rhode Island	0	0.0	0	0.0
South Carolina	2	0.1	246	<0.1
South Dakota	<1	<0.1	17	<0.1
Tennessee	18	0.6	3,150	0.6
Texas	793	25.1	140,430	27.0
Utah	5	0.2	850	0.2
Vermont	0	0.0	0	0.0
Virginia	213	6.7	33,331	6.4
Washington	2	0.1	391	0.1
West Virginia	0	0.0	0	0.0
Wisconsin	2	0.1	230	0.0
Wyoming	1	<0.1	165	<0.1
<b>United States</b>	<b>3,155</b>	<b>100.0</b>	<b>520,785</b>	<b>100.0</b>

**Note:** Labor income includes regular salary, over-time payments, holiday payments, OPC (Other Personnel Costs: awards, lump sum payments, bonuses, and permanent change-of-station costs), and benefits.



**Figure 4: Shares of NASA M2M Labor Force and Labor Income in Top Ten States (based on FTEs).**



### 3.3.2. NASA Procurement for the M2M Program

M2M procurement refers to contracts for goods and/or services originating from the different NASA Centers that support the M2M program. In Fiscal Year 2019, NASA allocated more than \$4.4 billion in expenditures to vendors in 48 states and the District of Columbia, and several foreign countries.<sup>8</sup> Alabama is the largest recipient state, accounting for approximately \$1.1 billion, or 26.6% of NASA's total procurement spending for the M2M program (Table 4 and Figure 5).

After Alabama, Colorado is the second largest state recipient of M2M procurement. Contracts performed in this state account for more than \$919 million, or nearly 21% of NASA's total procurement spending for the M2M program. The State of Texas is the third largest recipient of M2M procurement. Contracts performed in Florida account for approximately \$517 million, or 11.7% of NASA's total procurement spending for the M2M program. California is the fifth largest recipient of M2M procurement. Contracts performed in this state account for \$506 million, or 11.5% of NASA's total procurement spending for the M2M program. Several other states' shares of M2M procurement are smaller but still sizeable. Utah, Louisiana, and Virginia are among such states.

<sup>8</sup> North Dakota and Wyoming are the only states that did not have M2M-specific contracts in FY 2019.

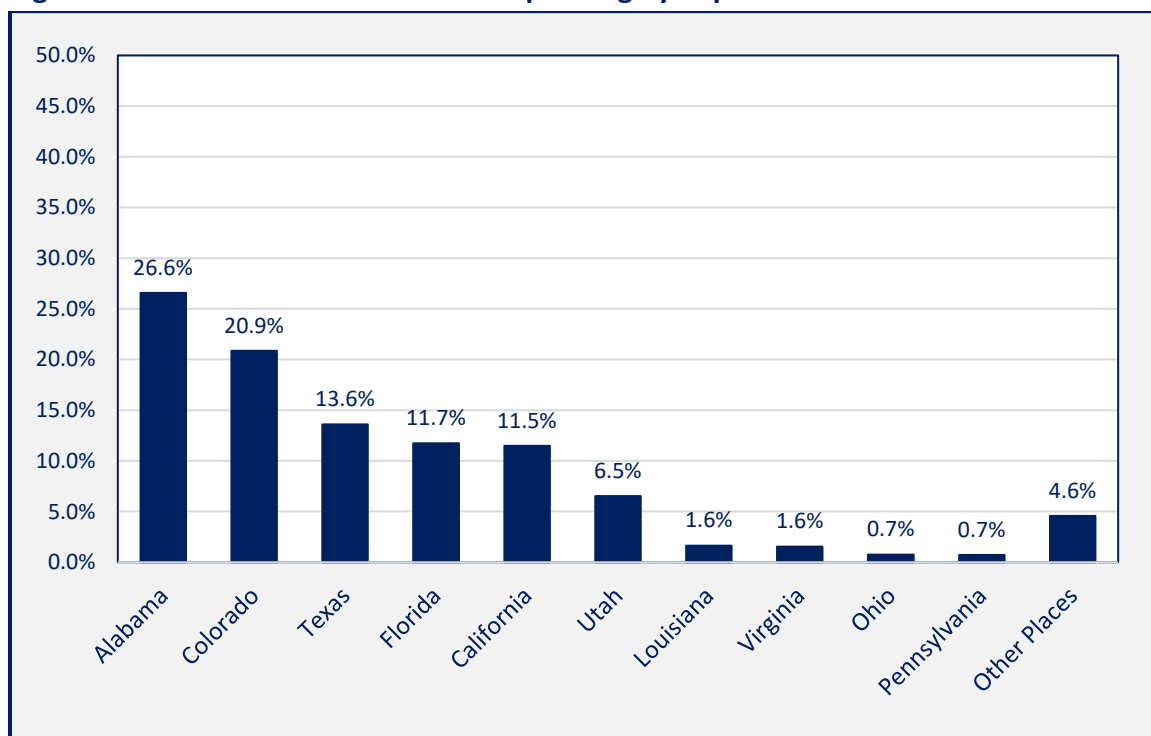
**Table 4: NASA Procurement for the M2M Program.**

State	Amount (\$thousands)	%
Alabama	1,171,298	26.6
Alaska	48	<0.1
Arizona	13,705	0.3
Arkansas	107	<0.1
California	506,074	11.5
Colorado	919,347	20.9
Connecticut	8,932	0.2
Delaware	234	<0.1
District of Columbia	11,198	0.3
Florida	516,968	11.7
Georgia	1,709	<0.1
Hawaii	179	<0.1
Idaho	8,574	0.2
Illinois	3,840	0.1
Indiana	3,982	0.1
Iowa	1,363	<0.1
Kansas	103	<0.1
Kentucky	6,766	0.2
Louisiana	71,840	1.6
Maine	22	<0.1
Maryland	18,656	0.4
Massachusetts	8,072	0.2
Michigan	1,861	<0.1
Minnesota	545	<0.1
Mississippi	26,211	0.6
Missouri	9,176	0.2
Montana	83	<0.1
Nebraska	350	<0.1
Nevada	13,387	0.3
New Hampshire	4,186	0.1
New Jersey	3,336	0.1
New Mexico	21,834	0.5
New York	15,322	0.3
North Carolina	4,052	0.1
North Dakota	0	0.0
Ohio	32,659	0.7
Oklahoma	238	<0.1
Oregon	801	<0.1

Pennsylvania	32,196	0.7
Rhode Island	88	<0.1
South Carolina	292	<0.1
South Dakota	370	<0.1
Tennessee	737	<0.1
Texas	599,039	13.6
Utah	288,222	6.5
Vermont	273	<0.1
Virginia	68,318	1.6
Washington	7,409	0.2
West Virginia	2,663	0.1
Wisconsin	818	<0.1
Wyoming	0	0.0
Other Places	0	0.0
<b>United States</b>	<b>4,407,483</b>	<b>100.0</b>

**Note:** Procurement figures are inclusive of PCard purchases that are estimated to have occurred in a given state. “Geographic location” information was missing for PCard purchases in the data we received; therefore, we assumed that PCard expenditure has the same geographic location distribution as the NASA procurement spending. In addition, the data did not identify any spending for the M2M program. We assumed that approximately 23% of PCard purchases were made for the M2M program (the same as the program’s share of the NASA procurement in general).

**Figure 5: Share of M2M Procurement Spending by Top Ten States.**



## 4. MODEL DEVELOPMENT

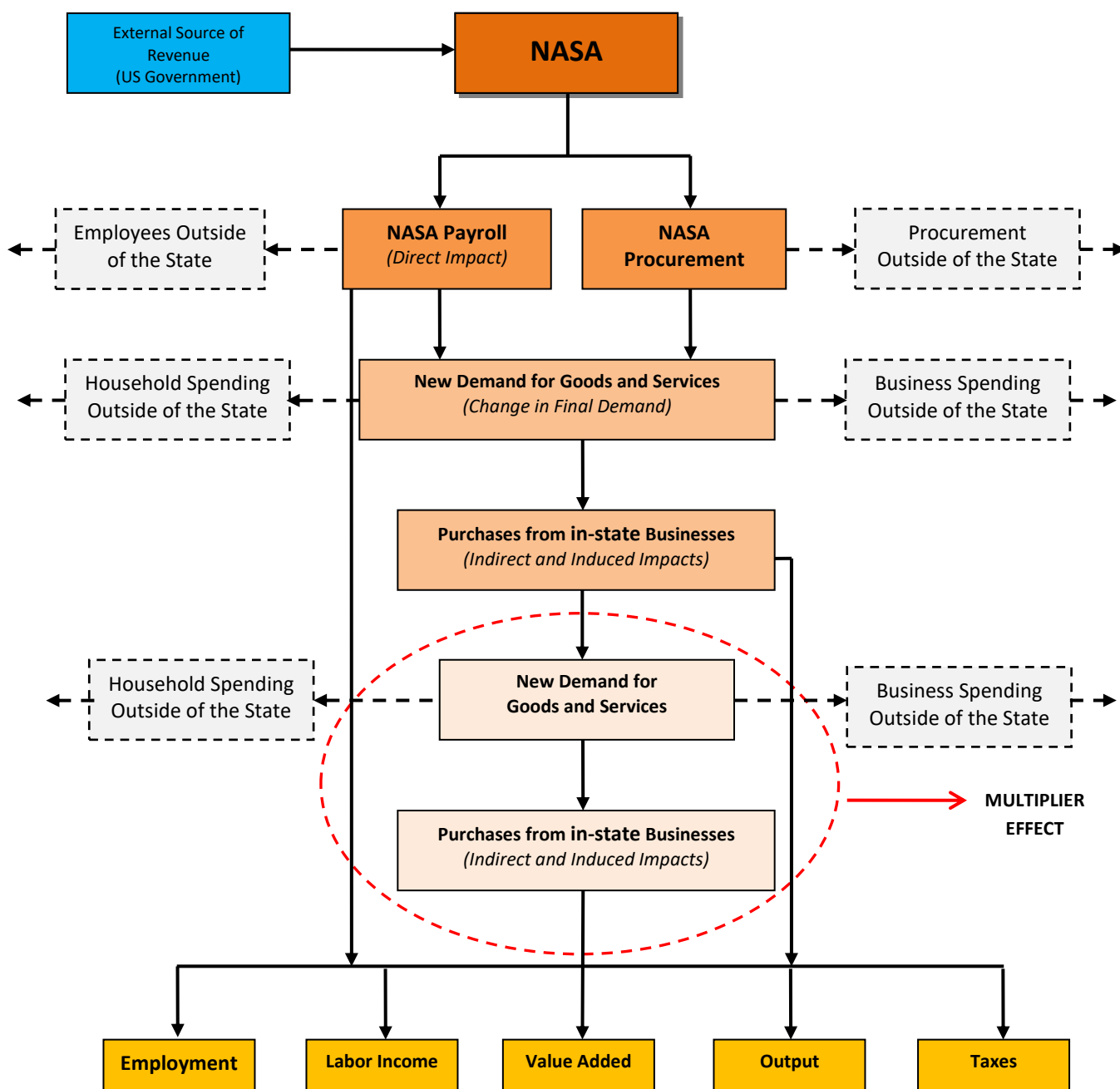
The model development process consists of scenario building and economic modeling stages that involve considerable judgment regarding how to translate the known information describing NASA economic activity (employment and contracting) into model entries, how to set the values of key parameters, and how to generate estimates for missing or incomplete data.

The scenario-building stage involves careful allocation of employment and contracting activities to the most appropriate industry sectors in the model, and determining the geographic location of each of the economic activities to be modeled. This process appears straightforward initially but is more complicated, as it involves questions such as whether a contractor is a manufacturer or a distributor, whether foreign contractors engage with U.S.-based subcontractors, and whether contractors that have a presence in the local area site their main research or organizational units in close proximity or otherwise.

The economic modeling stage consists of building a descriptive input-output model in IMPLAN that can be applied to estimate the effects of the direct employment of NASA, contracting activities, and other aspects of the scenario on all of the sectors of the economy. This stage is where analysts may adjust the default input-output model constructed by the software to represent better the known features of the local economy and match the model assumptions to the particular scenarios being evaluated.

### 4.1. Scenario-Building

The premise of this economic impact assessment is that spending at and through NASA and the M2M program represents an injection of resources into state economies by an external source: the federal government. As described in Section 2, the originator of the event (the source of the resources) determines the counterfactual scenario against which the economic impact analysis is measured. Federal employees' labor income at NASA constitutes an extra-local infusion of resources into the economies examined in this study. According to our scenario, the activities of NASA trigger a cascading series of economic activities in state economies by increasing demand for certain products and services (Figure 6).

**Figure 6: Economic Impact of NASA on a State Economy.**

**Note:** This figure is adapted from Lendel and Park (2012). Payroll refers to the government agency (NASA) Procurement is only associated with government contracting.

In this process:

- **Direct effects** are comprised of NASA employment.
- **Indirect effects** are purchases of goods and services by NASA as well as by the industries that supply NASA. For example, an aerospace firm carrying out contract work for NASA may purchase electronic components and engineering consulting services from other firms to enable its own production.
- **Induced effects** are the impacts of the consumption spending by employees and business proprietors that is engendered by the direct and indirect effects. In other words, induced impacts result from the household spending of employees and owners of business establishments that supply NASA (indirect) and that earn income from employment at NASA facilities (direct). While direct and indirect impacts vary based on the types of goods and services being produced and purchased, induced impacts typically vary much less in type because they support general consumption. Because the average labor income of NASA employees exceeds the per capita income in the local economies examined, on a per capita basis, the induced impacts resulting from the expenditures of NASA employees are anticipated to exceed the induced impacts resulting from expenditures of employees of the industries that supply NASA.<sup>9</sup>

This complex web of industrial relations and market transactions is represented by the input-output model in the IMPLAN software. The resulting mathematical formulae allow examination of the effects of change in one or several economic activities on an entire economy.

#### 4.2. Study Area Designation and Local Expenditures

Defining the study area affects the extent of estimated impacts. The idea is to cover enough area to include the most important aspects of the impact, yet not too much area, or the effects will be swamped by extraneous economic activity. As impact regions become larger, estimated impact figures rise, and the meaning of a specific economic impact finding for a jurisdiction (e.g., a county or a state) becomes ambiguous in terms of its policy implications. A typical approach is to approximate a functional economic area—a reasonably self-contained economic unit. A functional economic area includes the places where a majority of people live, work, and shop, and sometimes can be identified by physical characteristics or resident behavior.

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<sup>9</sup> The IMPLAN model accounts for local commuting patterns. For example, if 20% of the workers in a particular industry (e.g., retail) who work in the region live outside of the region, the model will allocate 80% of labor's disposable income into the model to generate induced impacts. The model excludes payments to federal and state taxes and savings based on the locality's average local tax and savings rates. Thus, only the disposable incomes of local workers are included in the model.

There are 52 distinct geographic areas examined in this study.<sup>10</sup> As described in Section 3, NASA employee residences are concentrated in certain states. Contracting activity, however, is spread across the U.S.

Every impact analysis starts with local expenditures. Local expenditures are the changes in demand (events) that occur within the study region and constitute the direct impacts. Below, we describe how local expenditure figures were derived for each of the impact regions.

***NASA Impacts:***

1. Fifty (50) states and DC: We estimated the portion of employment and contracting activity using state locations of employee residences and vendors.
2. U.S.: All employment and contracting activities are included in the national model except for contractors.

***M2M Impacts:***

1. Fifty (50) states and DC: We estimated the portion of M2M-specific employment and contracting activity using state locations of employee residences and vendors.
2. U.S.: All employment and contracting activities attributable to the M2M program are included in the national model.

### **4.3. Leakage of Economic Activity in State Models**

Leakage of economic activity from a region occurs because local industries are not able to supply all of the intermediate inputs required to produce the change in final demand. In the short run, this may be due to constraints on supply (i.e., producers cannot quickly produce larger quantities of inputs); in both the short and long run, suppliers that produce the required inputs may not exist within the region.

Because of the leakage of economic activity, initial NASA labor income and procurement spending leads to successive rounds of new spending in the impact area (i.e., states) that diminish in size as some economic activity leaves the region in the form of spending outside the local economy (Bess and Ambargis, 2011). (Savings activity also causes later rounds of spending to decrease in size compared to initial spending.) The higher the level of leakage, the smaller the total economic impact due to the initial change in the economy.

Typically, economic impact analyses assume that economic activity that leaks out of the impact area has no further effect on the local economy. This assumption may yield an underestimate of local economic impact to the extent that some portion of the leakage “returns”. For instance, a non-local input supplier may itself purchase some of its inputs

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<sup>10</sup> The U.S. as a whole, 50 states, and Washington, DC.

from within the region being analyzed. In most cases it is not possible to model such return leakage. In conducting an analysis of a single region that is relatively small in comparison to the nation (e.g., a state or a county), however, this return leakage normally is negligible relative to other uncertainties in the impact modeling process.

Economic activity leakage represents a more significant challenge when modeling impacts for a group of regions that substantially trade goods and services among one another. In such a case, it becomes important to account for leakage in the modeling process, or impacts for each region would be underestimated. To clarify this concept, consider the example of manufacturing a jet engine. If the production of the engine in state A requires the purchase of turbine blades from state B, then this purchase is a leakage from state A. That means the purchases of goods and services associated with the production of the blades are also excluded from the multiplier of state A. That is to say, if the blade manufacturer in state B purchases quality control services from state A, then the impact of the increase in demand for engineering services from state A is also excluded from the multiplier of state A because the multiplier does not include such feedback effects (return leakage). This is a simple example of unaccounted leakage between two states with three rounds of spending.<sup>11</sup> The challenge in the current study is much greater as we are dealing with leakage occurring among fifty (50) states plus DC with thousands of rounds of spending.

In order to account for the leakage of economic activities from state models, ideally we might estimate a multi-regional input-output model that includes estimates of the supply and purchase interactions among fifty-one regions (50 states plus DC) simultaneously. This is (currently) not feasible due to data and computational limitations. Instead, we follow a three-step, post-modeling approach to capture inter-regional leakage effects. First, we run each state model independently to obtain estimates of the indirect and induced effects occurring in states due to initial NASA spending. Second, we sum these indirect and induced effect estimates across the fifty states (and DC) and subtract this cumulative total from the national total. Third, we allocate the difference found in Step 2 (i.e., the amount un-apportioned due to leakage across state boundaries) to states in proportion to their shares of indirect and induced effects calculated in Step 1. This approach forces the national model and the state-level models to be consistent in terms of the magnitude of impacts.

Although the approach generates total national impact figures that are as accurate as possible, it does retain uncertainty at the regional level, reflecting the assignment of the un-apportioned impacts to particular states. Because we do not have information on the destination of leakages, we probably overestimate the impact in some states and underestimate it in others. Overestimation would occur if a given state in reality captures

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<sup>11</sup> As noted by Coughlin and Mandelbaum (1991), the inability to fully capture interregional feedback effects is one of biggest limitations of input-output models.



a smaller share of the un-apportioned amount than what we allocate. Underestimation would occur if a given state in reality captures a larger share of the un-apportioned amount than what we allocate. Based on the share of the un-apportioned amount in the national total and the state-level industry information available from IMPLAN, we judge that the typical error is likely approximately 15% for both the NASA and M2M models.

#### **4.4. Economic Modeling**

In this section, we describe how various data items discussed in the previous section are translated into economic events and activities. This step enters the inputs into the impact model, and the economic impact figures (discussed in Section 6) derive from the numbers generated in this step. Before we provide details of the model specification, we briefly review the modeling software, IMPLAN.

IMPLAN is a widely-used impact analysis program based on a regional input-output model. At the heart of the model is a matrix of dollar flows called the social accounting matrix (SAM) that is estimated from a combination of national benchmark input-output data and regional information. This matrix accounts for all the dollar flows among different sectors of the regional economy. Unlike some other input-output models, which represent only the purchasing relationships between industry and household sectors, the SAM in IMPLAN includes the economic relationships among government, industry, and household sectors, allowing the modeling of transfer payments such as unemployment insurance.

Using this information, the IMPLAN software models the way a dollar injected into one sector is spent and then circulated through other sectors of the economy, generating waves of economic activity, or so-called “economic multiplier” effects. The model generates a series of multipliers that, in aggregate, describe the economic repercussions of the original activity. For direct events entered in the form of employment, IMPLAN applies estimates of the average output and compensation per worker to translate the direct effects into monetary value figures. It then applies the value of an event to local and national sector-specific production functions and traces these values through subsequent cycles of transactions and payments to estimate the indirect and induced impacts. During each of these cycles, the procedure removes expenditures to government, savings, and extra-local purchases, so that the results reflect only those transactions that impact the local economy.

The process of model development and impact estimation consists of the following steps:

1. Identify new events (direct impacts) to be introduced into the model.  
The labor income of employees at NASA facilities and the procurement spending originating from NASA are the direct impacts.
2. Identify the industry sectors affected.

For all NASA activity, we allocated vendors and corresponding contracting totals to industry sectors based on NASA's descriptions of what the contract entails. Descriptions of many of the manufactured items and services rendered were provided, and we used this information to allocate corresponding contracting totals to appropriate industries. In cases where a description was not available or was not explicit enough to allow us to select an industry, we conducted additional web searches visiting vendor companies' web sites and made a selection accordingly. We followed the same procedure for activities related to the M2M program.

3. Enter the transaction value dollars based on the year of the model.  
Each dollar value must be specified as either purchaser or producer prices. Producer prices are those paid at the factory door, the amount that a producing firm receives for its output. Input-output models in IMPLAN are specified in producer prices.
4. Customize IMPLAN coefficients as appropriate.  
We utilized 2018 IMPLAN data to construct the input-output model.<sup>12</sup> 2018 was the most current dataset available at the initiation of the study. The NASA employment and procurement figures are for Fiscal Year 2019. Because input-output relationships among industries usually do not change substantially over relatively short periods of time, the relationships that existed among industries in 2018 are reasonable approximations to those that existed in 2019.

Other than the figures entered to signify new events, the ratio of locally purchased to imported goods is perhaps the most significant numerical figure that affects the multipliers and impact estimates derived from an input-output model. The greater the fraction of goods and services purchased locally, the more local economic activity will be stimulated, and hence the larger the resulting multiplier. For all regional models other than the national model, we retained the default model estimates, termed Regional Purchase Coefficients (RPCs). RPCs are derived from an econometric equation that predicts local purchase proportions based on the region's characteristics. In the absence of specific information to justify a different approach, the default RPCs typically are the most appropriate choice.

For the national model, no econometric model exists within IMPLAN and the supply/demand pooling method was used to estimate the RPCs. This method takes into account the national situation where there is no need to estimate interregional (domestic) trade flows, but rather the proportion of demand that is met by the U.S. as opposed to foreign suppliers. The supply/demand pooling method applies data on U.S. foreign exports to estimate the retained portion of each commodity as satisfying domestic demand, and assumes that each commodity is sourced domestically first

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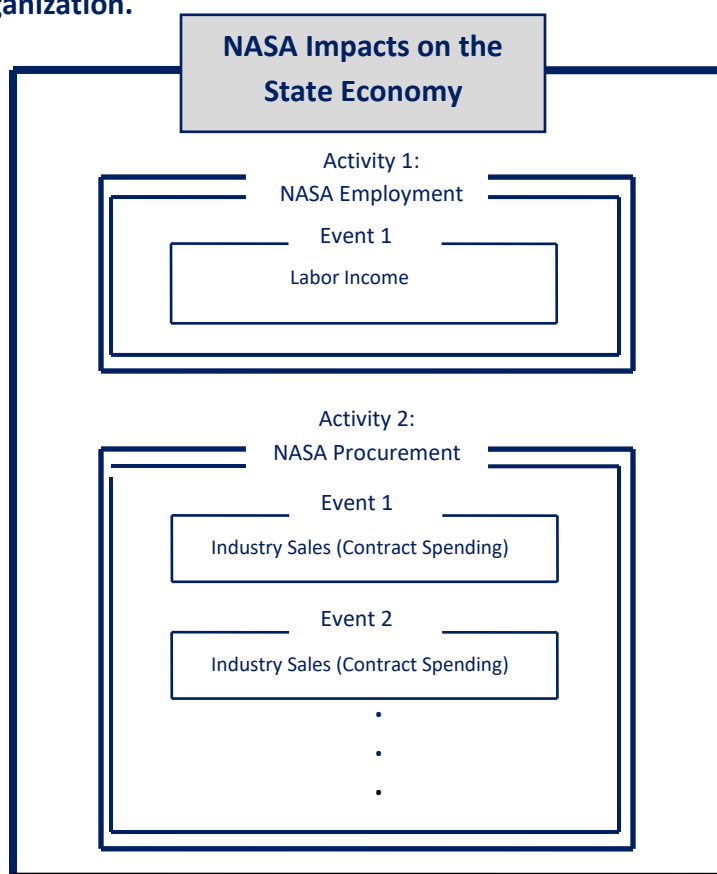
<sup>12</sup> Economic impact modeling data are available at <https://www.implan.com/data/>.

until production is exhausted.<sup>13</sup> In comparison with the regional RPCs, the supply/demand pooling method yields maximum estimates; that is, no more local commodity can be purchased than is locally produced (IMPLAN, 2004). Consequently, we anticipate greater impacts per employee and per dollar of procurement spending nationally than individual states.

5. Operate the software to generate estimates of the impact of the events on the study area economy.

For this study, we generated four separate categories of activities: (1) NASA employment, (2) NASA procurement, (3) M2M employment, (4) M2M procurement. Each of these activities is in turn a collection of events (changes in labor income or industrial sales in particular industry sectors—see Figure 7 below), and is replicated as necessary for the different geographic regions studied (over 50).

**Figure 7: Impact Organization.**



**Note:** This figure is adapted from IMPLAN (2004).

<sup>13</sup> The designers of the IMPLAN software suggest that this assumption is appropriate for the national context, in which typically there is little advantage to procuring substitutable commodities from foreign rather than domestic suppliers, and it makes even more sense for the specialized portions of the supply chains following from NASA procurement.

## 5. IMPACT ESTIMATION DECISIONS

The types of employment and procurement data and the assumptions made in the scenario development and model building stages have implications for impact estimates presented in the following section (see Box 6).

First, there may be slight overestimation involved in our results for certain states where businesses engage in subcontracting activity that deviates from the model assumptions. Contractors whose main research or organizational units are located elsewhere but have a presence in a certain state might engage in subcontracting relations with businesses near the location of their headquarters rather than their remote location. Because we assumed that institutions in these conditions would procure locally (according to the RPCs as estimated in the model) and that the resulting household income/spending would occur locally as well, the impacts of such institutions on certain states may be overestimated.

Second, we chose not to include travel expenditures related to business trips by employees at NASA facilities. The rationale behind this decision is lack of evidence indicating that business transactions related to operations of NASA lead to more-than-average travel (as is modeled automatically). That is, the economic impact model estimates travel-related expenditure impacts as a standard byproduct of business transactions occurring in the economy. If such travel is more frequent than average, the impact results are likely to be underestimated slightly.

Third, our impact modeling, like any other estimation approach using IMPLAN, captures only traceable business transactions occurring in the economic system. Not all positive economic impacts are traceable via input-output transactions. Research and development (R&D) conducted at NASA centers and by its suppliers in the aerospace industry may benefit businesses in related industrial fields, either through NASA activities augmenting those businesses' own research and development efforts, or by making it possible for those firms to employ more efficient production technologies. Either case will result in increases in productivity for the economy as a whole (Jaffe *et al.*, 1993; Shapiro, 2015). These effects are termed externalities or spillovers and cannot be captured in economic impact analyses based on input-output models. Given that the industries deriving the most benefit from direct NASA spending are scientific research<sup>14</sup> and development services (accounting for more 65% of NASA procurement spending), the total economic impacts of NASA activities might exceed the estimates reported in this study.

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<sup>14</sup> Basic research provides larger spillover benefits than that of development research because development spillovers are largely internalized by patent policy that provides monopoly power to firms with innovative products. Intellectual property rights do not as thoroughly internalize more general and theoretical basic research externalities.

Finally, tourism activity related to the presence of NASA facilities and associated space museums may generate additional economic impacts for states. This impact analysis does not include these tourism effects. Specific data quantifying visitor volume, origin, and expenditure patterns could be used to incorporate tourism impacts in future analysis.

**Box 6: Potential Sources for Over- or Underestimation of Economic Impacts**

**Subcontracting activity:** Impacts are calculated based on a combination of the industry-specific subcontracting relationships that exist nationwide and in the model area. To the extent that businesses engage in subcontracting activity that deviates from the national and regional averages, impacts could be over- or underestimated depending on the direction of deviation. There is likely slight overestimation for states with NASA contractors whose location is different from their parent companies' location (i.e., subsidiaries or branch plants). On the other hand, there is likely slight underestimation for states with NASA contractors whose location is the same as the company's headquarters. Unfortunately, we are not able to quantify the magnitude of the over- or underestimation for different states without specific subcontracting information for NASA contractors.

**Business travel:** To the extent that NASA's business travel is more frequent than the average for the related industry in the model, the impact results are underestimated slightly for states that are the destinations of trips are that host commercial airline headquarters. If NASA's business travel is less frequent than the model industry average, the impact results are overestimated slightly for the same states.

**NASA center & museum visitors:** Due to lack of data on visitor numbers and associated spending, we are not able to model the economic impacts of visitors to NASA facilities. Therefore, impact estimates for states that attract substantial visitors (particularly those hailing from outside of the state) are likely underestimated. Specific data quantifying visitor volume, origin, and expenditure patterns could be used to incorporate tourism impacts in future analyses.

## 6. RESULTS ANALYSIS

In this section, we present estimates of NASA and M2M program impacts on the U.S. as a whole, the fifty (50) states, and Washington, DC. For each region, we first analyze overall NASA impacts and then examine M2M program impacts. Finally, we specify the portion of NASA impacts attributable to the M2M program to highlight the relative contribution of the M2M program in every state.

The economic impact is examined through a detailed analysis of the changes in employment, output (gross sales), labor income, value added<sup>15</sup>, and taxes<sup>16</sup> due to NASA's activities.<sup>17</sup> First, summary impacts are presented, organized by the type of impact. Second, for employment and output, two of the most important impact categories, results are examined by NASA employment and procurement components.<sup>18</sup> The detailed disaggregation of economic impacts by their sources highlights the relative contributions of NASA's employment and procurement activities to the overall NASA impacts. Third, for each of the impact categories, the ten most heavily impacted industries are described.<sup>19</sup>

### 6.1. Economic Impacts on the United States

#### 6.1.1. NASA Impacts

At the national level, NASA directly employs 18,694 civil servants (17,022 FTE jobs), with annual compensation of \$2.9 billion in wages and benefits. The contracting activity originating from NASA (nearly \$19.3 billion) is both large in volume and very diverse— involving most categories of manufacturing or service industry. There are indirect effects from purchases of goods and services by NASA as well as by the firms that supply NASA. Consumption expenditures made by employees of NASA, NASA's suppliers, and suppliers further up the production chain, create induced effects. Taking the domestic portions of these spending streams into account, the total employment impact of NASA across the U.S. is more than 312,000 jobs (including direct, indirect, and induced impacts—see Box 2 in Section 1). The labor income and economic output associated with this total amount of employment are, respectively, \$23.7 billion and \$64.3 billion. Contracting activities along with NASA's direct employment generated an estimated \$6.9 billion in federal, state, and local tax revenues in 2019 (Table 5).

Multipliers give additional insight as to how the economy is affected by an initial economic change (see Box 7 below and Box 4 in Section 1). For every civil service FTE job

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<sup>15</sup> Please refer to Box 3 in the introduction (Section 1) for the definition of value added.

<sup>16</sup> Unless otherwise mentioned, all monetary values correspond to 2019 dollars.

<sup>17</sup> Please note that due to rounding column and row totals may not be equal to the sum of columns or rows throughout the report.

<sup>18</sup> Separate impacts for NASA employment and procurement components are presented in the Appendix.

<sup>19</sup> This analysis includes only those states in which the total employment impact is greater than 1,000 jobs.

located at NASA, an additional 17.4 jobs are supported throughout the U.S. economy.<sup>20</sup> The income multiplier is 8.1: for each \$1 million of labor income earned by NASA employees, an additional \$7.1 million in labor income is generated in the U.S. economy. The output multiplier is 8.7. For each \$1 million's worth of output generated at NASA, an additional \$7.7 million of output (intermediary and final goods and services) is generated throughout the U.S. economy.

#### Box 7: Multiplier Considerations

The multipliers referenced in this section, and in particular the employment multiplier, are larger than is typical for this kind of impact study because of the volume of NASA's contracting activity, all of which is classified as indirect impact. Please note that if additional (or reduced) civil service employees are not associated with additional (reduced) contracting activity at a comparable scale, then it may be inappropriate to use the employment multiplier to estimate future economic impacts of changes in civil service employment at NASA centers. Multipliers calculated in the conventional way are provided in the Appendix and they are comparable to multipliers found in similar studies.

Multipliers are calculated for only those states with direct NASA employment. Every state has different multipliers, and state multipliers normally are smaller than national multipliers. The size of the multiplier changes depending on the size and diversity of the economy analyzed. Large and sectorally diverse economies such as those of the states of Texas or California tend to have larger multipliers than smaller or less diverse economies such as in the states of Rhode Island or Wyoming.

Multiplier magnitudes are determined by the quantity of supply chain linkages and range of consumer goods and services available within the economy. Therefore, states in which firms often procure inputs locally and consumers generally spend a larger portion of their income locally tend to have larger multipliers than states that do not have strong supply chain linkages and fewer options for consumers.

**Table 5: Summary of NASA Impacts by Types of Impact, the United States.**

Impact Type	Employment <sup>21</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	17,022	2,904,480	3,517,219	7,354,389	635,516
Indirect	158,161	13,156,644	18,394,936	33,002,680	3,460,915
Induced	137,447	7,591,393	13,412,267	23,985,618	2,874,407
<b>Total</b>	<b>312,630</b>	<b>23,652,518</b>	<b>35,324,422</b>	<b>64,342,687</b>	<b>6,970,837</b>
<i>Multiplier</i>	<i>18.4</i>	<i>8.1</i>	<i>10.0</i>	<i>8.7</i>	<i>n.a.</i>

<sup>20</sup> "Supports" means partial or full support. We use "supported" instead of "created" to be conservative in our attribution of impacts to NASA. While NASA activities create new positions in some sectors of the economy, in many instances NASA helps sustain existing jobs in the economy.

<sup>21</sup> While direct employment component refers to full-time equivalent (FTE) positions at NASA centers, indirect and induced employment components refer to a combination of full-time and part-time positions.

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

Beside overall impact figures, it is useful to examine the source of impacts to better understand the contribution of different NASA activities to the U.S. economy.<sup>22</sup> Table 6 examines the sources of the employment figures presented in the second column of Table 5. Procurement spending originating from NASA is responsible for the largest portion of overall NASA employment impacts. Nearly 87% of the jobs supported throughout the U.S. economy by NASA are due to procurement spending, leaving the share of NASA's direct employment in the overall employment impact at around 13%.

**Table 6: NASA Employment Impacts by Sources of Impact, the United States.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	17,022	40.7	0	0.0	17,022	5.4	100.0	0.0
Indirect*	0	0.0	158,161	58.4	158,161	50.6	0.0	100.0
Induced	24,842	59.3	112,605	41.6	137,447	44.0	18.1	81.9
<b>Total</b>	<b>41,864</b>	<b>100</b>	<b>270,766</b>	<b>100</b>	<b>312,630</b>	<b>100</b>	<b>13.4</b>	<b>86.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 7 examines the sources of the output figures in the fifth column of Table 5. Similar to employment impact, procurement spending originating from NASA is responsible for the lion's share of overall NASA output impacts (nearly 82%). NASA employment's share of the overall output impact is around 18%. The reason that NASA employment's share of the output impact exceeds its share of employment impact is that employees at NASA produce more output per worker than the average for employees in the supply chain of NASA procurement.

<sup>22</sup> Here, the focus is on the two most important categories of the economic impact analysis: employment and output. Analogous tables for labor income and value added categories are contained in the Appendix.



**Table 7: NASA Output Impacts by Sources of Impact, the United States.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	7,354,389	62.9	0	0.0	7,354,389	11.4	100.0	0.0
Indirect*	0	0.0	33,002,680	62.7	33,002,680	51.3	0.0	100.0
Induced	4,338,870	37.1	19,646,749	37.3	23,985,618	37.3	18.1	81.9
<b>Total</b>	<b>11,693,258</b>	<b>100</b>	<b>52,649,428</b>	<b>100</b>	<b>64,342,687</b>	<b>100</b>	<b>18.2</b>	<b>81.8</b>

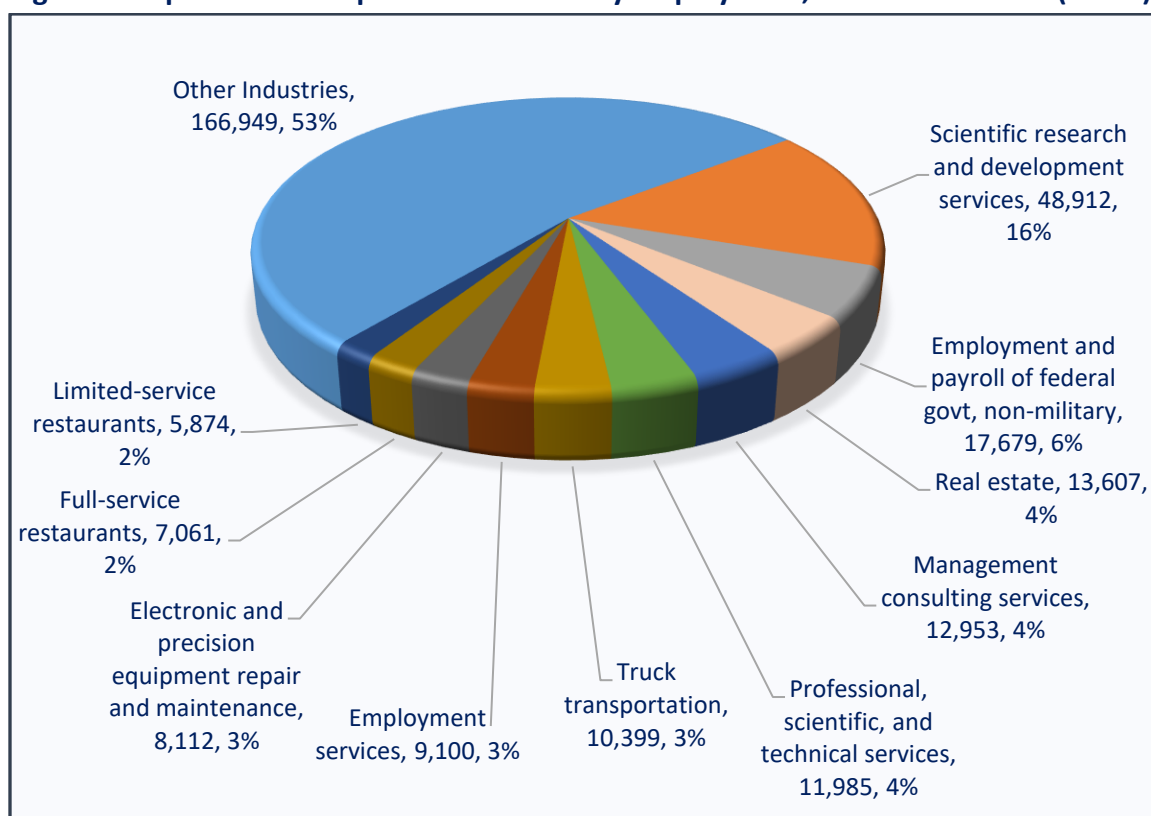
\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **312,630 jobs in the U.S. economy were supported by NASA activities in Fiscal Year 2019.**

Of these, 17,022 (5%) were directly located at NASA centers. As a result of the procurement of goods and services in the U.S. economy, 158,161 additional jobs (51%) were created. The remaining employment—137,447 jobs (44%)—was in the form of induced impacts as labor income and proprietor earnings were spent in the wider consumer economy.

Figure 8 depicts the ten most impacted industries by employment. Scientific research and development services and federal government<sup>23</sup> are the most impacted industries, respectively. These two industries together account for 20% of the jobs created. The employment in scientific research and development services is driven largely by NASA procurement spending. This industry accounted for approximately 66% of NASA procurement spending in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.

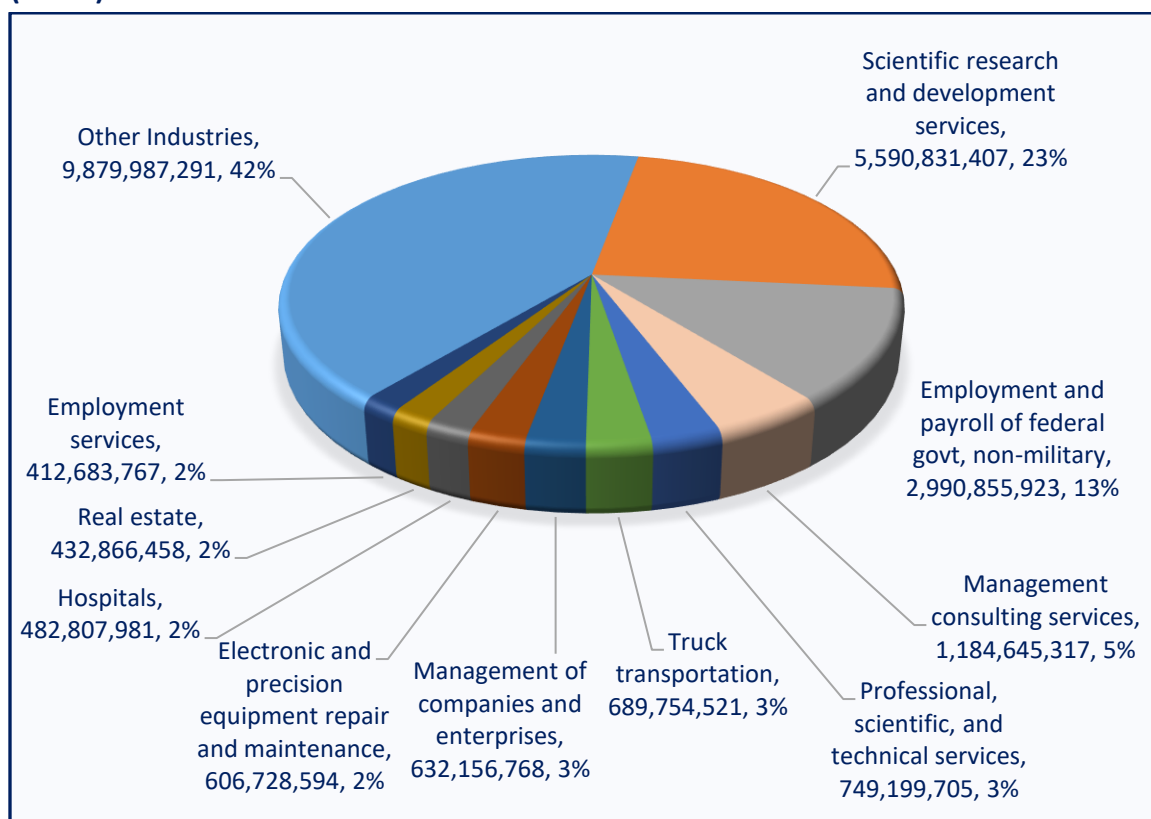
<sup>23</sup> Employment and payroll of federal government (non-military) is only included as an industry in supply chain analysis via employment. We only consider impacts to this industry from employment, not from contracting or indirect purchases.

**Figure 8: Top Ten Most Impacted Industries by Employment, the United States (NASA).**

**The total income impact of NASA in the U.S. was \$23.7 billion in Fiscal Year 2019.** Of this amount, nearly \$3 billion (13%) represented wages and benefits paid to NASA employees (direct impact). Payments to employees of private firms and organizations across the nation that supplied goods and services to NASA (indirect impact) represented \$13.1 billion (55%). The remaining income (induced impact), estimated to be \$7.6 billion (32%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 9 depicts the ten most impacted industries by labor income. Scientific research and development, management consulting services, and professional and technical services are the most impacted industries by income (along with the federal government sector). The four industries together account for 44% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the national average. As of 2018, the average employee compensation in the scientific research and development services industry was \$114,304 (including benefits), compared to an average of \$62,977 across the country.

**Figure 9: Top Ten Most Impacted Industries by Labor Income, the United States (NASA).**



**Box 8: Overlap between Labor Income, Value Added, and Output**

These categories are not mutually exclusive, they overlap significantly (i.e., labor income is a subset of value added, and value added in turn is a subset of output). Therefore, adding these values is double counting of impacts.

**Labor Income** = Employee Compensation + Proprietor Income – Taxes

**Value Added** = Labor Income + Taxes + Other Property Type Income (Profit)

**Output** = Value Added + Intermediate Purchases (Business to Business)

**Labor income** equals employee compensation (wages and benefits) and proprietor income.

**Proprietor income** consists of payments received by self-employed individuals and unincorporated business owners.

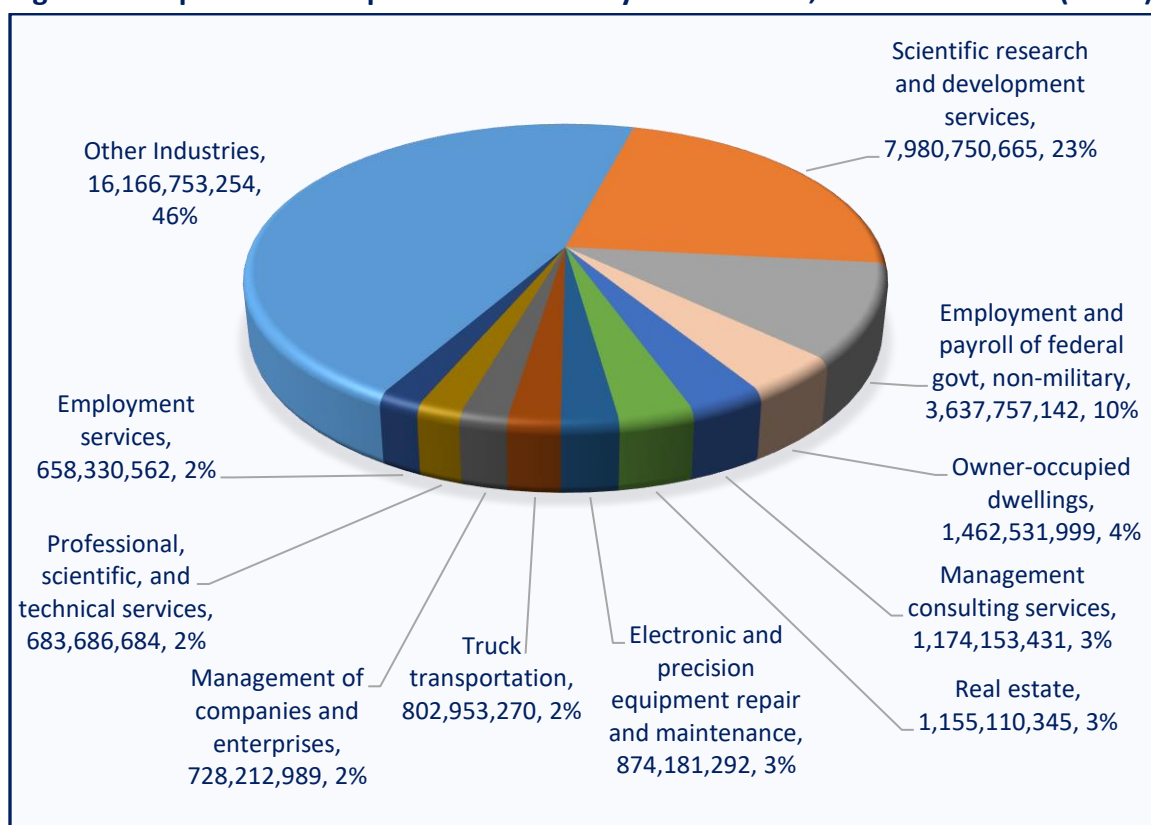
**Profits** (net of taxes), also referred as other property type income, include corporate profits, capital consumption allowance, payments for rent, dividends, royalties and interest income.

**Intermediate purchases (Business to Business)** are purchases of goods and services such as energy and materials that are used for the production of other goods and services rather for final consumption.

**The total value added impact of NASA in the U.S. was \$35.3 billion in Fiscal Year 2019.** Of this amount, more than \$3.5 billion (10%) was created by civil service employees and \$18.4 billion (52%) was created indirectly by the \$19.3 billion in procurement spending across all industry sectors in the country. \$13.4 billion (38%) was generated by increased consumption spending supported by increased earnings.

Figure 10 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services is the most impacted industry (along with the federal government sector). The two industries together account for a third of the total value added created. NASA activities accounted for an increase of nearly \$8 billion in value added in scientific research and development services. \$3.6 billion dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 10: Top Ten Most Impacted Industries by Value Added, the United States (NASA).**

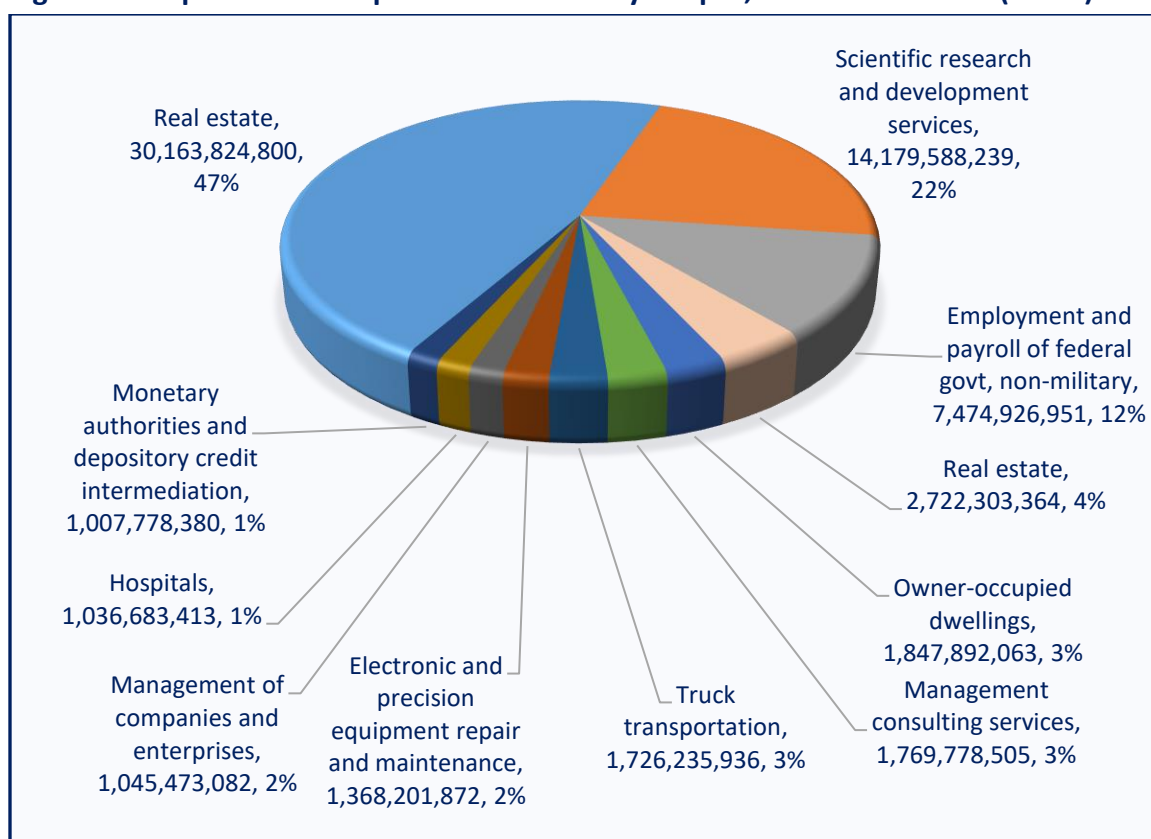


**The total output impact of NASA in the U.S. was \$64.3 billion in Fiscal Year 2019.** The direct impact of \$7.3 billion constitutes the value of production by NASA employees, accounting for around 12% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$19.3 billion resulted in an

additional increase in output (gross sales) of \$13.7 billion across all industry sectors (adding up to the indirect total of \$33 billion in Table 5). \$24 billion (37%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of more than \$14 billion in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 11). Similar to employment, impacts in this industry are largely driven by NASA procurement spending; scientific research and development services accounted for approximately 66% of NASA procurement spending in Fiscal Year 2019. Sales in management consulting services, truck transportation, and electronic and precision equipment repair and maintenance are also impacted significantly. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 11: Top Ten Most Impacted Industries by Output, the United States (NASA).**



### 6.1.2. M2M Program Impacts

At the national level, NASA directly employs 5,563 civil servants (3,155 FTEs) for the M2M program, with annual compensation of more than \$520 million in wages and benefits.

The M2M-related contracting originating from NASA (\$4.4 billion) is both large in volume and very diverse—involving almost every major category of manufacturing or service activity. There are indirect effects from the purchases of goods and services by NASA Centers as well as by the firms that supply those centers. Consumption expenditures made by the M2M labor force, by suppliers to the M2M program, and by suppliers further upstream within the production chain, create induced effects. Taking the domestic portions of these spending streams into account, the total employment impact of the M2M program across the U.S. is more than 69,000 jobs (including direct, indirect, and induced impacts—see Box 2 in Section 1). The labor income and economic output associated with this total amount of employment are, respectively, \$5.2 billion and \$14.1 billion. M2M contracting activities along with NASA’s direct employment for the M2M program generated an estimated \$1.5 billion in federal, state and local tax revenues in 2019 (Table 8).

**Table 8: Summary of M2M Program Impacts by Types of Impact, the United States.**

Impact Type	Employment <sup>24</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3,155	520,785	651,896	1,363,093	113,951
Indirect	35,723	3,026,066	4,236,120	7,503,499	778,473
Induced	30,355	1,676,524	2,961,822	5,296,629	634,750
<b>Total</b>	<b>69,233</b>	<b>5,223,376</b>	<b>7,849,838</b>	<b>14,163,222</b>	<b>1,527,174</b>
<i>Multiplier</i>	<i>21.9</i>	<i>10.0</i>	<i>12.0</i>	<i>10.4</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different M2M-specific NASA activities to the U.S. economy. Eighty-nine (89) percent of the employment impacts and eighty-five (85) percent of the output impacts are due to M2M procurement.

<sup>24</sup> While direct employment component refers to full-time equivalent (FTE) positions at NASA centers, indirect and direct employment components refer to a combination of full-time and part-time positions.

**Table 9: M2M Program Employment Impacts by Sources of Impact, the United States.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3,155	41.5	0	0.0	3,155	4.6	100.0	0.0
Indirect*	0	0.0	35,723	58.0	35,723	51.6	0.0	100.0
Induced	4,454	58.5	25,901	42.0	30,355	43.8	14.7	85.3
<b>Total</b>	<b>7,609</b>	<b>100</b>	<b>61,624</b>	<b>100</b>	<b>69,233</b>	<b>100</b>	<b>11.0</b>	<b>89.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 10: M2M Program Output Impacts by Sources of Impact, the United States.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,363,093	63.7	0	0.0	1,363,093	9.6	100.0	0.0
Indirect*	0	0.0	7,503,499	62.4	7,503,499	53.0	0.0	100.0
Induced	777,977	36.3	4,518,652	37.6	5,296,629	37.4	14.7	85.3
<b>Total</b>	<b>2,141,071</b>	<b>100</b>	<b>12,022,151</b>	<b>100</b>	<b>14,163,222</b>	<b>100</b>	<b>15.1</b>	<b>84.9</b>

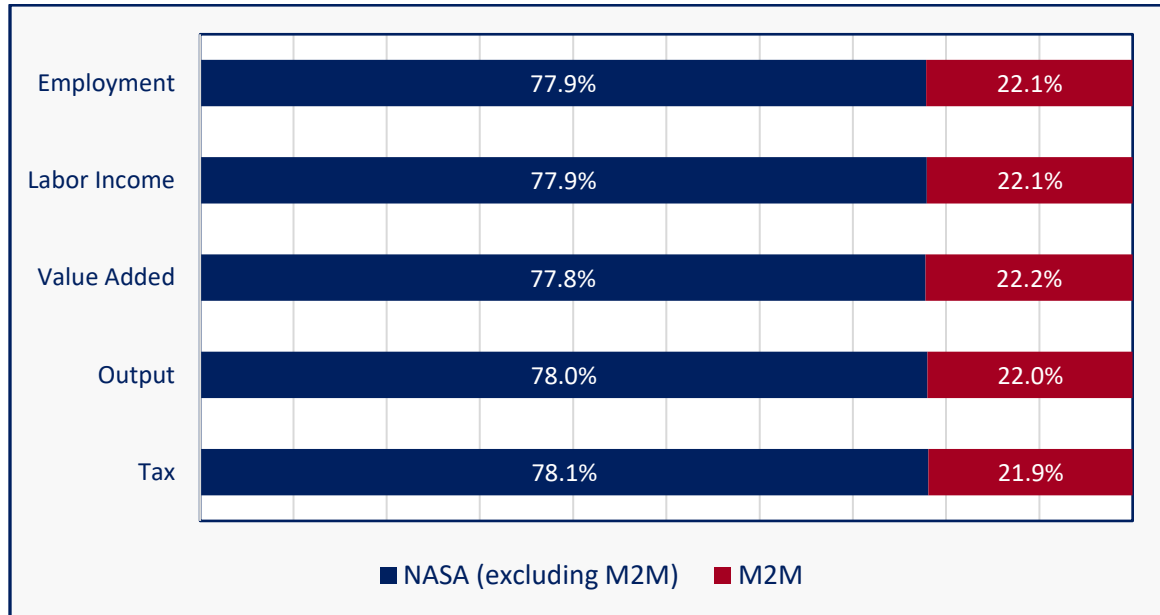
### 6.1.3. The M2M Program's Share of NASA Impacts

Approximately 22% of overall NASA agency impacts in the U.S. are attributable to the M2M program (Table 11 and Figure 12). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 11: The M2M Program Portion of Overall NASA Impacts, the United States.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	312,630	23,652,518	35,324,422	64,342,687	6,970,837
M2M Portion	69,233	5,223,376	7,849,838	14,163,222	1,527,174
M2M Share (%)	22.1%	22.1%	22.2%	22.0%	21.9%

**Figure 12: The M2M Program Portion of Overall NASA Impacts, the United States.**





## 6.2. Economic Impacts on the State of Alabama

### 6.2.1. NASA Impacts

In 2019, 2,372 NASA civil service employees (2,214 FTEs) residing in Alabama earned \$365 million in labor income. NASA contracts sourced in Alabama in the same year totaled \$1.9 billion. The total economic impact resulting from these activities is 35,768 jobs, \$2.3 billion in labor income, and \$6 billion in economic output. These economic activities generate more than \$189 million in tax revenues for the state and local governments in Alabama (Table 12).

The employment multiplier is 16.2, meaning that for every NASA job located in Alabama, an additional 15.2 jobs are supported in the state economy. The output multiplier of 6.3 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$5.3 million worth of output is sustained throughout the state economy.

**Table 12: Summary of NASA Impacts by Types of Impact, Alabama.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,214	365,050	457,537	956,695	8,078
Indirect	20,226	1,303,329	1,616,519	3,065,721	64,474
Induced	13,328	589,180	1,057,693	2,035,991	116,787
<b>Total</b>	<b>35,768</b>	<b>2,257,559</b>	<b>3,131,750</b>	<b>6,058,407</b>	<b>189,339</b>
<i>Multiplier</i>	16.2	6.2	6.8	6.3	n.a.

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Alabama economy. Table 13 examines the sources of the employment figures in the second column of Table 12. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Eighty-five (85) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 15%.

**Table 13: NASA Employment Impacts by Sources of Impact, Alabama.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2,214	41.0	0	0.0	2,214	6.2	100.0	0.0
Indirect*	0	0.0	20,226	66.6	20,226	56.5	0.0	100.0
Induced	3,187	59.0	10,141	33.4	13,328	37.3	23.9	76.1
<b>Total</b>	<b>5,401</b>	<b>100</b>	<b>30,367</b>	<b>100</b>	<b>35,768</b>	<b>100</b>	<b>15.1</b>	<b>84.9</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 14 examines the sources of the output figures in the fifth column of Table 12. Procurement spending is responsible for more than 76% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 24%. The reason that NASA employment's share of the overall output impact is larger than its share of the overall employment impact is that NASA employees produce more output per worker than the average employee in the NASA procurement supply chain. Because NASA's labor force is more concentrated in the state than its procurement (compared to the nationwide impacts), a slightly larger proportion of NASA impacts in Alabama are attributable to the employment of NASA civil service workers.

**Table 14: NASA Output Impacts by Sources of Impact, Alabama.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	956,695	66.3	0	0.0	956,695	15.8	100.0	0.0
Indirect*	0	0.0	3,065,721	66.4	3,065,721	50.6	0.0	100.0
Induced	487,369	33.7	1,548,622	33.6	2,035,991	33.6	23.9	76.1
<b>Total</b>	<b>1,444,064</b>	<b>100</b>	<b>4,614,343</b>	<b>100</b>	<b>6,058,407</b>	<b>100</b>	<b>23.8</b>	<b>76.2</b>

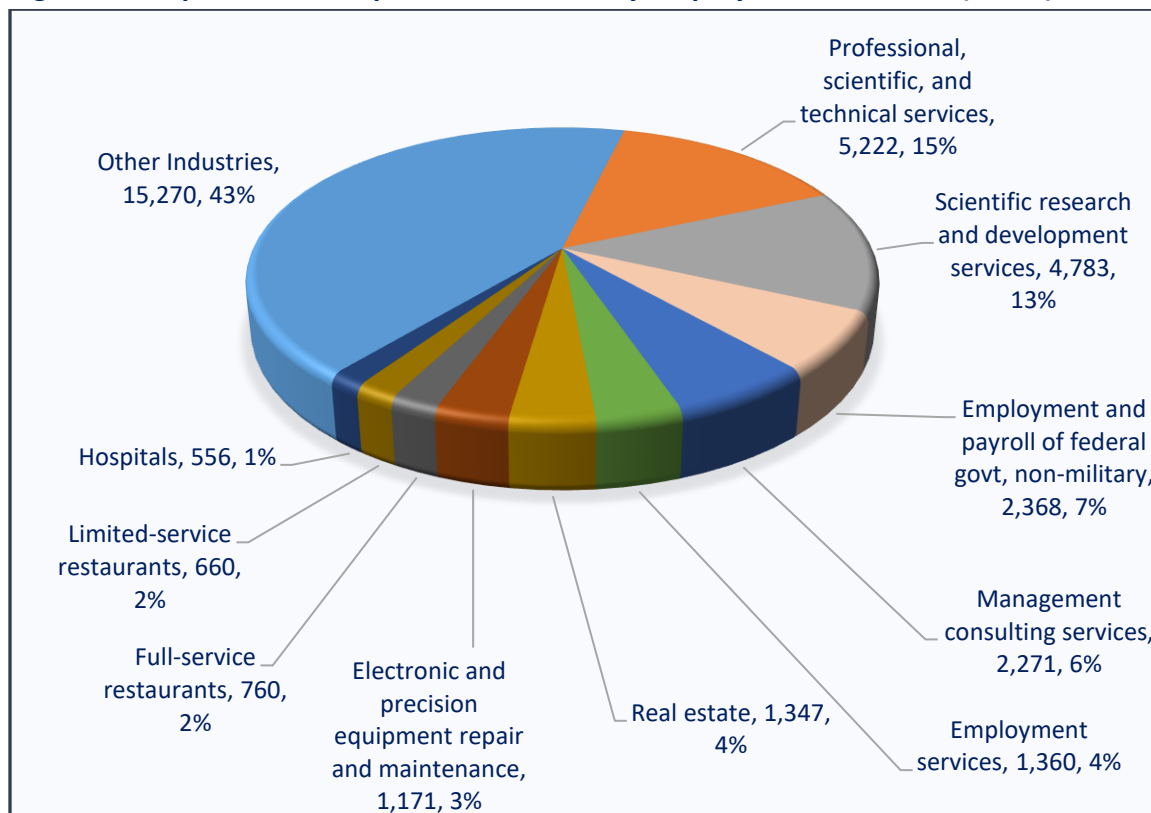
\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**35,768 jobs in the Alabama economy were supported by NASA activities in Fiscal Year 2019.** Of these, 2,214 (6%) were directly located at NASA centers. As a result of the procurement of goods and services in the Alabama economy, 20,226 additional jobs (57%) were created. The remaining employment—13,328 jobs (37%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 13 depicts the ten most impacted industries by employment. Professional and technical as well as scientific research and development services are the most impacted industries, respectively. These industries (along with the federal government sector) account for more than a third of the jobs created. The employment in these industries is

driven largely by NASA procurement spending; these two industries accounted for approximately 72% of NASA procurement spending in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.

**Figure 13: Top Ten Most Impacted Industries by Employment, Alabama (NASA).**

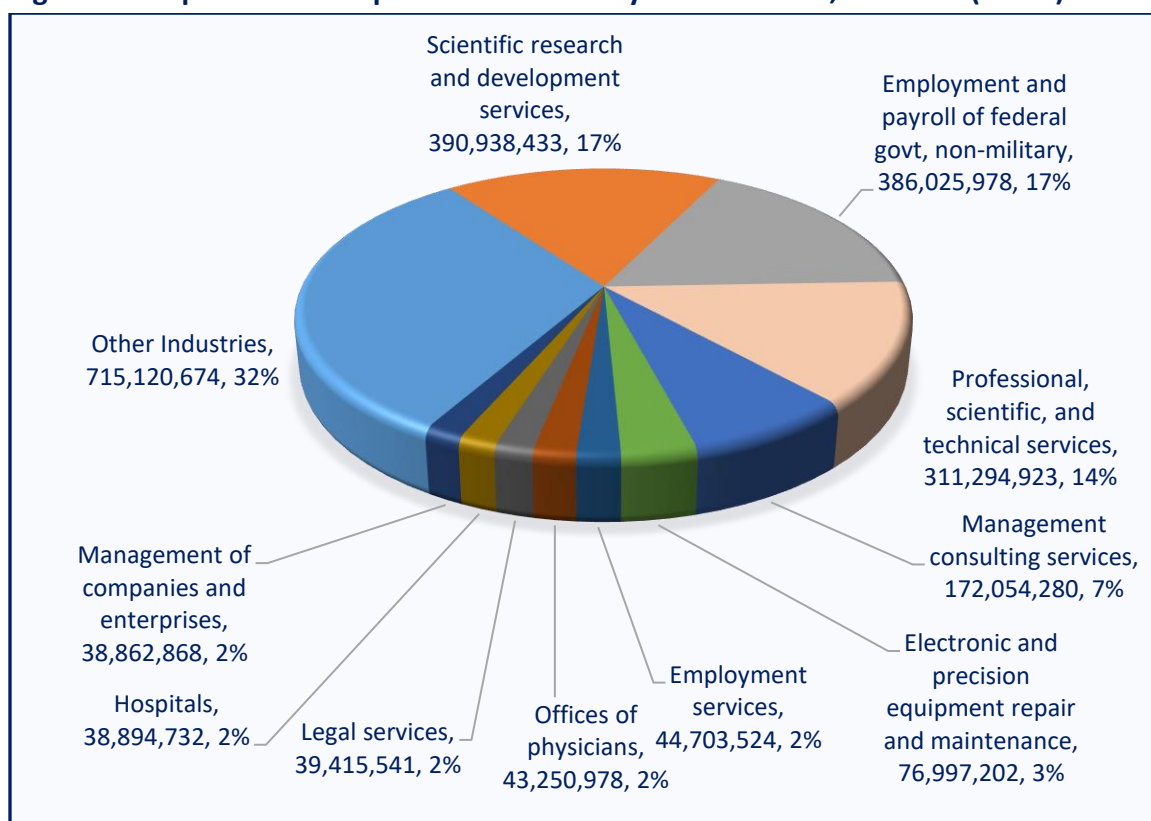


**The total income impact of NASA in Alabama was \$2.3 billion in Fiscal Year 2019.** Of this amount, \$365 million (16%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$1.3 billion (58%). The remaining income (induced impact), estimated to be \$590 million (26%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 14 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development, professional and technical services and management consulting services are the most impacted industries by income (along with the federal government sector). The four industries together account for 55% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee

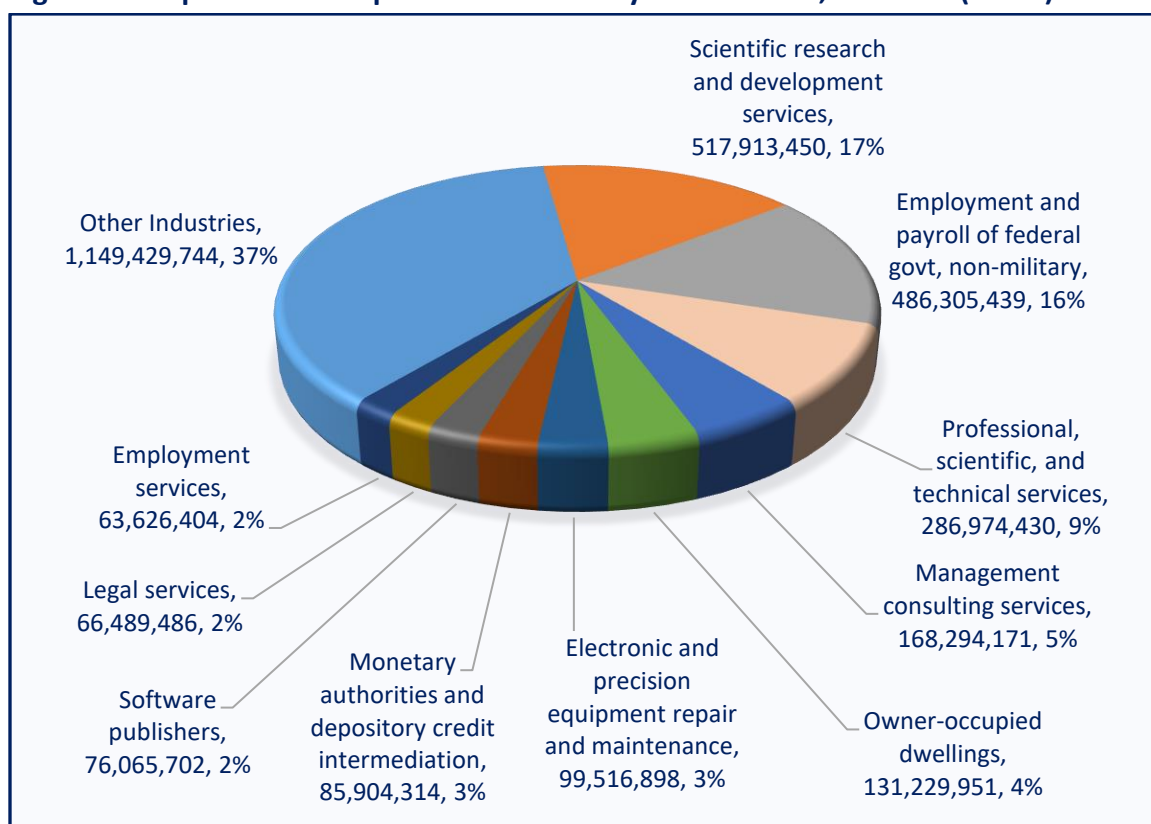
compensation in the scientific research and development services industry was \$83,715 (including benefits), compared to an average of \$51,613 across Alabama.

**Figure 14: Top Ten Most Impacted Industries by Labor Income, Alabama (NASA).**



**The total value added impact of NASA in Alabama was \$3.1 billion in Fiscal Year 2019.** Of this amount, more than \$457.5 million (15%) was created by civil service employees and \$1.6 billion (51%) was created indirectly by the \$1.9 billion in procurement spending across all industry sectors in Alabama. \$1 billion (34%) was generated by increased consumption spending supported by increased earnings.

Figure 15 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development and professional and technical services are the most impacted industries (along with the federal government sector). The three industries together account for 42% of the total value added created. NASA activities accounted for an increase of \$518 million in value added in scientific research and development services, and a \$287 million increase in value added in professional and technical services. Four hundred eighty six (486) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

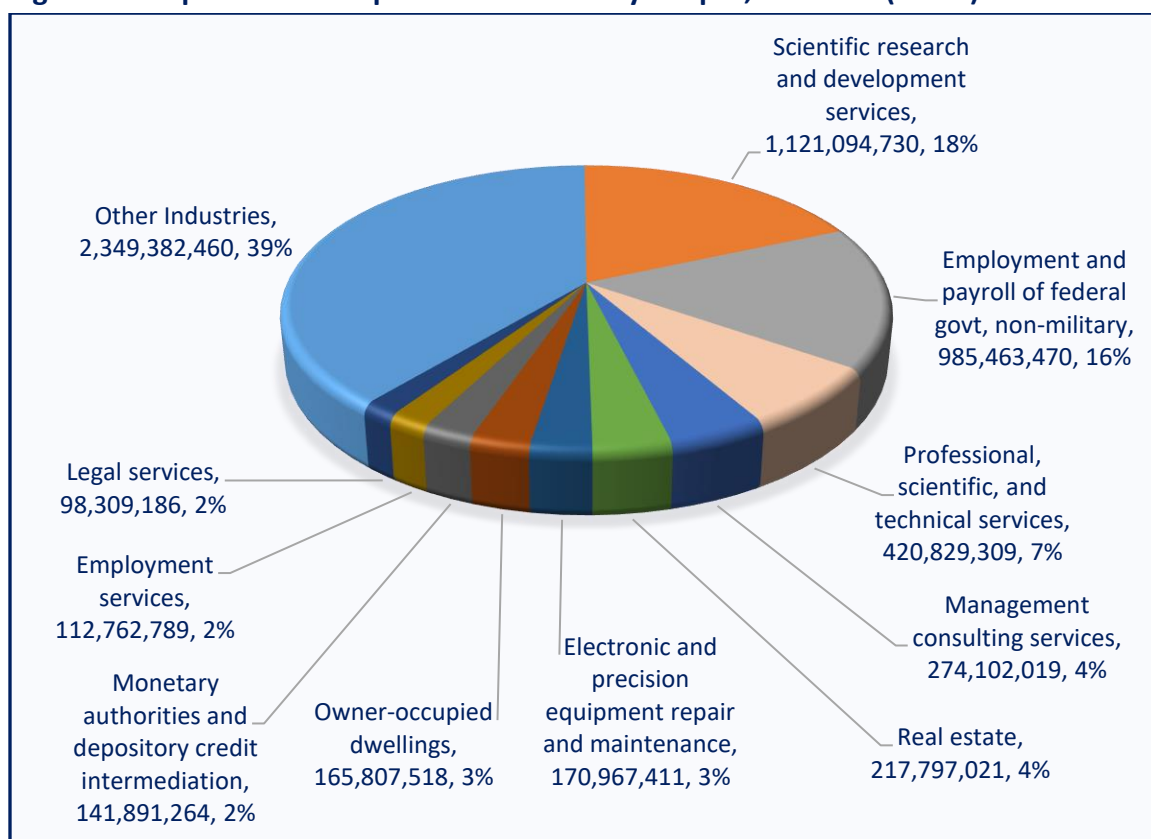
**Figure 15: Top Ten Most Impacted Industries by Value Added, Alabama (NASA).**

**The total output impact of NASA in Alabama was \$6 billion in Fiscal Year 2019.** The direct impact of \$956.7 million constitutes the value of production by NASA employees, accounting for around 16% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$1.9 billion resulted in an additional increase in output (gross sales) of \$1.1 billion across all industry sectors (adding up to the indirect total of \$3 billion in Table 12). \$2 billion (34%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of more than \$1.1 billion in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services, and a \$420.8 million increase in sales in professional and technical services (Figure 16). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 72% of NASA procurement spending in Fiscal Year 2019. Aside from management consulting services and electronic and precision equipment repair and maintenance, the output impacts reported in other industries mainly result from increases in consumption spending (induced impacts). The sizable impacts in the real

estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 16: Top Ten Most Impacted Industries by Output, Alabama (NASA).**



### 6.2.2. M2M Program Impacts

In 2019, Alabama had 1,222 M2M-related civil service employees (864 FTEs) jobs with a corresponding labor income of \$138.4 million. M2M program contracts sourced in Alabama in the same year totaled \$1.1 billion. The total Alabama employment impact is 18,609 jobs (including direct, indirect, and induced impacts—see Box 2, Section 1), meaning that for every M2M-related job located in the state, an additional 20.5 jobs are created in the state economy. The labor income and economic output impacts are \$1.2 billion and \$3.3 billion, respectively. These economic activities, along with the M2M program labor force, generate \$99 million in tax revenues for the state and local governments in Alabama (Table 15).

**Table 15: Summary of M2M Program Impacts by Types of Impact, Alabama.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	864	138,436	178,589	373,425	3,063
Indirect	10,830	775,884	1,009,103	1,825,559	33,927
Induced	6,914	323,452	581,695	1,082,862	62,106
<b>Total</b>	<b>18,609</b>	<b>1,237,772</b>	<b>1,769,387</b>	<b>3,281,845</b>	<b>99,096</b>
<i>Multiplier</i>	21.5	8.9	9.9	8.8	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Alabama economy. Eighty-nine (89) percent of the employment impacts and eighty-three (83) percent of the output impacts are due to NASA procurement sourced within the state.

**Table 16: M2M Program Employment Impacts by Sources of Impact, Alabama.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	864	42.5	0	0.0	864	4.6	100.0	0.0
Indirect*	0	0.0	10,830	65.3	10,830	58.2	0.0	100.0
Induced	1,170	57.5	5,744	34.7	6,914	37.2	16.9	83.1
<b>Total</b>	<b>2,035</b>	<b>100</b>	<b>16,574</b>	<b>100</b>	<b>18,609</b>	<b>100</b>	<b>10.9</b>	<b>89.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 17: M2M Program Output Impacts by Sources of Impact, Alabama.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	373,425	67.0	0	0.0	373,425	11.4	100.0	0.0
Indirect*	0	0.0	1,825,559	67.0	1,825,559	55.6	0.0	100.0
Induced	183,512	33.0	899,350	33.0	1,082,862	33.0	16.9	83.1
<b>Total</b>	<b>556,937</b>	<b>100</b>	<b>2,724,909</b>	<b>100</b>	<b>3,281,845</b>	<b>100</b>	<b>17.0</b>	<b>83.0</b>



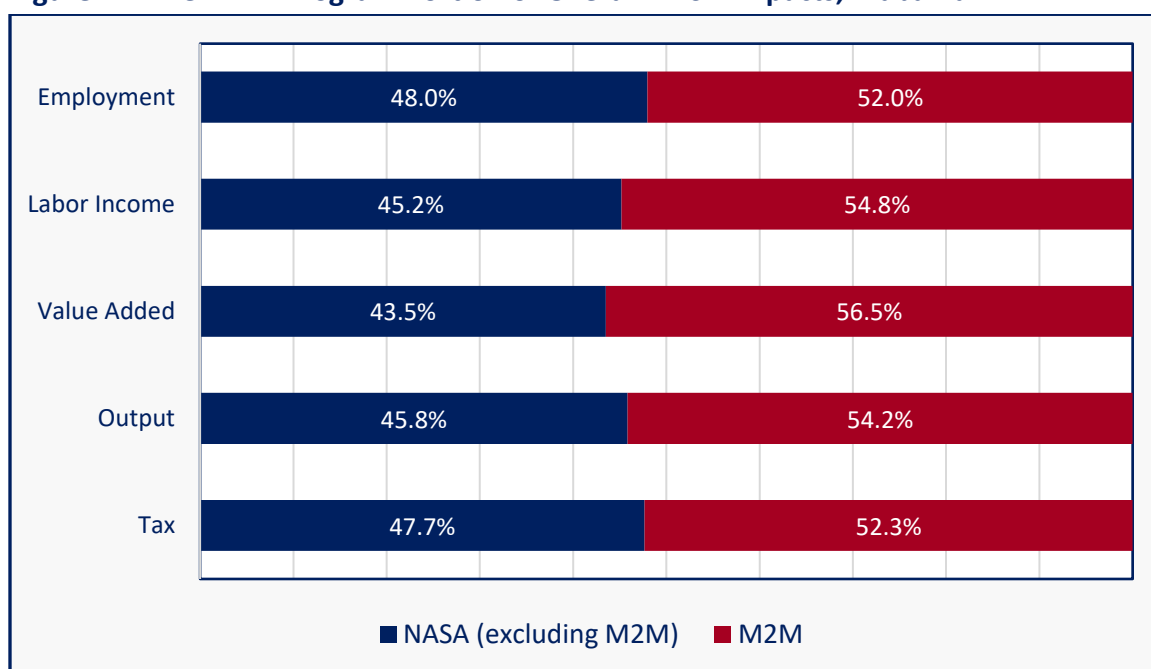
### 6.2.3. The M2M Program's Share of NASA Impacts

Approximately 54% of overall NASA agency impacts in the state are attributable to the M2M program (Table 18 and Figure 17). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 18: The M2M Program Portion of Overall NASA Impacts, Alabama.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	35,768	2,257,559	3,131,750	6,058,407	189,339
M2M Portion	18,609	1,237,772	1,769,387	3,281,845	99,096
M2M Share (%)	52.0%	54.8%	56.5%	54.2%	52.3%

**Figure 17: The M2M Program Portion of Overall NASA Impacts, Alabama.**





### 6.3. Economic Impacts on the State of Alaska

#### 6.3.1. NASA Impacts

In 2019, 4 NASA civil service employees (2 FTEs) residing in Alaska earned \$131,000 in labor income. NASA contracts sourced in Alaska in the same year totaled \$17.2 million. The total economic impact resulting from these activities is 191 jobs, \$13.5 million in labor income, and \$37 million in economic output. These economic activities generate \$711,000 in tax revenues for the state and local governments in Alaska (Table 19).

**Table 19: Summary of NASA Impacts by Types of Impact, Alaska.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	131	352	737	1
Indirect	123	9,714	12,055	25,201	272
Induced	67	3,614	6,433	10,991	438
<b>Total</b>	<b>191</b>	<b>13,460</b>	<b>18,841</b>	<b>36,929</b>	<b>711</b>
<i>Multiplier</i>	<i>112.1</i>	<i>102.4</i>	<i>53.5</i>	<i>50.1</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Alaska economy. Table 20 examines the sources of the employment figures in the second column of Table 19. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 99% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is around 1%.

**Table 20: NASA Employment Impacts by Sources of Impact, Alaska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	64.4	0	0.0	2	0.9	100.0	0.0
Indirect*	0	0.0	123	65.2	123	64.3	0.0	100.0
Induced	1	35.6	66	34.8	67	34.8	1.4	98.6
<b>Total</b>	<b>3</b>	<b>100</b>	<b>189</b>	<b>100</b>	<b>191</b>	<b>100</b>	<b>1.4</b>	<b>98.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 21 examines the sources of the output figures in the fifth column of Table 19. Procurement spending is responsible for nearly 98% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is around 2%.

**Table 21: NASA Output Impacts by Sources of Impact, Alaska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	737	82.5	0	0.0	737	2.0	100.0	0.0
Indirect*	0	0.0	25,201	69.9	25,201	68.2	0.0	100.0
Induced	156	17.5	10,835	30.1	10,991	29.8	1.4	98.6
<b>Total</b>	<b>893</b>	<b>100</b>	<b>36,036</b>	<b>100</b>	<b>36,929</b>	<b>100</b>	<b>2.4</b>	<b>97.6</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.3.2. M2M Program Impacts

There were no M2M-specific NASA employees in Alaska in FY 2019, but approximately \$48,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is less than one job, \$24,000 in labor income, and \$81,000 worth of output (Table 22).

**Table 22: Summary of M2M Program Impacts by Types of Impact, Alaska.**

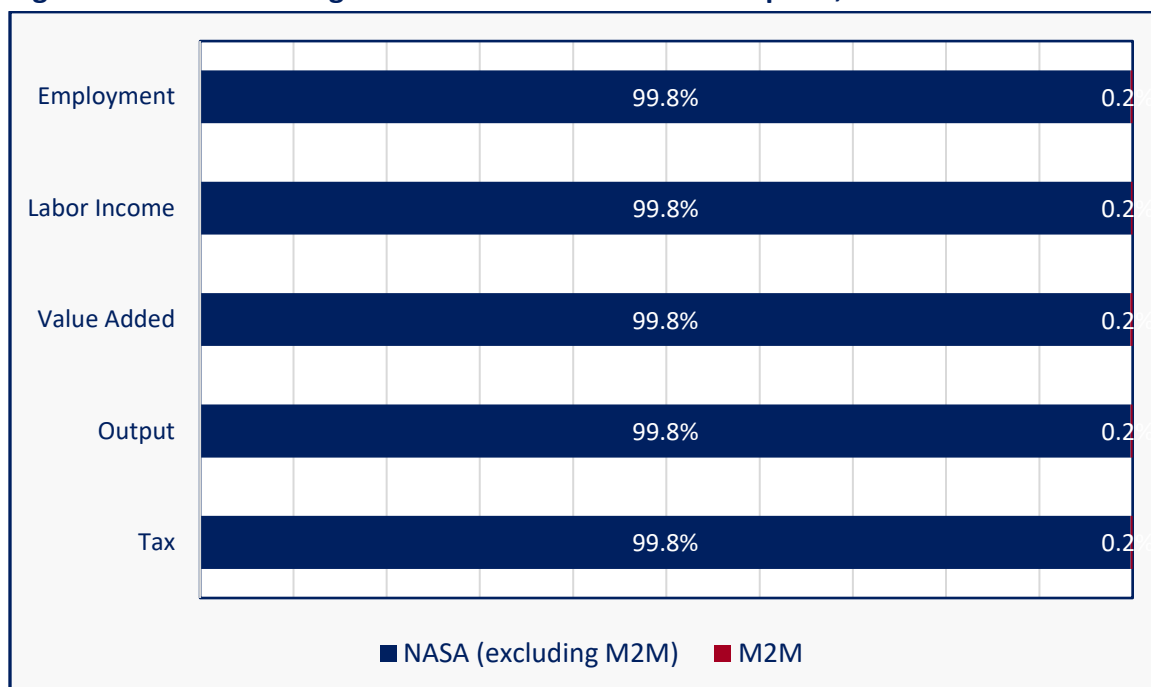
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	<1	19	37	66	1
Induced	<1	5	9	15	1
<b>Total</b>	<b>&lt;1</b>	<b>24</b>	<b>46</b>	<b>81</b>	<b>2</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.3.3. The M2M Program's Share of NASA Impacts

Less than 1% of overall NASA agency impacts in the state are attributable to the M2M program (Table 23 and Figure 18).

**Table 23: The M2M Program Portion of Overall NASA Impacts, Alaska.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	191	13,460	18,841	36,929	711
M2M Portion	<1	24	46	81	2
M2M Share (%)	0.2%	0.2%	0.2%	0.2%	0.2%

**Figure 18: The M2M Program Portion of Overall NASA Impacts, Alaska.**

## 6.4. Economic Impacts on the State of Arizona

### 6.4.1. NASA Impacts

In 2019, 21 NASA civil service employees (14 FTEs) residing in Arizona earned more than \$2.5 million in labor income. NASA contracts sourced in Arizona in the same year totaled \$343.7 million. The total economic impact resulting from these activities is 5,041 jobs, \$325.3 million in labor income, and \$971 million in economic output. These economic activities generate \$30 million in tax revenues for the state and local governments in Arizona (Table 24).

**Table 24: Summary of NASA Impacts by Types of Impact, Arizona.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	2,538	2,948	6,165	45
Indirect	2,907	213,924	321,520	625,693	11,359
Induced	2,119	108,859	188,732	339,153	18,653
<b>Total</b>	<b>5,041</b>	<b>325,320</b>	<b>513,200</b>	<b>971,010</b>	<b>30,057</b>
<i>Multiplier</i>	353.3	128.2	174.1	157.5	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Arizona economy. Table 25 examines the sources of the employment figures in the second column of Table 24. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 99% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 1%.

**Table 25: NASA Employment Impacts by Sources of Impact, Arizona.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	14	34.0	0	0.0	14	0.3	100.0	0.0
Indirect*	0	0.0	2,907	58.2	2,907	57.7	0.0	100.0
Induced	28	66.0	2,092	41.8	2,119	42.0	1.3	98.7
<b>Total</b>	<b>42</b>	<b>100</b>	<b>4,999</b>	<b>100</b>	<b>5,041</b>	<b>100</b>	<b>0.8</b>	<b>99.2</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 26 examines the sources of the output figures in the fifth column of Table 24. Procurement spending is responsible for approximately 99% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is around 1%.

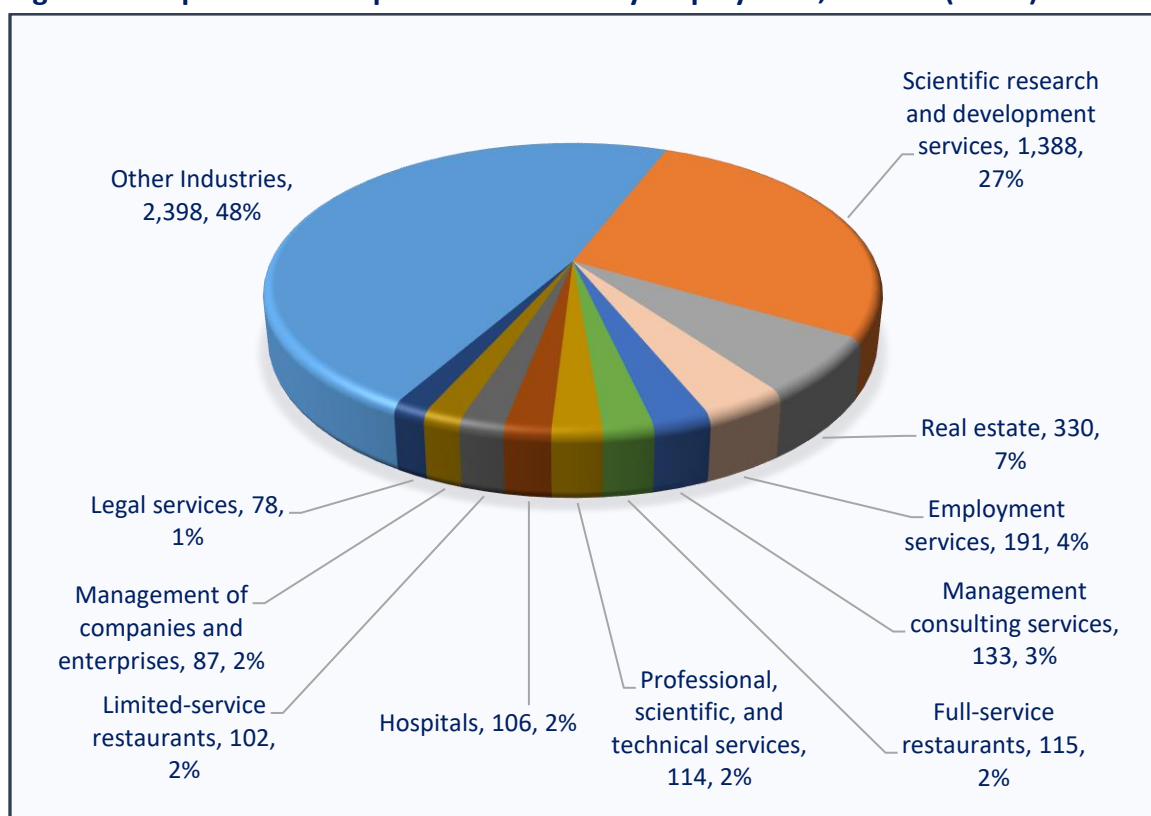
**Table 26: NASA Output Impacts by Sources of Impact, Arizona.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	6,165	58.2	0	0.0	6,165	0.6	100.0	0.0
Indirect*	0	0.0	625,693	65.1	625,693	64.4	0.0	100.0
Induced	4,431	41.8	334,722	34.9	339,153	34.9	1.3	98.7
<b>Total</b>	<b>10,596</b>	<b>100</b>	<b>960,415</b>	<b>100</b>	<b>971,010</b>	<b>100</b>	<b>1.1</b>	<b>98.9</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

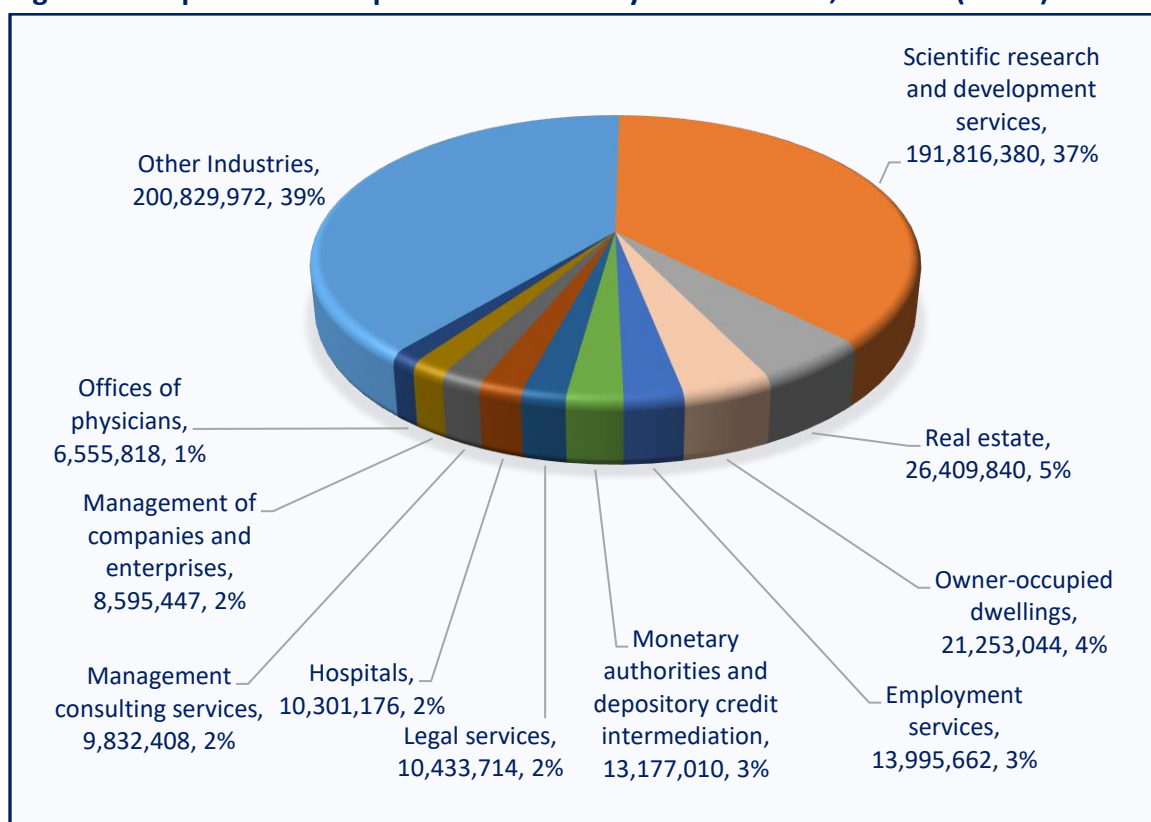
**5,041 jobs in the Arizona economy were supported by NASA activities in Fiscal Year 2019.** Of these, 14 (<1%) were directly located at NASA centers. As a result of the procurement of goods and services in the Arizona economy, 2,907 additional jobs (58%) were created. The remaining employment—2,119 jobs (42%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 19 depicts the ten most impacted industries by employment. Scientific research and development services is the most heavily impacted industry, accounting for 27% of the jobs created. The employment in this industry is driven largely by NASA procurement spending; scientific research and development services accounted for approximately 94% of NASA procurement spending in the state in Fiscal Year 2019.

**Figure 19: Top Ten Most Impacted Industries by Employment, Arizona (NASA).**

**The total income impact of NASA in Arizona was \$325.3 million in Fiscal Year 2019.** Of this amount, more than \$2.5 million (1%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$214 million (66%). The remaining income (induced impact), estimated to be \$108.8 million (33%), resulted from expenditures by those earning income through the direct and indirect impacts.

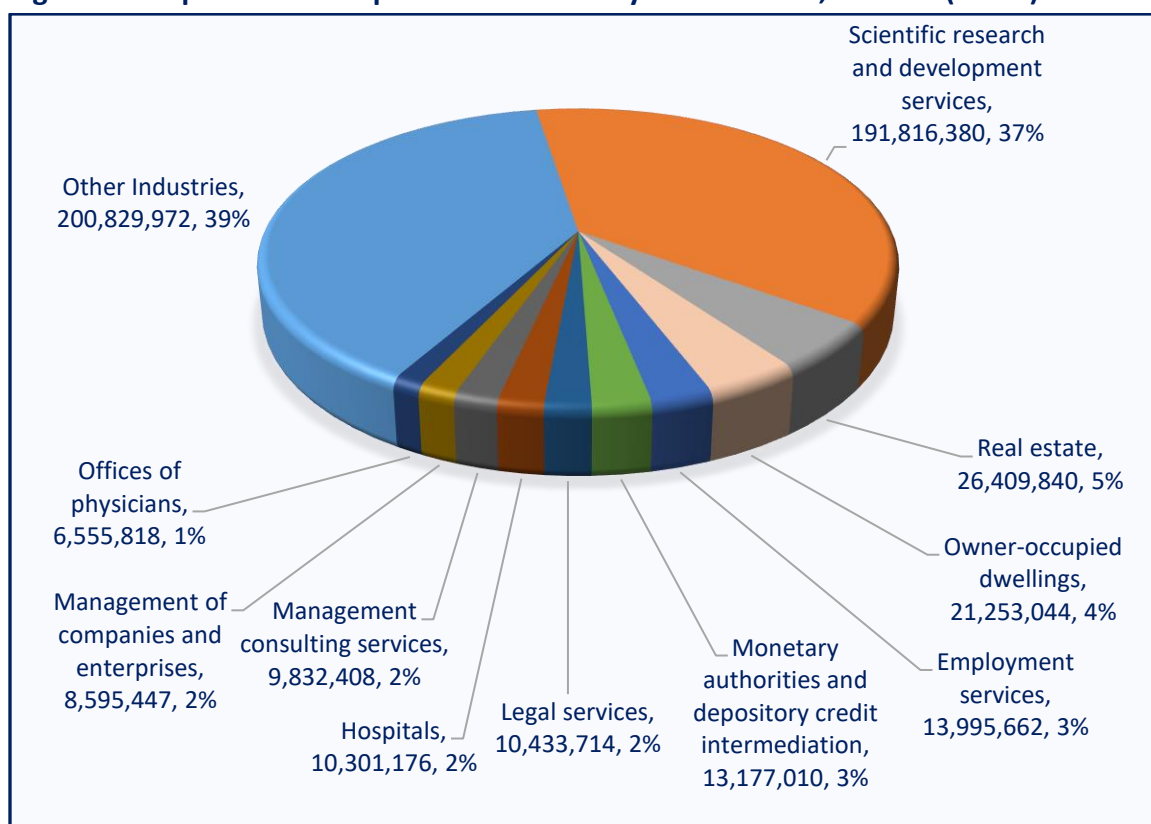
Figure 20 depicts the ten most impacted industries by labor income. As a consequence of its share of total employment, scientific research and development services is the most impacted industry, accounting for 37% of the total labor income earned. The reason that this industry's share of labor income is larger than its share of employment is that employee compensation in this industry is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$95,329 (including benefits), compared to an average of \$55,742 across Arizona.

**Figure 20: Top Ten Most Impacted Industries by Labor Income, Arizona (NASA).**

**The total value added impact of NASA in Arizona was \$513.2 million in Fiscal Year 2019.**

Of this amount, more than \$2.9 million (<1%) was created by civil service employees and \$321.5 million (63%) was created indirectly by the \$343.7 million in procurement spending across all industry sectors in Arizona. \$188.7 million (37%) was generated by increased consumption spending supported by increased earnings.

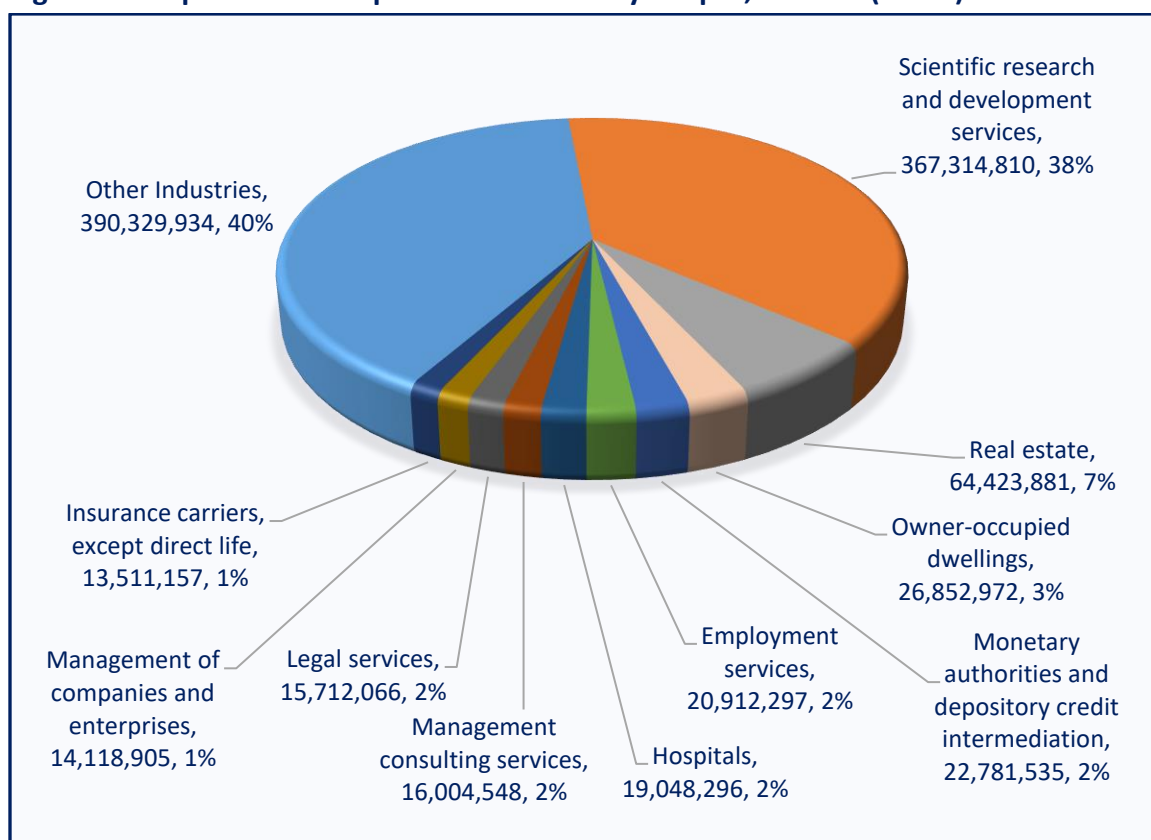
Figure 21 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services is the most impacted industry. NASA activities accounted for an increase of more than \$191.8 million in value added in scientific research and development services in Arizona.

**Figure 21: Top Ten Most Impacted Industries by Value Added, Arizona (NASA).**

**The total output impact of NASA in Arizona was \$971 million in Fiscal Year 2019.** The direct impact of \$6.1 million constitutes the value of production by NASA employees, accounting for around 1% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$343.7 million resulted in an additional increase in output (gross sales) of \$282 million across all industry sectors (adding up to the indirect total of \$625.7 million in Table 24). Approximately \$339.1 million (35%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of \$367.3 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 22). Similar to employment, impacts in this industry are nearly completely driven by NASA procurement spending in the state.



**Figure 22: Top Ten Most Impacted Industries by Output, Arizona (NASA).**

### 6.4.2. M2M Program Impacts

In 2019, Arizona had one M2M-related civil service employee (1 FTE) with a corresponding labor income of \$147,000. M2M program contracts sourced in the state in the same year totaled \$13.7 million. The total Arizona employment impact is 176 jobs. The labor income and economic output associated with this employment are \$12.8 million and \$37.9 million, respectively. The M2M program generates approximately \$1.2 million in tax revenues for the state and local governments in Arizona (Table 27).

**Table 27: Summary of M2M Program Impacts by Types of Impact, Arizona.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	147	139	290	3
Indirect	98	8,404	12,954	24,887	498
Induced	77	4,253	7,321	12,723	700
<b>Total</b>	<b>176</b>	<b>12,804</b>	<b>20,413</b>	<b>37,900</b>	<b>1,200</b>
<i>Multiplier</i>	<i>261.9</i>	<i>87.0</i>	<i>147.3</i>	<i>130.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-

employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Arizona economy. Nearly 99 percent of the employment impacts and 98% percent of the output impacts are due to NASA procurement sourced within the state.

**Table 28: M2M Program Employment Impacts by Sources of Impact, Arizona.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	29.9	0	0.0	1	0.4	100.0	0.0
Indirect*	0	0.0	98	56.6	98	55.9	0.0	100.0
Induced	2	70.1	75	43.4	77	43.8	2.0	98.0
<b>Total</b>	<b>2</b>	<b>100</b>	<b>173</b>	<b>100</b>	<b>176</b>	<b>100</b>	<b>1.3</b>	<b>98.7</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 29: M2M Program Output Impacts by Sources of Impact, Arizona.**

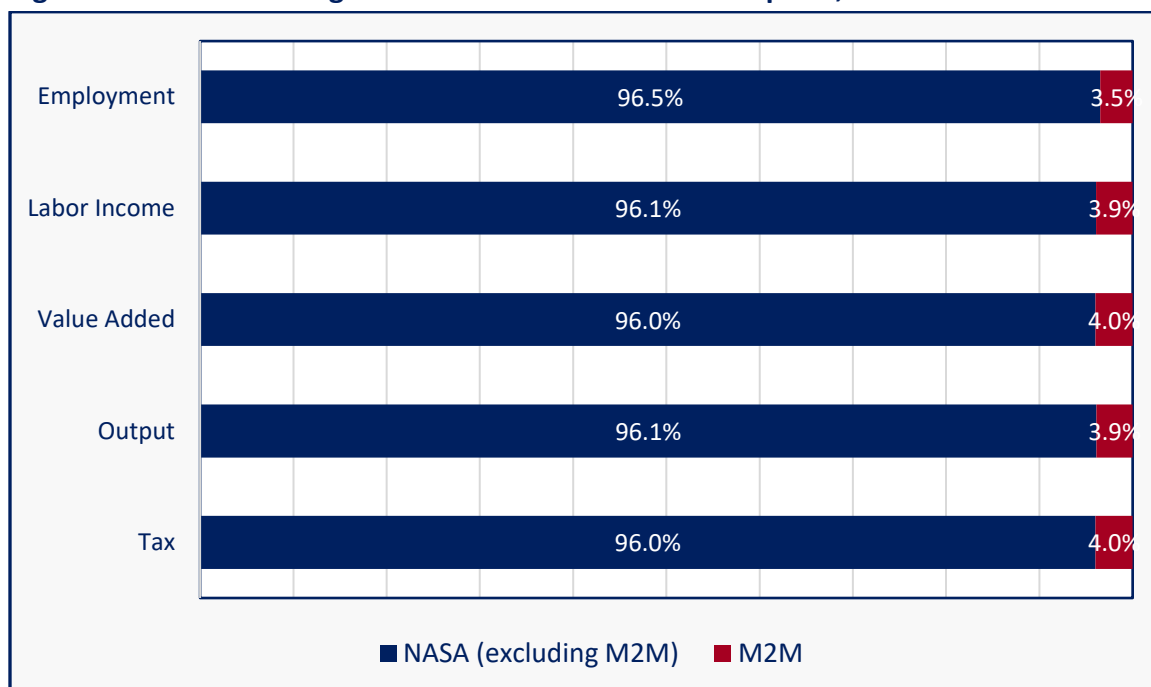
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	290	52.6	0	0.0	290	0.8	100.0	0.0
Indirect*	0	0.0	24,887	66.6	24,887	65.7	0.0	100.0
Induced	261	47.4	12,462	33.4	12,723	33.6	2.0	98.0
<b>Total</b>	<b>550</b>	<b>100</b>	<b>37,350</b>	<b>100</b>	<b>37,900</b>	<b>100</b>	<b>1.5</b>	<b>98.5</b>

#### 6.4.3. The M2M Program's Share of NASA Impacts

Approximately 4% of overall NASA agency impacts in the state are attributable to the M2M program (Table 30 and Figure 23). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 30: The M2M Program Portion of Overall NASA Impacts, Arizona.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	5,041	325,320	513,200	971,010	30,057
M2M Portion	176	12,804	20,413	37,900	1,200
M2M Share (%)	3.5%	3.9%	4.0%	3.9%	4.0%

**Figure 23: The M2M Program Portion of Overall NASA Impacts, Arizona.**

## 6.5. Economic Impacts on the State of Arkansas

### 6.5.1. NASA Impacts

In 2019, 2 NASA civil service employees (1 FTE) residing in Arkansas earned \$158,000 in labor income. NASA contracts sourced in Arkansas in the same year totaled \$2.2 million. The total economic impact resulting from these activities is 32 jobs, \$2 million in labor income, and \$5.7 million in economic output. These economic activities generate \$181,000 in tax revenues for the state and local governments in Arkansas (Table 31).

**Table 31: Summary of NASA Impacts by Types of Impact, Arkansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	158	207	432	4
Indirect	19	1,265	1,722	3,427	69
Induced	12	508	920	1,796	108
<b>Total</b>	<b>32</b>	<b>1,931</b>	<b>2,849</b>	<b>5,655</b>	<b>181</b>
<i>Multiplier</i>	<i>32.3</i>	<i>12.2</i>	<i>13.8</i>	<i>13.1</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Arkansas economy. Table 32 examines the sources of the employment figures in the second column of Table 31. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 93% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is around 7%.

**Table 32: NASA Employment Impacts by Sources of Impact, Arkansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	41.8	0	0.0	1	3.1	100.0	0.0
Indirect*	0	0.0	19	64.6	19	59.8	0.0	100.0
Induced	1	58.2	11	35.4	12	37.1	11.6	88.4
<b>Total</b>	<b>2</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>32</b>	<b>100</b>	<b>7.4</b>	<b>92.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 33 examines the sources of the output figures in the fifth column of Table 31. Procurement spending is responsible for nearly 89% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is around 11%.

**Table 33: NASA Output Impacts by Sources of Impact, Arkansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	432	67.4	0	0.0	432	7.6	100.0	0.0
Indirect*	0	0.0	3,427	68.3	3,427	60.6	0.0	100.0
Induced	209	32.6	1,587	31.7	1,796	31.8	11.6	88.4
<b>Total</b>	<b>641</b>	<b>100</b>	<b>5,014</b>	<b>100</b>	<b>5,655</b>	<b>100</b>	<b>11.3</b>	<b>88.7</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.5.2. M2M Program Impacts

There were no M2M-specific NASA employees in Arkansas in FY 2019, but \$107,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is one job, \$75,000 in labor income, and \$243,000 worth of output (Table 34).

**Table 34: Summary of M2M Program Impacts by Types of Impact, Arkansas.**

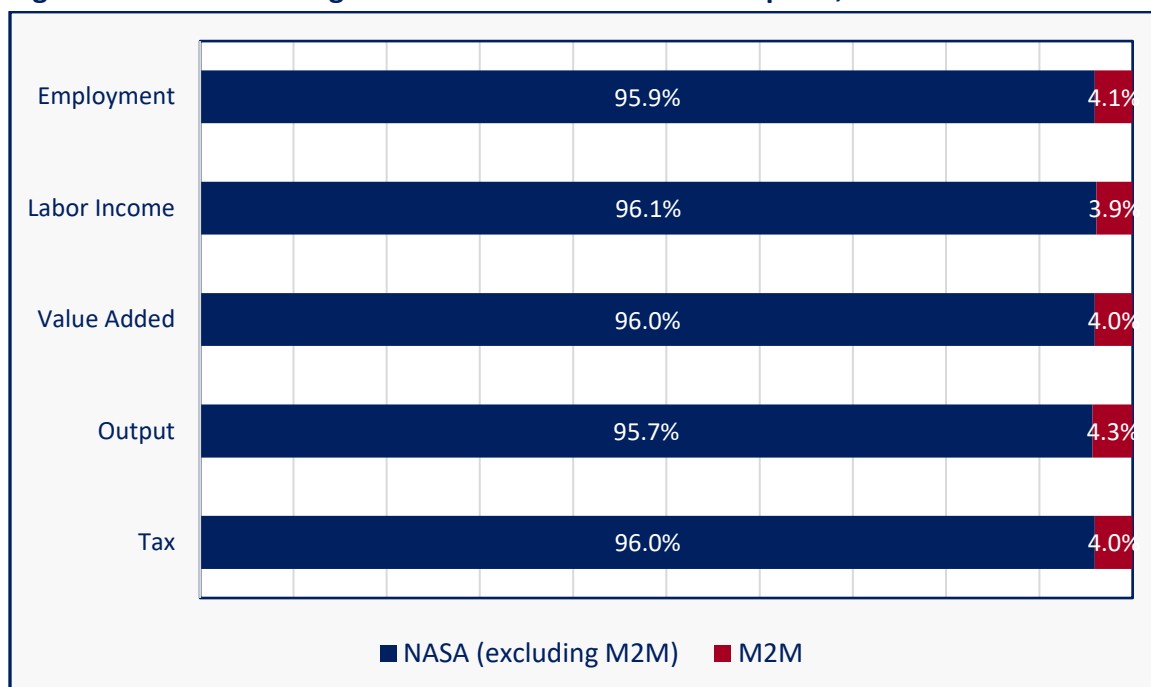
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	1	56	81	177	3
Induced	<1	19	35	66	4
<b>Total</b>	<b>1</b>	<b>75</b>	<b>115</b>	<b>243</b>	<b>7</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.5.3. The M2M Program's Share of NASA Impacts

Around 4% of overall NASA agency impacts in the state are attributable to the M2M program (Table 35 and Figure 24). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 35: The M2M Program Portion of Overall NASA Impacts, Arkansas.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	32	1,931	2,849	5,655	181
M2M Portion	1	75	115	243	7
M2M Share (%)	4.1%	3.9%	4.0%	4.3%	4.0%

**Figure 24: The M2M Program Portion of Overall NASA Impacts, Arkansas.**

## 6.6. Economic Impacts on the State of California

### 6.6.1 NASA Impacts

In 2019, 1,848 NASA civil service employees (1,679 FTEs) residing in California earned \$308 million in labor income. NASA contracts sourced in California in the same year totaled more than \$5.2 billion. The total economic impact resulting from these activities is 69,725 jobs, \$6.3 billion in labor income, and \$16.6 billion in economic output. These economic activities generate more than \$787.2 million in tax revenues for the state and local governments in California (Table 36).

The employment multiplier is 41.5, meaning that for every NASA job located in California, an additional 40.5 jobs are supported in the state economy. The output multiplier of 22.9 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$21.9 million worth of output is sustained throughout the state economy.

**Table 36: Summary of NASA Impacts by Types of Impact, California.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,679	308,027	346,867	725,288	13,068
Indirect	34,085	3,773,669	5,532,601	9,050,269	330,339
Induced	33,961	2,213,946	3,931,815	6,828,083	443,881
<b>Total</b>	<b>69,725</b>	<b>6,295,641</b>	<b>9,811,283</b>	<b>16,603,640</b>	<b>787,287</b>
<i>Multiplier</i>	<i>41.5</i>	<i>20.4</i>	<i>28.3</i>	<i>22.9</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the California economy. Table 37 examines the sources of the employment figures in the second column of Table 36. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 93% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 7%.

**Table 37: NASA Employment Impacts by Sources of Impact, California.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1,679	37.1	0	0.0	1,679	2.4	100.0	0.0
Indirect*	0	0.0	34,085	52.3	34,085	48.9	0.0	100.0
Induced	2,847	62.9	31,114	47.7	33,961	48.7	8.4	91.6
<b>Total</b>	<b>4,526</b>	<b>100</b>	<b>65,199</b>	<b>100</b>	<b>69,725</b>	<b>100</b>	<b>6.5</b>	<b>93.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 38 examines the sources of the output figures in the fifth column of Table 36. Procurement spending is responsible for more than 92% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 8%.

**Table 38: NASA Output Impacts by Sources of Impact, California.**

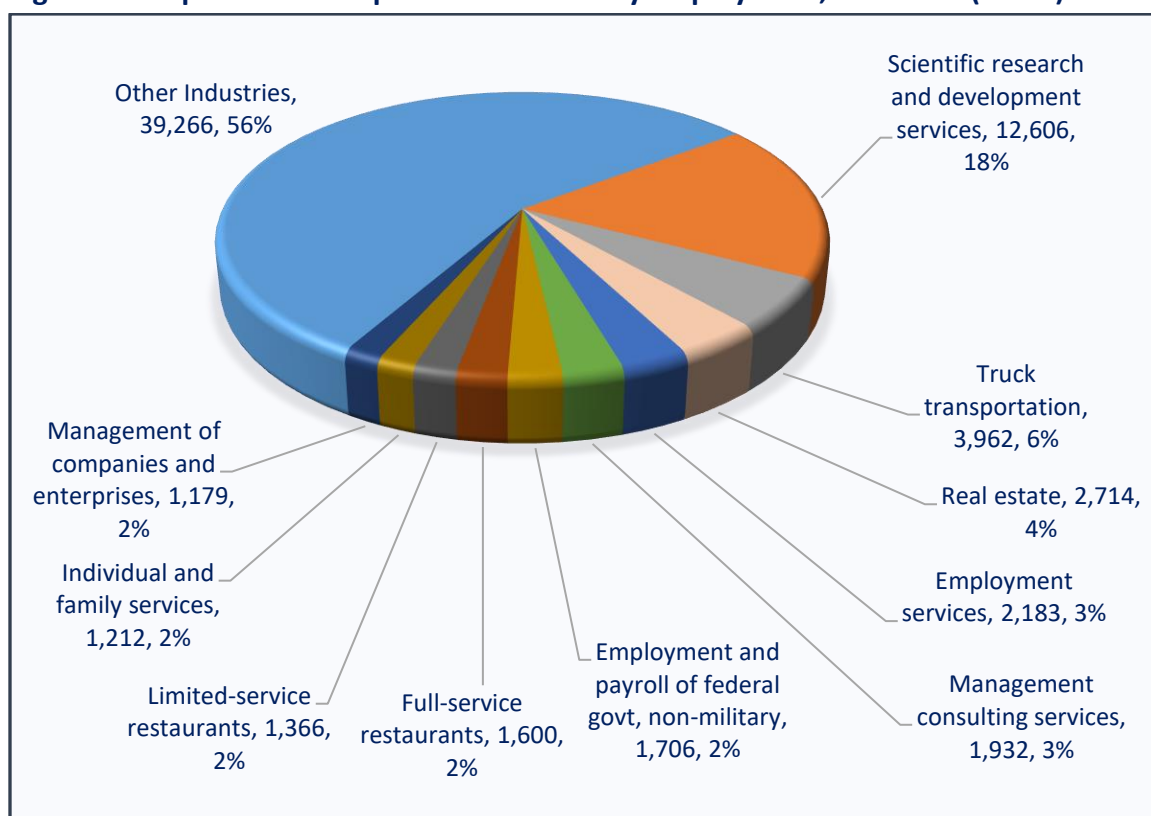
Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	725,288	55.9	0	0.0	725,288	4.4	100.0	0.0
Indirect*	0	0.0	9,050,269	59.1	9,050,269	54.5	0.0	100.0
Induced	572,974	44.1	6,255,108	40.9	6,828,083	41.1	8.4	91.6
<b>Total</b>	<b>1,298,263</b>	<b>100</b>	<b>15,305,377</b>	<b>100</b>	<b>16,603,640</b>	<b>100</b>	<b>7.8</b>	<b>92.2</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**69,725 jobs in the California economy were supported by NASA activities in Fiscal Year 2019.** Of these, 1,679 (2%) were directly located at NASA centers. As a result of the procurement of goods and services in the California economy, 34,085 additional jobs (49%) were created. The remaining employment—33,961 jobs (49%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

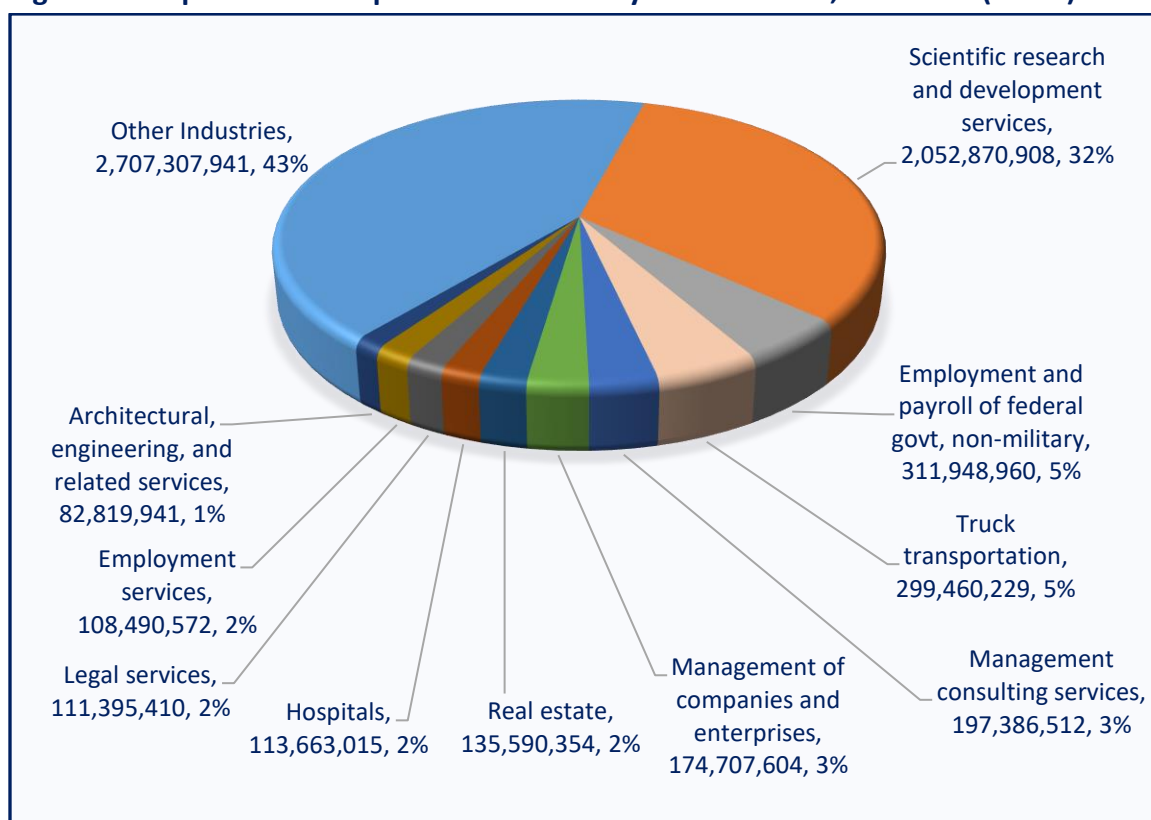
Figure 25 depicts the ten most impacted industries by employment. Scientific research and development services is the most impacted industry, accounting for 18% of the jobs created. The employment in this industry is driven largely by NASA procurement spending; scientific research and development services accounted for approximately 79% of NASA procurement spending in the state in Fiscal Year 2019.



**Figure 25: Top Ten Most Impacted Industries by Employment, California (NASA).**

**The total income impact of NASA in California was \$6.3 billion in Fiscal Year 2019.** Of this amount, more than \$308 million (5%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$3.7 billion (60%). The remaining income (induced impact), estimated to be \$2.2 billion (35%), resulted from expenditures by those earning income through the direct and indirect impacts.

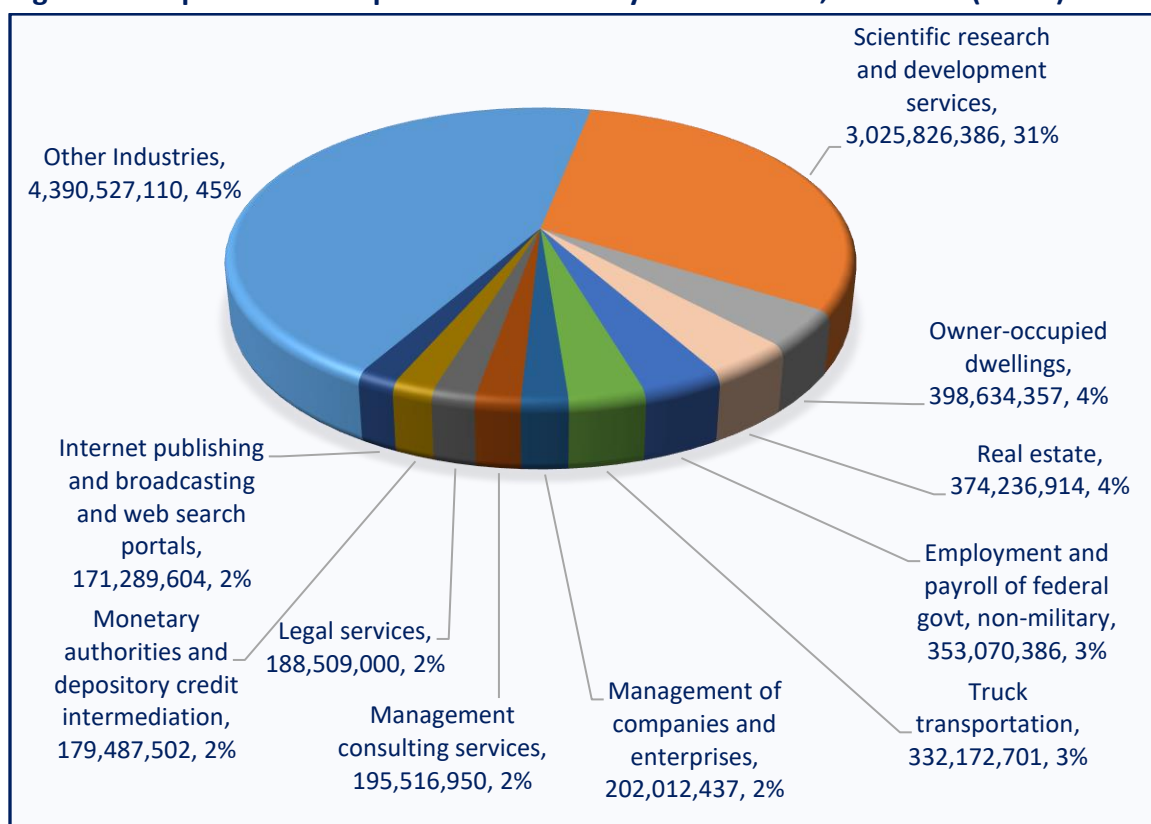
Figure 26 depicts the ten most impacted industries by labor income. Scientific research and development and the federal government sector are the most impacted sectors. The two industries together account for 37% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$166,783 (including benefits), compared to an average of \$74,266 across California.

**Figure 26: Top Ten Most Impacted Industries by Labor Income, California (NASA).**

**The total value added impact of NASA in California was \$9.8 billion in Fiscal Year 2019.**

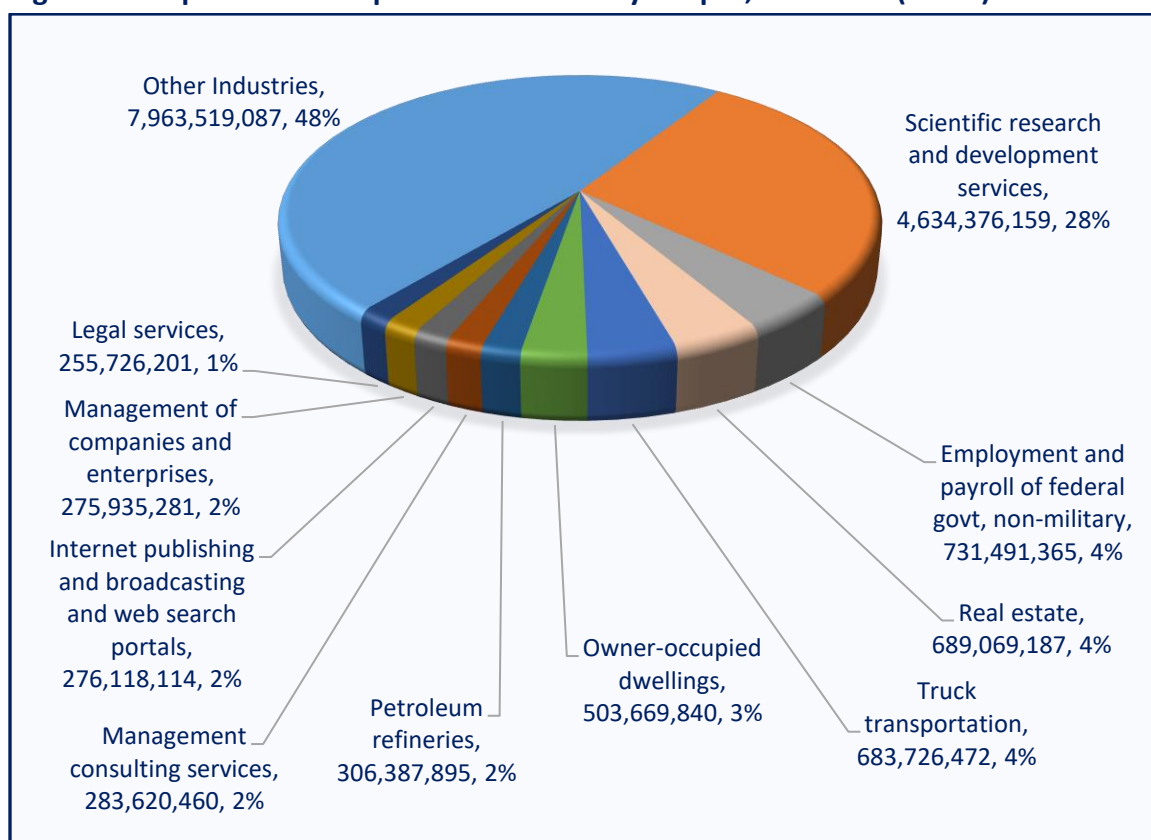
Of this amount, nearly \$346.8 million (4%) was created by civil service employees and \$5.5 billion (56%) was created indirectly by the \$5.2 billion in procurement spending across all industry sectors in California. \$3.9 billion (40%) was generated by increased consumption spending supported by increased earnings.

Figure 27 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development is the most impacted industry, accounting for 31% of the total value added created. NASA activities accounted for an increase of \$3 billion in value added in scientific research and development services. Three hundred fifty three (353) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 27: Top Ten Most Impacted Industries by Value Added, California (NASA).**

**The total output impact of NASA in California was \$16.6 billion in Fiscal Year 2019.** The direct impact of \$725 million constitutes the value of production by NASA employees, accounting for around 4% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$5.2 billion resulted in an additional increase in output (gross sales) of \$3.8 billion across all industry sectors (adding up to the indirect total of \$9 billion in Table 36). Approximately \$6.8 billion (41%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of more than \$4.6 billion in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 28). Similar to employment, impact in this industry is largely driven by NASA procurement spending; scientific research and development services accounted for approximately 79% of NASA procurement spending in the state in Fiscal Year 2019. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 28: Top Ten Most Impacted Industries by Output, California (NASA).**

### 6.6.2. M2M Program Impacts

In 2019, California had 331 M2M-related civil service employees (162 FTEs) with a corresponding labor income of \$31 million. M2M program contracts sourced in the state in the same year totaled \$506 million. The total California employment impact is 6,107 jobs. The labor income and economic output associated with this employment are \$640.1 million and \$1.6 billion, respectively. The M2M program generates approximately \$73.6 million in tax revenues for the state and local governments in California (Table 39).

**Table 39: Summary of M2M Program Impacts by Types of Impact, California.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	162	31,400	33,377	69,789	1,332
Indirect	2,648	372,690	561,941	827,873	26,469
Induced	3,298	236,673	419,971	704,494	45,808
<b>Total</b>	<b>6,107</b>	<b>640,762</b>	<b>1,015,289</b>	<b>1,602,156</b>	<b>73,609</b>
<i>Multiplier</i>	<i>37.8</i>	<i>20.4</i>	<i>30.4</i>	<i>23.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion

units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the California economy. More than 92 percent of the employment impacts and nearly 92 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 40: M2M Program Employment Impacts by Sources of Impact, California.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	162	35.5	0	0.0	162	2.6	100.0	0.0
Indirect*	0	0.0	2,648	46.8	2,648	43.4	0.0	100.0
Induced	294	64.5	3,004	53.2	3,298	54.0	8.9	91.1
<b>Total</b>	<b>455</b>	<b>100</b>	<b>5,652</b>	<b>100</b>	<b>6,107</b>	<b>100</b>	<b>7.5</b>	<b>92.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 41: M2M Program Output Impacts by Sources of Impact, California.**

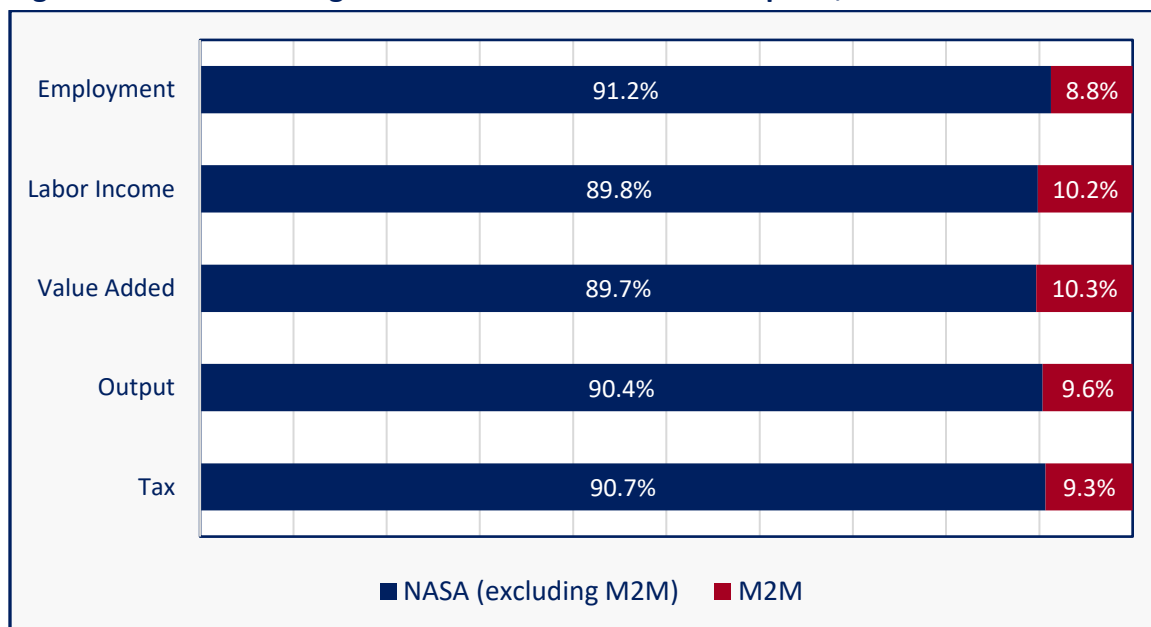
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	69,789	52.6	0	0.0	69,789	4.4	100.0	0.0
Indirect*	0	0.0	827,873	56.3	827,873	51.7	0.0	100.0
Induced	62,814	47.4	641,680	43.7	704,494	44.0	8.9	91.1
<b>Total</b>	<b>132,603</b>	<b>100</b>	<b>1,469,553</b>	<b>100</b>	<b>1,602,156</b>	<b>100</b>	<b>8.3</b>	<b>91.7</b>

### 6.6.3. The M2M Program's Share of NASA Impacts

Around 9% of overall NASA agency impacts in the state are attributable to the M2M program (Table 42 and Figure 29). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 42: The M2M Program Portion of Overall NASA Impacts, California.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	69,725	6,295,641	9,811,283	16,603,640	787,287
M2M Portion	6,107	640,762	1,015,289	1,602,156	73,609
M2M Share (%)	8.8%	10.2%	10.3%	9.6%	9.3%

**Figure 29: The M2M Program Portion of Overall NASA Impacts, California.**

## 6.7. Economic Impacts on the State of Colorado

### 6.7.1. NASA Impacts

In 2019, 49 NASA civil service employees (32 FTEs) residing in Colorado earned \$5.6 million in labor income. NASA contracts sourced in Colorado in the same year totaled \$1.5 billion. The total economic impact resulting from these activities is 22,851 jobs, \$1.6 billion in labor income, and \$4.5 billion in economic output. These economic activities generate more than \$141 million in tax revenues for the state and local governments in Colorado (Table 43).

**Table 43: Summary of NASA Impacts by Types of Impact, Colorado.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	32	5,589	6,697	14,003	155
Indirect	13,112	1,069,493	1,504,364	2,852,991	51,695
Induced	9,706	519,973	903,290	1,647,742	89,300
<b>Total</b>	<b>22,851</b>	<b>1,595,055</b>	<b>2,414,351</b>	<b>4,514,737</b>	<b>141,150</b>
<i>Multiplier</i>	<i>705.0</i>	<i>285.4</i>	<i>360.5</i>	<i>322.4</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Colorado economy. Table 44 examines the sources of the employment figures in the second column of Table 43. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly all of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is less than 1%.

**Table 44: NASA Employment Impacts by Sources of Impact, Colorado.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	32	36.5	0	0.0	32	0.1	100.0	0.0
Indirect*	0	0.0	13,112	57.6	13,112	57.4	0.0	100.0
Induced	56	63.5	9,650	42.4	9,706	42.5	0.6	99.4
<b>Total</b>	<b>89</b>	<b>100</b>	<b>22,762</b>	<b>100</b>	<b>22,851</b>	<b>100</b>	<b>0.4</b>	<b>99.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 45 examines the sources of the output figures in the fifth column of Table 43. Procurement spending is responsible for more than 99% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 1%.

**Table 45: NASA Output Impacts by Sources of Impact, Colorado.**

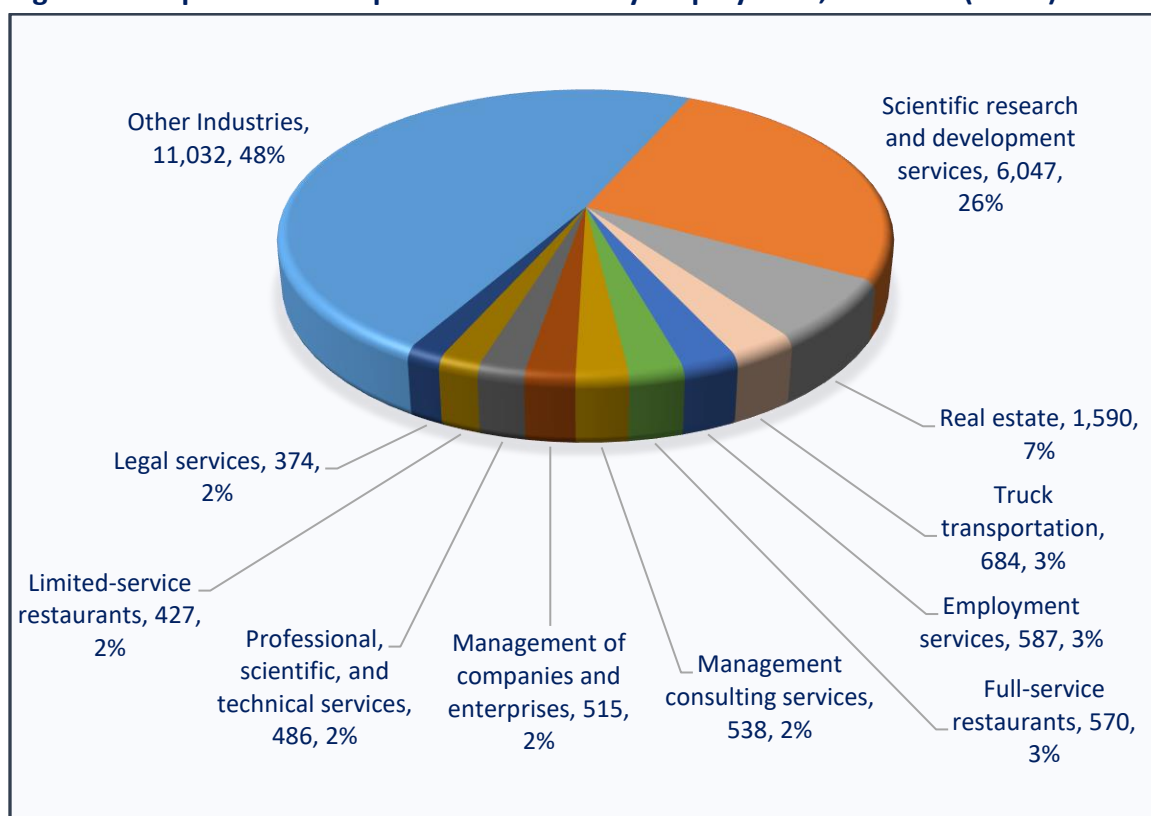
Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	14,003	59.4	0	0.0	14,003	0.3	100.0	0.0
Indirect*	0	0.0	2,852,991	63.5	2,852,991	63.2	0.0	100.0
Induced	9,581	40.6	1,638,162	36.5	1,647,742	36.5	0.6	99.4
<b>Total</b>	<b>23,584</b>	<b>100</b>	<b>4,491,153</b>	<b>100</b>	<b>4,514,737</b>	<b>100</b>	<b>0.5</b>	<b>99.5</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**22,851 jobs in the Colorado economy were supported by NASA activities in Fiscal Year 2019.** Of these, 32 (<1%) were directly located at NASA centers. As a result of the procurement of goods and services in the Colorado economy, 13,112 additional jobs (57%) were created. The remaining employment—9,706 jobs (42%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

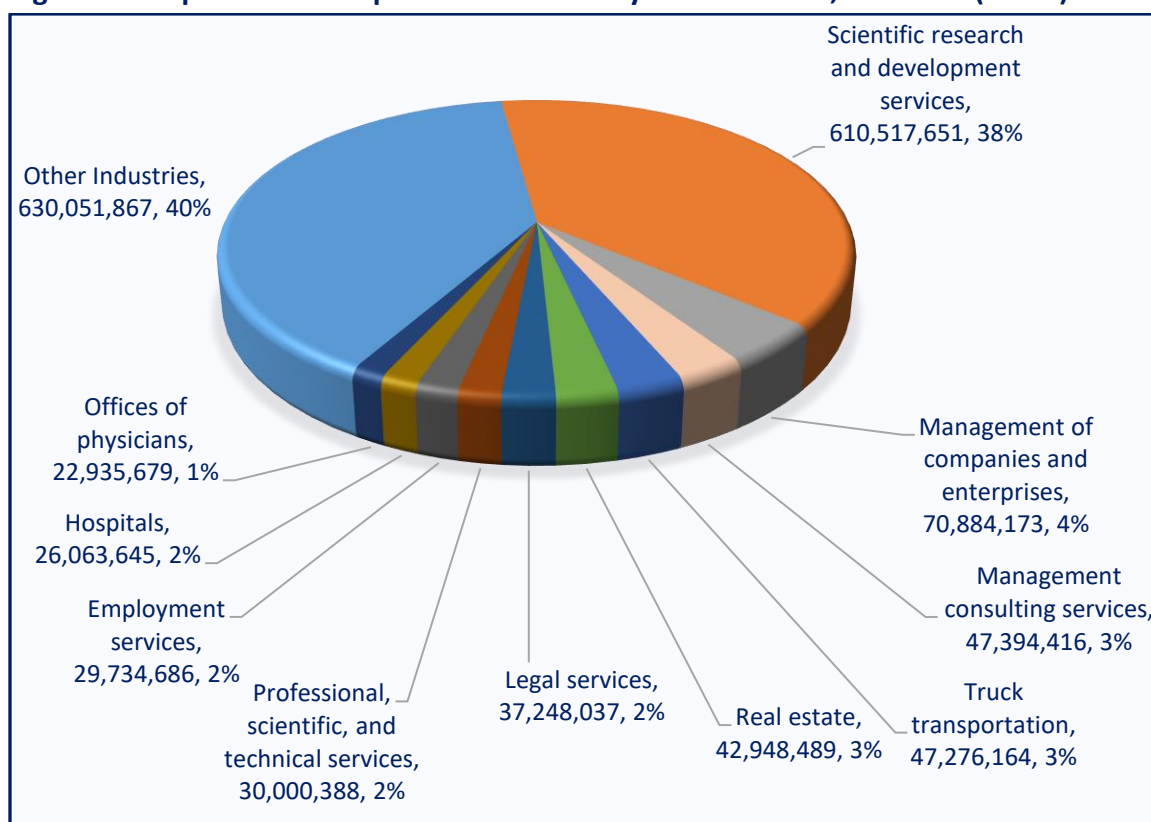
Figure 30 depicts the ten most impacted industries by employment. Scientific research and development services is the most impacted industry, accounting for more than a quarter of the jobs created. The employment in this industry is driven largely by NASA procurement spending; scientific research and development services accounted for approximately 92% of NASA procurement spending in the state in Fiscal Year 2019.



**Figure 30: Top Ten Most Impacted Industries by Employment, Colorado (NASA).**

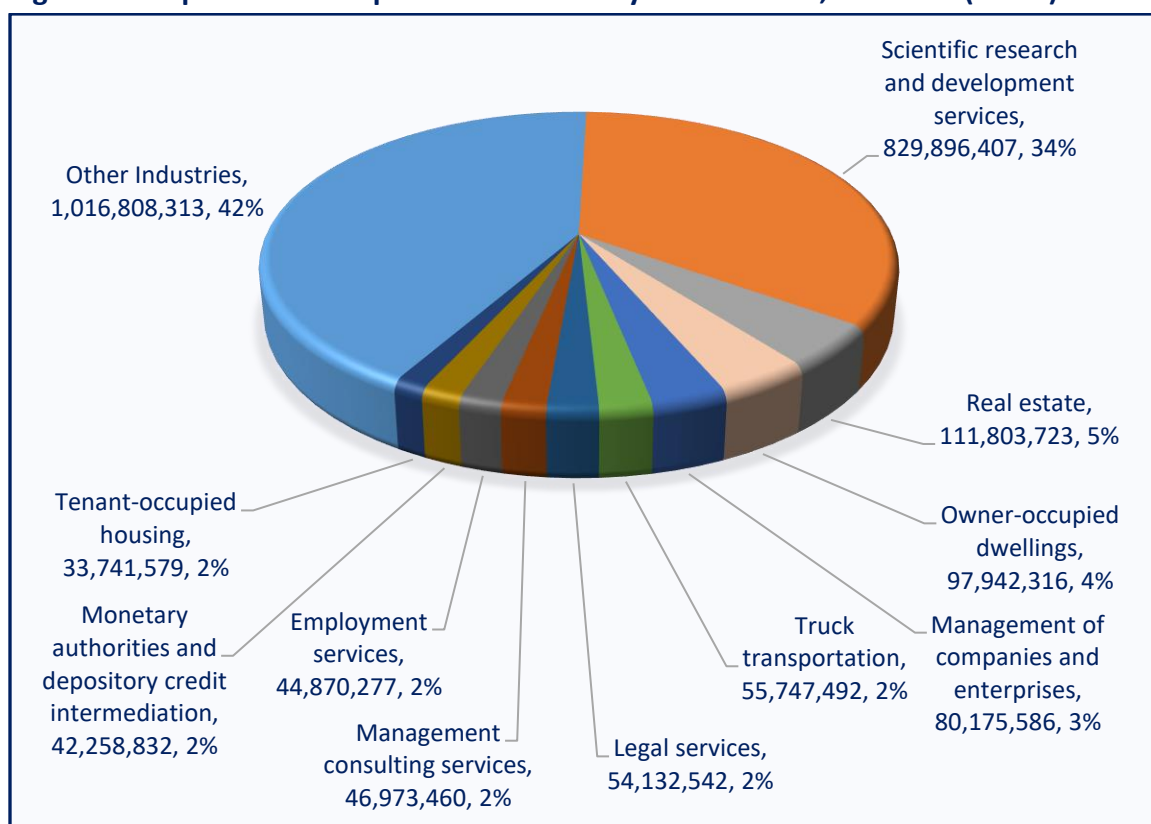
**The total income impact of NASA in Colorado was \$1.6 billion in Fiscal Year 2019.** Of this amount, \$5.6 million (<1%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$1 billion (67%). The remaining income (induced impact), estimated to be \$520 million (33%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 31 depicts the ten most impacted industries by labor income. Scientific research and development services account for 38% of the total labor income earned. The reason that this industry's share of labor income is larger than their share of employment is that employee compensation in this industry is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$103,400 (including benefits), compared to an average of \$61,226 across Colorado.

**Figure 31: Top Ten Most Impacted Industries by Labor Income, Colorado (NASA).****The total value added impact of NASA in Colorado was \$2.4 billion in Fiscal Year 2019.**

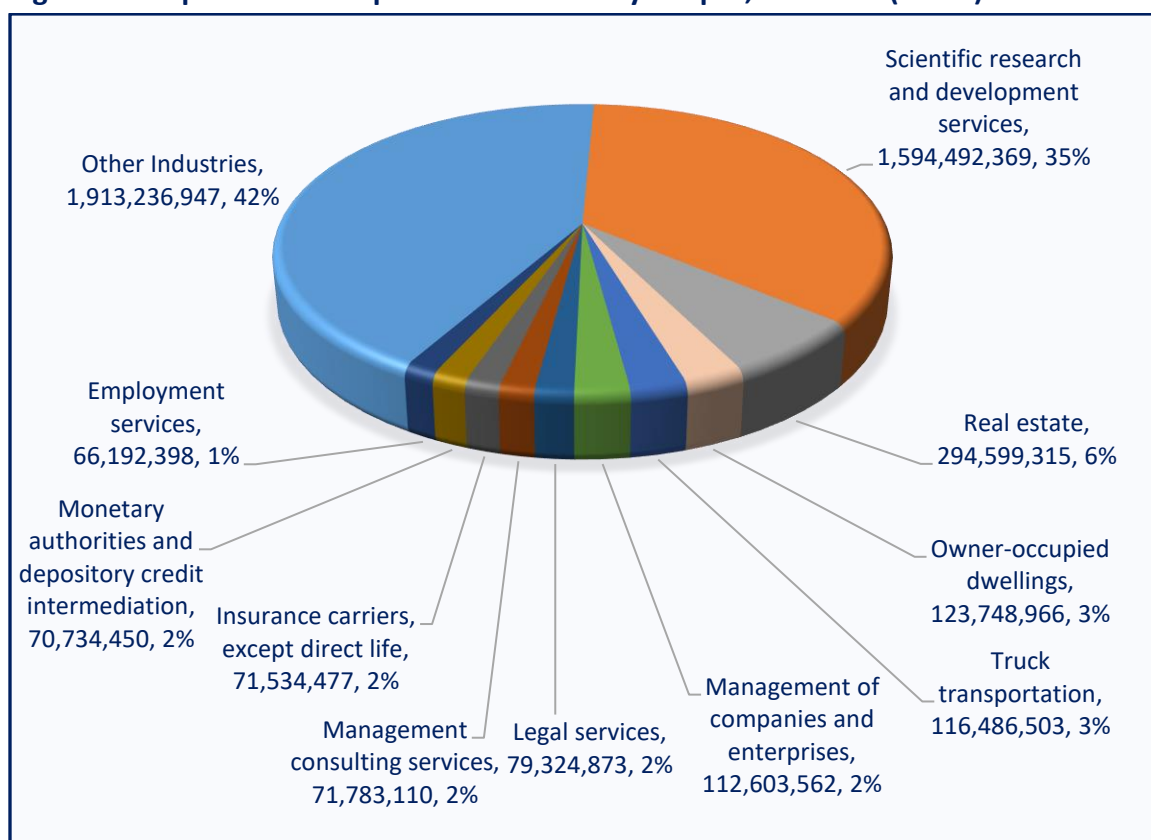
Of this amount, \$6.7 million (1%) was created by civil service employees and \$1.5 billion (62%) was created indirectly by the \$1.5 billion in procurement spending across all industry sectors in Colorado. \$903.3 million (37%) was generated by increased consumption spending supported by increased earnings.

Figure 32 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services is the most impacted industry, accounting for 34% of the total value added created. NASA activities accounted for an increase of more than \$820 million in value added in scientific research and development services.

**Figure 32: Top Ten Most Impacted Industries by Value Added, Colorado (NASA).**

**The total output impact of NASA in Colorado was \$4.5 billion in Fiscal Year 2019.** The direct impact of \$14 million constitutes the value of production by NASA employees, accounting for around 1% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$1.5 billion resulted in an additional increase in output (gross sales) of \$1.3 billion across all industry sectors (adding up to the indirect total of \$2.8 billion in Table 43). Approximately \$1.6 billion (36%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$1.6 billion in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 33). Similar to employment, impact in this industry is largely driven by NASA procurement spending; scientific research and development services accounted for approximately 92% of NASA procurement spending in the state in Fiscal Year 2019. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 33: Top Ten Most Impacted Industries by Output, Colorado (NASA).**

### 6.7.2. M2M Program Impacts

In 2019, Colorado had 13 M2M-related civil service employees (6 FTEs) with a corresponding labor income of \$966,000. M2M program contracts sourced in the state in the same year totaled \$919.3 million. The total Colorado employment impact is 12,419 jobs. The labor income and economic output associated with this employment are \$974 million and \$2.6 billion, respectively. The M2M program generates more than \$88 million in tax revenues for the state and local governments in Colorado (Table 46).

**Table 46: Summary of M2M Program Impacts by Types of Impact, Colorado.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	6	966	1,255	2,624	27
Indirect	6,778	649,933	921,568	1,632,447	34,858
Induced	5,635	323,005	560,691	987,920	53,542
<b>Total</b>	<b>12,419</b>	<b>973,904</b>	<b>1,483,514</b>	<b>2,622,991</b>	<b>88,426</b>
<i>Multiplier</i>	<i>2044.8</i>	<i>1008.2</i>	<i>1182.1</i>	<i>999.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-

employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Colorado economy. Nearly all employment and output impacts are due to NASA procurement sourced within the state.

**Table 47: M2M Program Employment Impacts by Sources of Impact, Colorado.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	6	38.9	0	0.0	6	0.0	100.0	0.0
Indirect*	0	0.0	6,778	54.6	6,778	54.6	0.0	100.0
Induced	10	61.1	5,626	45.4	5,635	45.4	0.2	99.8
<b>Total</b>	<b>16</b>	<b>100</b>	<b>12,404</b>	<b>100</b>	<b>12,419</b>	<b>100</b>	<b>0.1</b>	<b>99.9</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 48: M2M Program Output Impacts by Sources of Impact, Colorado.**

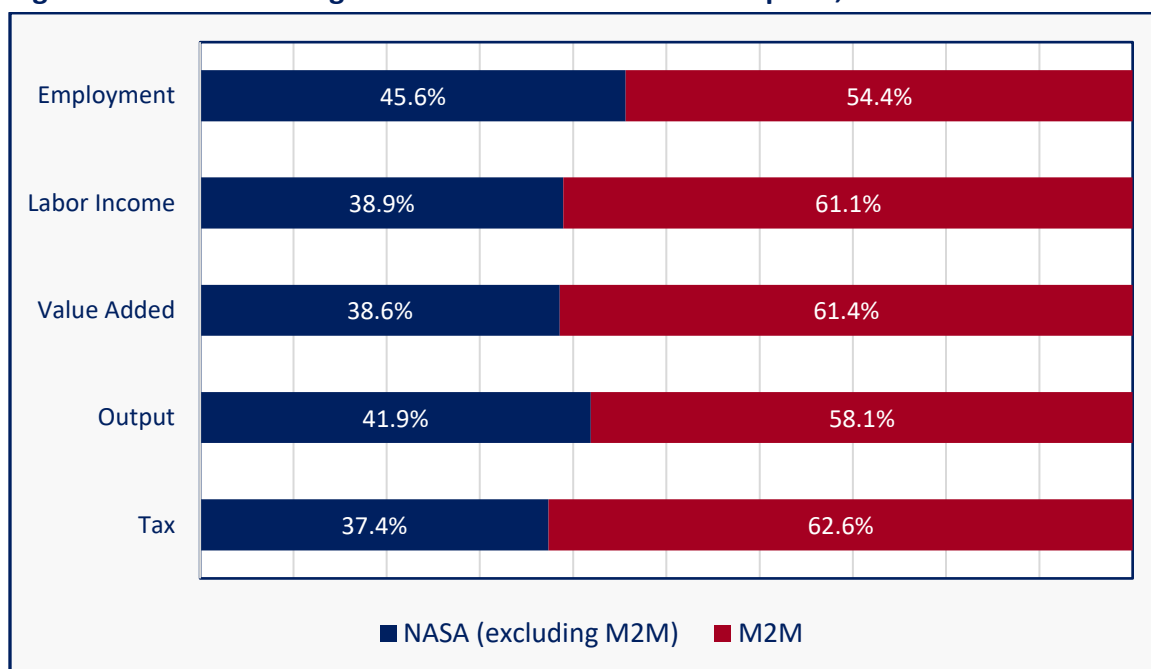
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	2,624	61.1	0	0.0	2,624	0.1	100.0	0.0
Indirect*	0	0.0	1,632,447	62.3	1,632,447	62.2	0.0	100.0
Induced	1,673	38.9	986,247	37.7	987,920	37.7	0.2	99.8
<b>Total</b>	<b>4,297</b>	<b>100</b>	<b>2,618,694</b>	<b>100</b>	<b>2,622,991</b>	<b>100</b>	<b>0.2</b>	<b>99.8</b>

### 6.7.3. The M2M Program's Share of NASA Impacts

Around 60% of overall NASA agency impacts in the state are attributable to the M2M program (Table 49 and Figure 34). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 49: The M2M Program Portion of Overall NASA Impacts, Colorado.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	22,851	1,595,055	2,414,351	4,514,737	141,150
M2M Portion	12,419	973,904	1,483,514	2,622,991	88,426
M2M Share (%)	54.4%	61.1%	61.4%	58.1%	62.6%

**Figure 34: The M2M Program Portion of Overall NASA Impacts, Colorado.**

## 6.8. Economic Impacts on the State of Connecticut

### 6.8.1. NASA Impacts

In 2019, 12 NASA civil service employees (4 FTEs) residing in Connecticut earned \$604,000 in labor income. NASA contracts sourced in Connecticut in the same year totaled \$30 million. The total economic impact resulting from these activities is 316 jobs, \$28.1 million in labor income, and \$75.7 million in economic output. These economic activities generate \$3.4 million in tax revenues for the state and local governments in Connecticut (Table 50).

**Table 50: Summary of NASA Impacts by Types of Impact, Connecticut.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	604	928	1,940	20
Indirect	179	18,832	28,787	50,197	1,746
Induced	132	8,712	14,776	23,570	1,607
<b>Total</b>	<b>316</b>	<b>28,148</b>	<b>44,490</b>	<b>75,707</b>	<b>3,374</b>
<i>Multiplier</i>	<i>70.4</i>	<i>46.6</i>	<i>48.0</i>	<i>39.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Connecticut economy. Table 51 examines the sources of the employment figures in the second column of Table 50. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 97% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 3%.

**Table 51: NASA Employment Impacts by Sources of Impact, Connecticut.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	4	48.3	0	0.0	4	1.4	100.0	0.0
Indirect*	0	0.0	179	58.4	179	56.7	0.0	100.0
Induced	5	51.7	128	41.6	132	41.9	3.6	96.4
<b>Total</b>	<b>9</b>	<b>100</b>	<b>307</b>	<b>100</b>	<b>316</b>	<b>100</b>	<b>2.9</b>	<b>97.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 52 examines the sources of the output figures in the fifth column of Table 50. Procurement spending is responsible for more than 96% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 4%.

**Table 52: NASA Output Impacts by Sources of Impact, Connecticut.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,940	69.4	0	0.0	1,940	2.6	100.0	0.0
Indirect*	0	0.0	50,197	68.8	50,197	66.3	0.0	100.0
Induced	855	30.6	22,714	31.2	23,570	31.1	3.6	96.4
<b>Total</b>	<b>2,795</b>	<b>100</b>	<b>72,912</b>	<b>100</b>	<b>75,707</b>	<b>100</b>	<b>3.7</b>	<b>96.3</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.8.2. M2M Program Impacts

In 2019, Connecticut had two M2M-related civil service employees (1 FTE) with a corresponding labor income of \$62,000. M2M program contracts sourced in the state in the same year totaled approximately \$9 million. The total Connecticut employment impact is 86 jobs. The labor income and economic output associated with this employment are \$8.1 million and \$22.1 million, respectively. The M2M program generates \$965,000 in tax revenues for the state and local governments in Connecticut (Table 53).

**Table 53: Summary of M2M Program Impacts by Types of Impact, Connecticut.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	62	144	301	2
Indirect	49	5,512	8,394	15,122	505
Induced	37	2,599	4,372	6,714	458
<b>Total</b>	<b>86</b>	<b>8,173</b>	<b>12,910</b>	<b>22,137</b>	<b>965</b>
<i>Multiplier</i>	<i>123.2</i>	<i>131.8</i>	<i>89.7</i>	<i>73.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.



The following two tables examine the contribution of different NASA activities to the Connecticut economy. Approximately 99 percent of the employment impacts and more than 98 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 54: M2M Program Employment Impacts by Sources of Impact, Connecticut.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	58.7	0	0.0	1	0.8	100.0	0.0
Indirect*	0	0.0	49	57.4	49	56.6	0.0	100.0
Induced	<1	41.3	36	42.6	37	42.6	1.3	98.7
<b>Total</b>	<b>1</b>	<b>100</b>	<b>85</b>	<b>100</b>	<b>86</b>	<b>100</b>	<b>1.4</b>	<b>98.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 55: M2M Program Output Impacts by Sources of Impact, Connecticut.**

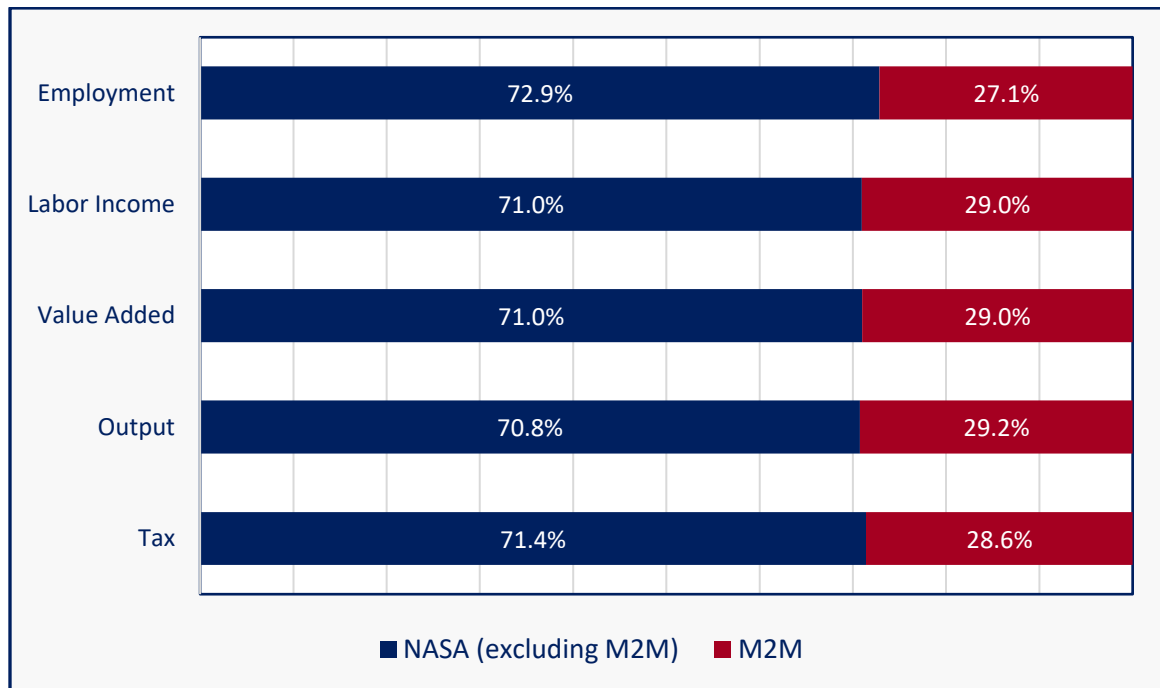
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	301	77.0	0	0.0	301	1.4	100.0	0.0
Indirect*	0	0.0	15,122	69.5	15,122	68.3	0.0	100.0
Induced	90	23.0	6,624	30.5	6,714	30.3	1.3	98.7
<b>Total</b>	<b>391</b>	<b>100</b>	<b>21,746</b>	<b>100</b>	<b>22,137</b>	<b>100</b>	<b>1.8</b>	<b>98.2</b>

### 6.8.3. The M2M Program's Share of NASA Impacts

Around 28% of overall NASA agency impacts in the state are attributable to the M2M program (Table 56 and Figure 35). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 56: The M2M Program Portion of Overall NASA Impacts, Connecticut.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	316	28,148	44,490	75,707	3,374
M2M Portion	86	8,173	12,910	22,137	965
M2M Share (%)	27.1%	29.0%	29.0%	29.2%	28.6%

**Figure 35: The M2M Program Portion of Overall NASA Impacts, Connecticut.**

## 6.9. Economic Impacts on the District of Columbia

### 6.9.1. NASA Impacts

In 2019, 308 NASA civil service employees (281 FTEs) residing in DC earned \$50.3 million in labor income. NASA contracts sourced in DC in the same year totaled \$309 million. The total economic impact resulting from these activities is 2,696 jobs, \$308.5 million in labor income, and \$648.6 million in economic output. These economic activities generate \$18.3 million in tax revenues for the local governments in DC (Table 57).

**Table 57: Summary of NASA Impacts by Types of Impact, the District of Columbia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	281	50,301	58,153	121,595	819
Indirect	1,770	206,747	229,251	414,748	10,689
Induced	645	51,406	75,991	112,295	6,808
<b>Total</b>	<b>2,696</b>	<b>308,454</b>	<b>363,395</b>	<b>648,638</b>	<b>18,316</b>
<i>Multiplier</i>	<i>9.6</i>	<i>6.1</i>	<i>6.2</i>	<i>5.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the DC economy. Table 58 examines the sources of the employment figures in the second column of Table 57. NASA procurement sourced within the region is largely responsible for the overall NASA employment impacts. More than 85% of the jobs supported throughout the regional economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 15%.

**Table 58: NASA Employment Impacts by Sources of Impact, the District of Columbia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	281	71.1	0	0.0	281	10.4	100.0	0.0
Indirect*	0	0.0	1,770	77.0	1,770	65.7	0.0	100.0
Induced	115	28.9	530	23.0	645	23.9	17.8	82.2
<b>Total</b>	<b>396</b>	<b>100</b>	<b>2,300</b>	<b>100</b>	<b>2,696</b>	<b>100</b>	<b>14.7</b>	<b>85.3</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 59 examines the sources of the output figures in the fifth column of Table 57. Procurement spending is responsible for more than 78% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 22%.

**Table 59: NASA Output Impacts by Sources of Impact, the District of Columbia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	121,595	85.8	0	0.0	121,595	18.7	100.0	0.0
Indirect*	0	0.0	414,748	81.8	414,748	63.9	0.0	100.0
Induced	20,044	14.2	92,251	18.2	112,295	17.3	17.8	82.2
<b>Total</b>	<b>141,639</b>	<b>100</b>	<b>506,999</b>	<b>100</b>	<b>648,638</b>	<b>100</b>	<b>21.8</b>	<b>78.2</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.9.2. M2M Program Impacts

In 2019, Washington, DC had 18 M2M-related civil service employees (5 FTEs) with a corresponding labor income of \$772,000. M2M program contracts sourced in the region in the same year totaled approximately \$11.2 million. The total Washington, DC employment impact is 85 jobs. The labor income and economic output associated with this employment are \$11.7 million and \$22.4 million, respectively. The M2M program generates \$633,000 in tax revenues for the local governments in Washington, DC (Table 60).

**Table 60: Summary of M2M Program Impacts by Types of Impact, the District of Columbia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	772	1,017	2,126	13
Indirect	57	8,850	10,643	16,043	365
Induced	23	2,042	2,974	4,204	255
<b>Total</b>	<b>85</b>	<b>11,665</b>	<b>14,634</b>	<b>22,373</b>	<b>633</b>
<i>Multiplier</i>	<i>17.2</i>	<i>15.1</i>	<i>14.4</i>	<i>10.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Washington, DC economy. More than 92 percent of the employment impacts and more than 89 percent of the output impacts are due to NASA procurement sourced within the region.

**Table 61: M2M Program Employment Impacts by Sources of Impact, the District of Columbia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	5	73.4	0	0.0	5	5.8	100.0	0.0
Indirect*	0	0.0	57	72.4	57	66.7	0.0	100.0
Induced	2	26.6	22	27.6	23	27.5	7.6	92.4
<b>Total</b>	<b>7</b>	<b>100</b>	<b>78</b>	<b>100</b>	<b>85</b>	<b>100</b>	<b>7.9</b>	<b>92.1</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

**Table 62: M2M Program Output Impacts by Sources of Impact, the District of Columbia.**

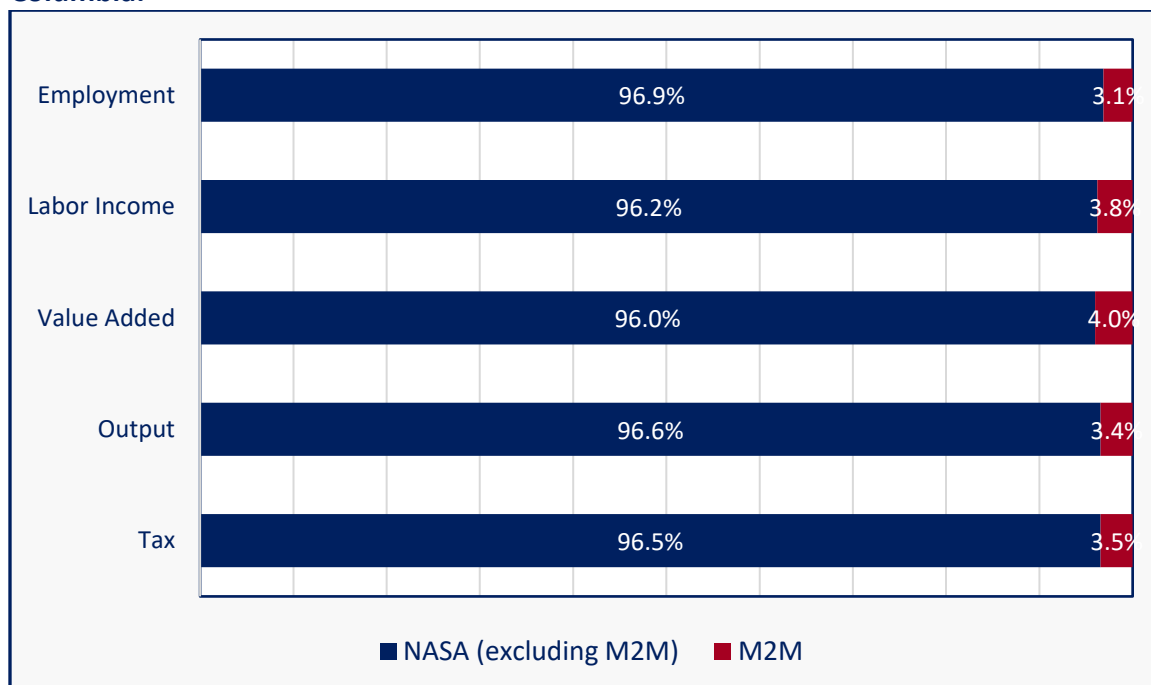
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	2,126	86.9	0	0.0	2,126	9.5	100.0	0.0
Indirect*	0	0.0	16,043	80.5	16,043	71.7	0.0	100.0
Induced	322	13.1	3,883	19.5	4,204	18.8	7.7	92.3
<b>Total</b>	<b>2,448</b>	<b>100</b>	<b>19,926</b>	<b>100</b>	<b>22,373</b>	<b>100</b>	<b>10.9</b>	<b>89.1</b>

### 6.9.3. The M2M Program's Share of NASA Impacts

Around 3% of overall NASA agency impacts in the state are attributable to the M2M program (Table 63 and Figure 36). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 63: The M2M Program Portion of Overall NASA Impacts, the District of Columbia.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	2,696	308,454	363,395	648,638	18,316
M2M Portion	85	11,665	14,634	22,373	633
M2M Share (%)	3.1%	3.8%	4.0%	3.4%	3.5%

**Figure 36: The M2M Program Portion of Overall NASA Impacts, the District of Columbia.**

## 6.10. Economic Impacts on the State of Delaware

### 6.10.1. NASA Impacts

In 2019, 8 NASA civil service employees (5 FTEs) residing in Delaware earned \$819,000 in labor income. NASA contracts sourced in Delaware in the same year totaled approximately \$8.1 million. The total economic impact resulting from these activities is 107 jobs, \$8.8 million in labor income, and \$22.4 million in economic output. These economic activities generate \$823,000 in tax revenues for the state and local governments in Delaware (Table 64).

**Table 64: Summary of NASA Impacts by Types of Impact, Delaware.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	819	1,043	2,182	24
Indirect	55	5,410	7,387	12,775	427
Induced	47	2,527	4,572	7,489	372
<b>Total</b>	<b>107</b>	<b>8,756</b>	<b>13,002</b>	<b>22,446</b>	<b>823</b>
<i>Multiplier</i>	<i>21.2</i>	<i>10.7</i>	<i>12.5</i>	<i>10.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Delaware economy. Table 65 examines the sources of the employment figures in the second column of Table 64. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 89% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 11%.

**Table 65: NASA Employment Impacts by Sources of Impact, Delaware.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	5	43.5	0	0.0	5	4.7	100.0	0.0
Indirect*	0	0.0	55	57.4	55	51.2	0.0	100.0
Induced	7	56.5	41	42.6	47	44.1	13.9	86.1
<b>Total</b>	<b>12</b>	<b>100</b>	<b>95</b>	<b>100</b>	<b>107</b>	<b>100</b>	<b>10.8</b>	<b>89.2</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 66 examines the sources of the output figures in the fifth column of Table 64. Procurement spending is responsible for nearly 86% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 14%.

**Table 66: NASA Output Impacts by Sources of Impact, Delaware.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,182	67.7	0	0.0	2,182	9.7	100.0	0.0
Indirect*	0	0.0	12,775	66.5	12,775	56.9	0.0	100.0
Induced	1,041	32.3	6,448	33.5	7,489	33.4	13.9	86.1
<b>Total</b>	<b>3,223</b>	<b>100</b>	<b>19,223</b>	<b>100</b>	<b>22,446</b>	<b>100</b>	<b>14.4</b>	<b>85.6</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

### 6.10.2. M2M Program Impacts

There were no M2M-specific NASA employees in Delaware in FY 2019, but \$234,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is 3 jobs, \$238,000 in labor income, and \$572,000 worth of output (Table 67).

**Table 67: Summary of M2M Program Impacts by Types of Impact, Delaware.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	2	167	224	375	12
Induced	1	70	123	197	10
<b>Total</b>	<b>3</b>	<b>238</b>	<b>347</b>	<b>572</b>	<b>22</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

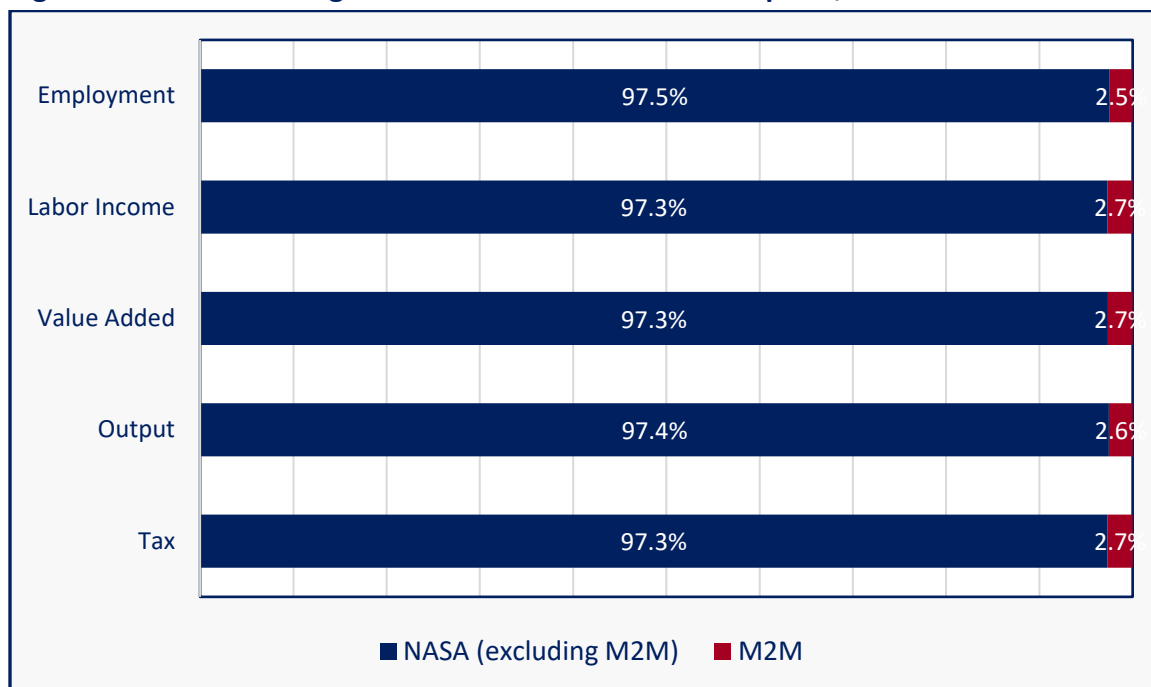
### 6.10.3. The M2M Program's Share of NASA Impacts

Approximately 3% of overall NASA agency impacts in the state are attributable to the M2M program (Table 68 and Figure 37). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).



**Table 68: The M2M Program Portion of Overall NASA Impacts, Delaware.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	107	8,756	13,002	22,446	823
M2M Portion	3	238	347	572	22
M2M Share (%)	2.5%	2.7%	2.7%	2.6%	2.7%

**Figure 37: The M2M Program Portion of Overall NASA Impacts, Delaware.**

## 6.11. Economic Impacts on the State of Florida

### 6.11.1. NASA Impacts

In 2019, 2,270 NASA civil service employees (2,021 FTEs) residing in Florida earned \$317.4 million in labor income. NASA contracts sourced in Florida in the same year totaled \$1.4 billion. The total economic impact resulting from these activities is 33,093 jobs, \$2 billion in labor income, and \$5.9 billion in economic output. These economic activities generate more than \$200 million in tax revenues for the state and local governments in Florida (Table 69).

The employment multiplier is 16.4, meaning that for every NASA job located in Florida, an additional 15.4 jobs are supported in the state economy. The output multiplier of 6.8 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$5.8 million worth of output is sustained throughout the state economy.

**Table 69: Summary of NASA Impacts by Types of Impact, Florida.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,021	317,406	417,526	873,033	2,249
Indirect	16,869	1,051,051	1,389,450	2,777,230	75,811
Induced	14,204	695,439	1,235,112	2,262,905	122,202
<b>Total</b>	<b>33,093</b>	<b>2,063,896</b>	<b>3,042,088</b>	<b>5,913,168</b>	<b>200,262</b>
<i>Multiplier</i>	<i>16.4</i>	<i>6.5</i>	<i>7.3</i>	<i>6.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Florida economy. Table 70 examines the sources of the employment figures in the second column of Table 69. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 83% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 17%.

**Table 70: NASA Employment Impacts by Sources of Impact, Florida.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2,021	35.5	0	0.0	2,021	6.1	100.0	0.0
Indirect*	0	0.0	16,869	61.6	16,869	51.0	0.0	100.0
Induced	3,679	64.5	10,525	38.4	14,204	42.9	25.9	74.1
<b>Total</b>	<b>5,699</b>	<b>100</b>	<b>27,394</b>	<b>100</b>	<b>33,093</b>	<b>100</b>	<b>17.2</b>	<b>82.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 71 examines the sources of the output figures in the fifth column of Table 69. Procurement spending is responsible for more than 75% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 25%.

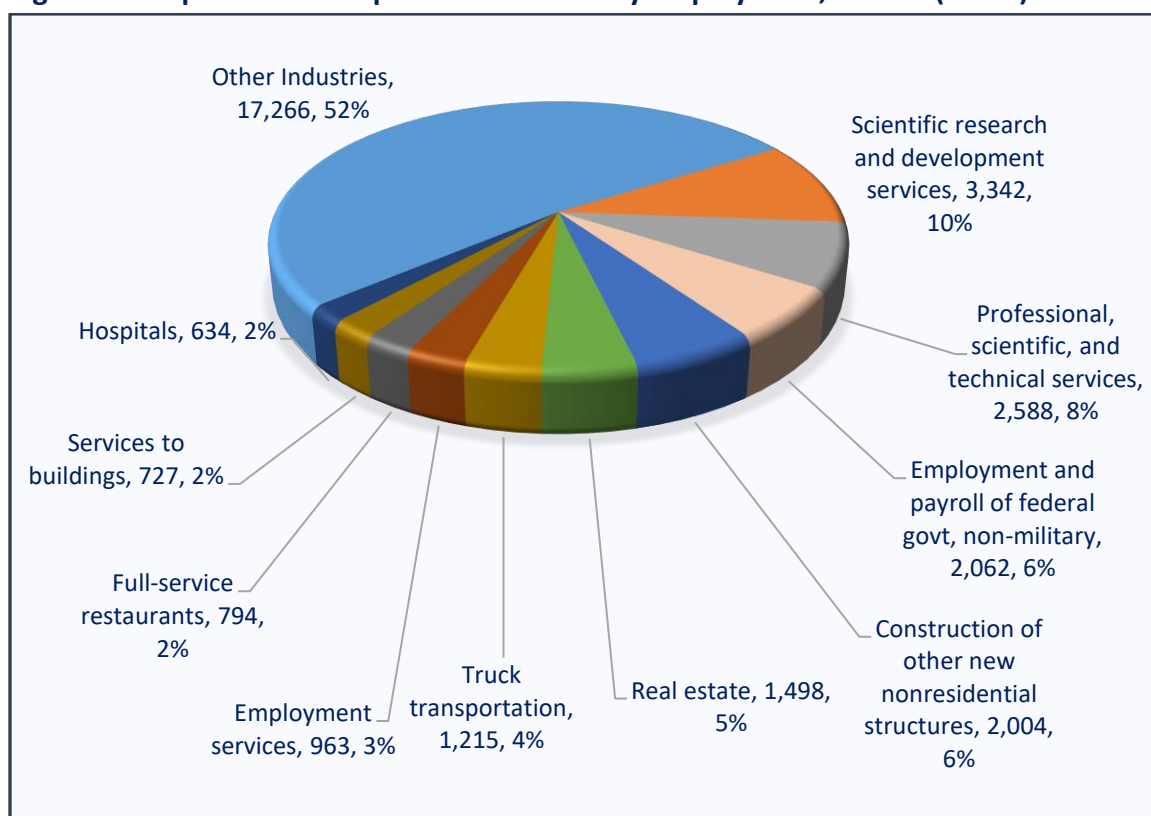
**Table 71: NASA Output Impacts by Sources of Impact, Florida.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	873,033	59.8	0	0.0	873,033	14.8	100.0	0.0
Indirect*	0	0.0	2,777,230	62.4	2,777,230	47.0	0.0	100.0
Induced	586,448	40.2	1,676,456	37.6	2,262,905	38.3	25.9	74.1
<b>Total</b>	<b>1,459,481</b>	<b>100</b>	<b>4,453,687</b>	<b>100</b>	<b>5,913,168</b>	<b>100</b>	<b>24.7</b>	<b>75.3</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

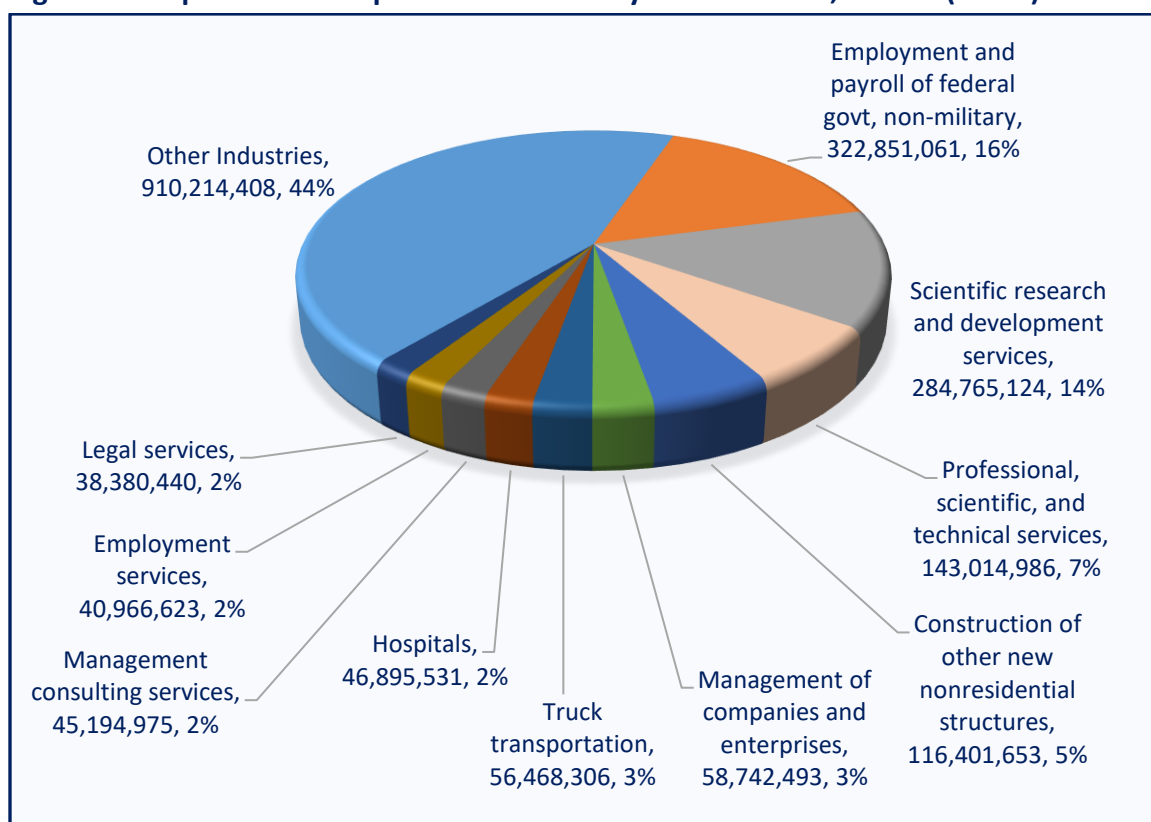
**33,093 jobs in the Florida economy were supported by NASA activities in Fiscal Year 2019.** Of these, 2,021 (6%) were directly located at NASA centers. As a result of the procurement of goods and services in the Florida economy, 16,869 additional jobs (51%) were created. The remaining employment—14,204 jobs (43%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 38 depicts the ten most impacted industries by employment. Professional and technical as well as scientific research and development services are the most impacted industries, respectively. These two industries together account for 18% of the jobs created. The employment in these industries is driven largely by NASA procurement spending; these two industries accounted for approximately 60% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.

**Figure 38: Top Ten Most Impacted Industries by Employment, Florida (NASA).**

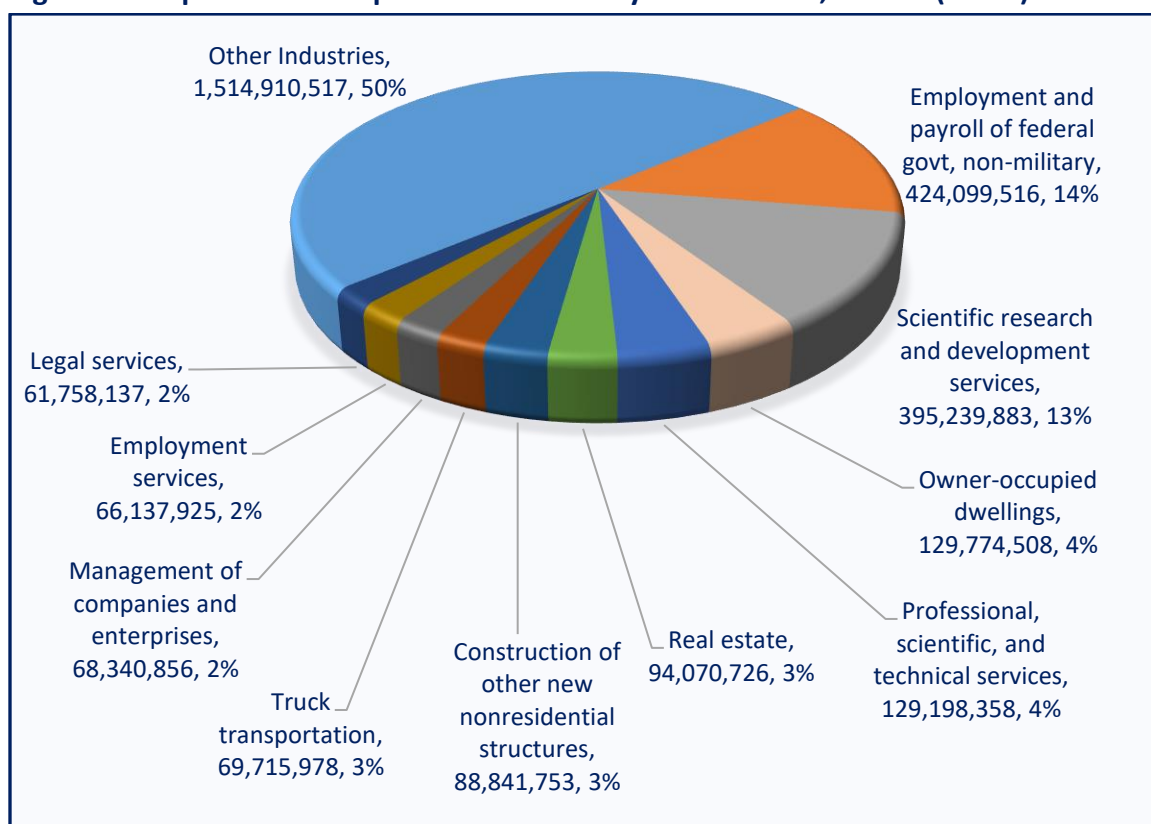
**The total income impact of NASA in Florida was \$2 billion in Fiscal Year 2019.** Of this amount, more than \$317 million (15%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$1 billion (51%). The remaining income (induced impact), estimated to be \$695 million (34%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 39 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development and professional and technical services (along with the federal government sector) are the most impacted industries. The three industries together account for 37% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$87,265 (including benefits), compared to an average of \$51,162 across Florida.

**Figure 39: Top Ten Most Impacted Industries by Labor Income, Florida (NASA).**

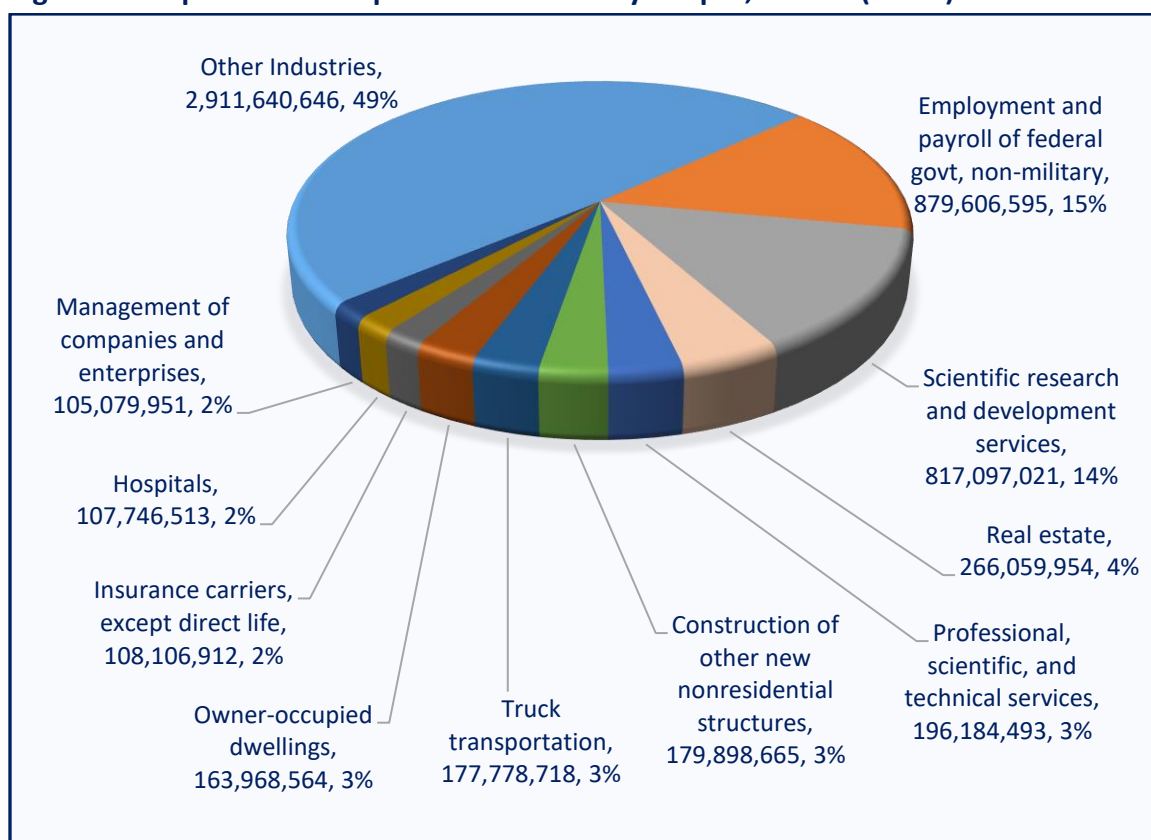
**The total value added impact of NASA in Florida was \$3 billion in Fiscal Year 2019.** Of this amount, more than \$417 million (14%) was created by civil service employees and \$1.4 billion (46%) was created indirectly by the \$1.4 billion in procurement spending across all industry sectors in Florida. \$1.2 billion (40%) was generated by increased consumption spending supported by increased earnings.

Figure 40 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development and professional services and the federal government sector are the most impacted industries. The two industries together account for 27% of the total value added created. NASA activities accounted for an increase of more than \$424 million in value added in scientific research and development services, and a \$129 million increase in value added in professional and technical services. Three hundred ninety five (395) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 40: Top Ten Most Impacted Industries by Value Added, Florida (NASA).**

**The total output impact of NASA in Florida was \$5.9 billion in Fiscal Year 2019.** The direct impact of \$873 million constitutes the value of production by NASA employees, accounting for around 15% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$1.4 billion resulted in an additional increase in output (gross sales) of \$1.4 billion across all industry sectors (adding up to the indirect total of \$2.8 billion in Table 69). More than \$2.2 billion (38%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of more than \$879 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services, and a \$817 million increase in sales in professional and technical services (Figure 41). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 60% of NASA procurement spending in the state in Fiscal Year 2019. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 41: Top Ten Most Impacted Industries by Output, Florida (NASA).**

### 6.11.2. M2M Program Impacts

In 2019, Florida had 966 M2M-related civil service employees (624 FTEs) with a corresponding labor income of nearly \$99 million. M2M program contracts sourced in the state in the same year totaled approximately \$517 million. The total Florida employment impact is 10,870 jobs. The labor income and economic output associated with this employment are \$744 million and \$2 billion, respectively. The M2M program generates more than \$66 million in tax revenues for the state and local governments in Florida (Table 72).

**Table 72: Summary of M2M Program Impacts by Types of Impact, Florida.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	624	98,998	128,981	269,696	701
Indirect	5,411	390,218	505,598	941,483	22,492
Induced	4,834	255,135	454,082	802,679	43,347
<b>Total</b>	<b>10,870</b>	<b>744,350</b>	<b>1,088,662</b>	<b>2,013,858</b>	<b>66,541</b>
<i>Multiplier</i>	<i>17.4</i>	<i>7.5</i>	<i>8.4</i>	<i>7.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Florida economy. Approximately 84 percent of the employment impacts and more than 77 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 73: M2M Program Employment Impacts by Sources of Impact, Florida.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	624	35.7	0	0.0	624	5.7	100.0	0.0
Indirect*	0	0.0	5,411	59.3	5,411	49.8	0.0	100.0
Induced	1,123	64.3	3,712	40.7	4,834	44.5	23.2	76.8
<b>Total</b>	<b>1,747</b>	<b>100</b>	<b>9,122</b>	<b>100</b>	<b>10,870</b>	<b>100</b>	<b>16.1</b>	<b>83.9</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 74: M2M Program Output Impacts by Sources of Impact, Florida.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	269,696	59.1	0	0.0	269,696	13.4	100.0	0.0
Indirect*	0	0.0	941,483	60.4	941,483	46.8	0.0	100.0
Induced	186,558	40.9	616,121	39.6	802,679	39.9	23.2	76.8
<b>Total</b>	<b>456,254</b>	<b>100</b>	<b>1,557,604</b>	<b>100</b>	<b>2,013,858</b>	<b>100</b>	<b>22.7</b>	<b>77.3</b>

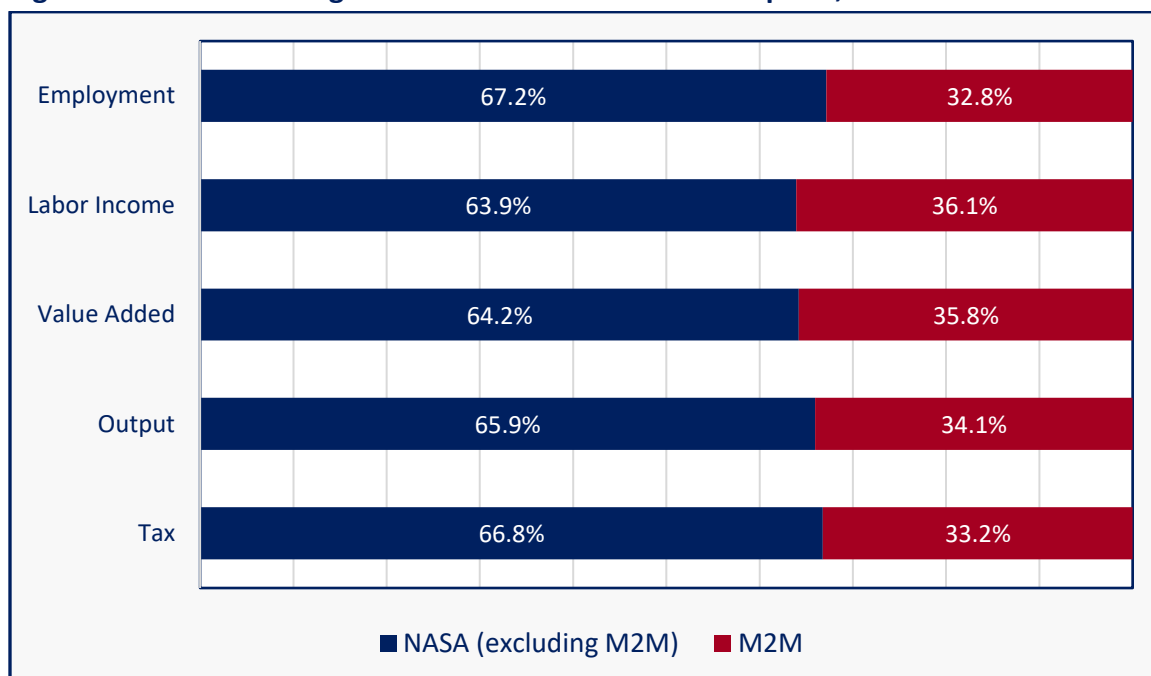
### 6.11.3. The M2M Program's Share of NASA Impacts

Around 34% of overall NASA agency impacts in the state are attributable to the M2M program (Table 75 and Figure 42). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).



**Table 75: The M2M Program Portion of Overall NASA Impacts, Florida.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	33,093	2,063,896	3,042,088	5,913,168	200,262
M2M Portion	10,870	744,350	1,088,662	2,013,858	66,541
M2M Share (%)	32.8%	36.1%	35.8%	34.1%	33.2%

**Figure 42: The M2M Program Portion of Overall NASA Impacts, Florida.**

## 6.12. Economic Impacts on the State of Georgia

### 6.12.1. NASA Impacts

In 2019, 29 NASA civil service employees (14 FTEs) residing in Georgia earned \$1.9 million in labor income. NASA contracts sourced in Georgia in the same year totaled \$24.5 million. The total economic impact resulting from these activities is 393 jobs, \$26.5 million in labor income, and \$78.6 million in economic output. These economic activities generate \$2.5 million in tax revenues for the state and local governments in Georgia (Table 76).

**Table 76: Summary of NASA Impacts by Types of Impact, Georgia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	1,885	2,957	6,184	51
Indirect	211	16,062	23,912	44,663	989
Induced	168	8,524	15,394	27,775	1,437
<b>Total</b>	<b>393</b>	<b>26,471</b>	<b>42,263</b>	<b>78,622</b>	<b>2,477</b>
<i>Multiplier</i>	<i>27.5</i>	<i>14.0</i>	<i>14.3</i>	<i>12.7</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Georgia economy. Table 77 examines the sources of the employment figures in the second column of Table 76. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 91% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 9%.

**Table 77: NASA Employment Impacts by Sources of Impact, Georgia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	14	41.5	0	0.0	14	3.6	100.0	0.0
Indirect*	0	0.0	211	58.7	211	53.6	0.0	100.0
Induced	20	58.5	148	41.3	168	42.8	12.0	88.0
<b>Total</b>	<b>34</b>	<b>100</b>	<b>359</b>	<b>100</b>	<b>393</b>	<b>100</b>	<b>8.8</b>	<b>91.2</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 78 examines the sources of the output figures in the fifth column of Table 76. Procurement spending is responsible for 88% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 12%.

**Table 78: NASA Output Impacts by Sources of Impact, Georgia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	6,184	65.0	0	0.0	6,184	7.9	100.0	0.0
Indirect*	0	0.0	44,663	64.6	44,663	56.8	0.0	100.0
Induced	3,330	35.0	24,445	35.4	27,775	35.3	12.0	88.0
<b>Total</b>	<b>9,514</b>	<b>100</b>	<b>69,108</b>	<b>100</b>	<b>78,622</b>	<b>100</b>	<b>12.1</b>	<b>87.9</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.12.2. M2M Program Impacts

In 2019, Georgia had five M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$305,000. M2M program contracts sourced in the state in the same year totaled \$1.7 million. The total Georgia employment impact is 27 jobs. The labor income and economic output associated with this employment are \$2.1 million and \$6 million, respectively. The M2M program generates \$189,000 in tax revenues for the state and local governments in Georgia (Table 79).

**Table 79: Summary of M2M Program Impacts by Types of Impact, Georgia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	305	353	738	8
Indirect	13	1,106	1,701	3,061	65
Induced	13	714	1,289	2,244	116
<b>Total</b>	<b>27</b>	<b>2,125</b>	<b>3,343</b>	<b>6,044</b>	<b>189</b>
<i>Multiplier</i>	<i>16.0</i>	<i>7.0</i>	<i>9.5</i>	<i>8.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Georgia economy. Nearly 82 percent of the employment impacts and more than 78 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 80: M2M Program Employment Impacts by Sources of Impact, Georgia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	34.1	0	0.0	2	6.2	100.0	0.0
Indirect*	0	0.0	13	56.7	13	46.3	0.0	100.0
Induced	3	65.9	10	43.3	13	47.5	25.3	74.7
<b>Total</b>	<b>5</b>	<b>100</b>	<b>22</b>	<b>100</b>	<b>27</b>	<b>100</b>	<b>18.3</b>	<b>81.7</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 81: M2M Program Output Impacts by Sources of Impact, Georgia.**

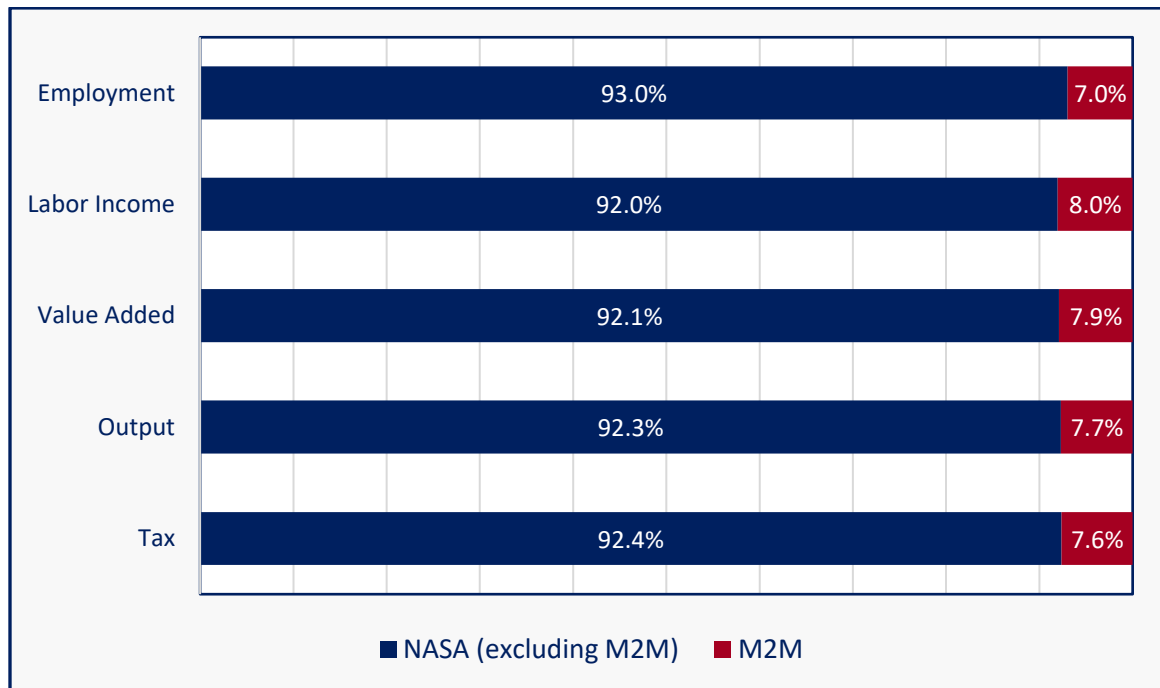
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	738	56.5	0	0.0	738	12.2	100.0	0.0
Indirect*	0	0.0	3,061	64.6	3,061	50.7	0.0	100.0
Induced	569	43.5	1,675	35.4	2,244	37.1	25.4	74.6
<b>Total</b>	<b>1,307</b>	<b>100</b>	<b>4,736</b>	<b>100</b>	<b>6,044</b>	<b>100</b>	<b>21.6</b>	<b>78.4</b>

### 6.12.3. The M2M Program's Share of NASA Impacts

Around 8% of overall NASA agency impacts in the state are attributable to the M2M program (Table 82 and Figure 43). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 82: The M2M Program Portion of Overall NASA Impacts, Georgia.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	393	26,471	42,263	78,622	2,477
M2M Portion	27	2,125	3,343	6,044	189
M2M Share (%)	7.0%	8.0%	7.9%	7.7%	7.6%

**Figure 43: The M2M Program Portion of Overall NASA Impacts, Georgia.**

## 6.13. Economic Impacts on the State of Hawaii

### 6.13.1 NASA Impacts

In 2019, 2 NASA civil service employees (less than 1 FTE) residing in Hawaii earned \$63,000 in labor income. NASA contracts sourced in Hawaii in the same year totaled \$30.7 million. The total economic impact resulting from these activities is 412 jobs, \$26.9 million in labor income, and \$74.8 million in economic output. These economic activities generate \$3 million in tax revenues for the state and local governments in Hawaii (Table 83).

**Table 83: Summary of NASA Impacts by Types of Impact, Hawaii.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	63	76	159	2
Indirect	261	19,131	23,978	49,928	1,222
Induced	151	7,664	13,982	24,740	1,816
<b>Total</b>	<b>412</b>	<b>26,858</b>	<b>38,036</b>	<b>74,827</b>	<b>3,039</b>
<i>Multiplier</i>	<i>1119.8</i>	<i>423.5</i>	<i>500.5</i>	<i>470.9</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Hawaii economy. Table 84 examines the sources of the employment figures in the second column of Table 83. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly all of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is less than 1%.

**Table 84: NASA Employment Impacts by Sources of Impact, Hawaii.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	<1	40.5	0	0.0	0	0.1	100.0	0.0
Indirect*	0	0.0	261	63.4	261	63.3	0.0	100.0
Induced	1	59.5	150	36.6	151	36.7	0.4	99.6
<b>Total</b>	<b>1</b>	<b>100</b>	<b>411</b>	<b>100</b>	<b>412</b>	<b>100</b>	<b>0.2</b>	<b>99.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 85 examines the sources of the output figures in the fifth column of Table 83. Procurement spending is responsible for nearly all of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is less than 1%.

**Table 85: NASA Output Impacts by Sources of Impact, Hawaii.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	159	64.2	0	0.0	159	0.2	100.0	0.0
Indirect*	0	0.0	49,928	66.9	49,928	66.7	0.0	100.0
Induced	89	35.8	24,652	33.1	24,740	33.1	0.4	99.6
<b>Total</b>	<b>248</b>	<b>100</b>	<b>74,580</b>	<b>100</b>	<b>74,827</b>	<b>100</b>	<b>0.3</b>	<b>99.7</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.13.2. M2M Program Impacts

There were no M2M-specific NASA employees in Hawaii in FY 2019, but \$179,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is 2 jobs, \$160,000 in labor income, and \$429,000 worth of output (Table 86).

**Table 86: Summary of M2M Program Impacts by Types of Impact, Hawaii.**

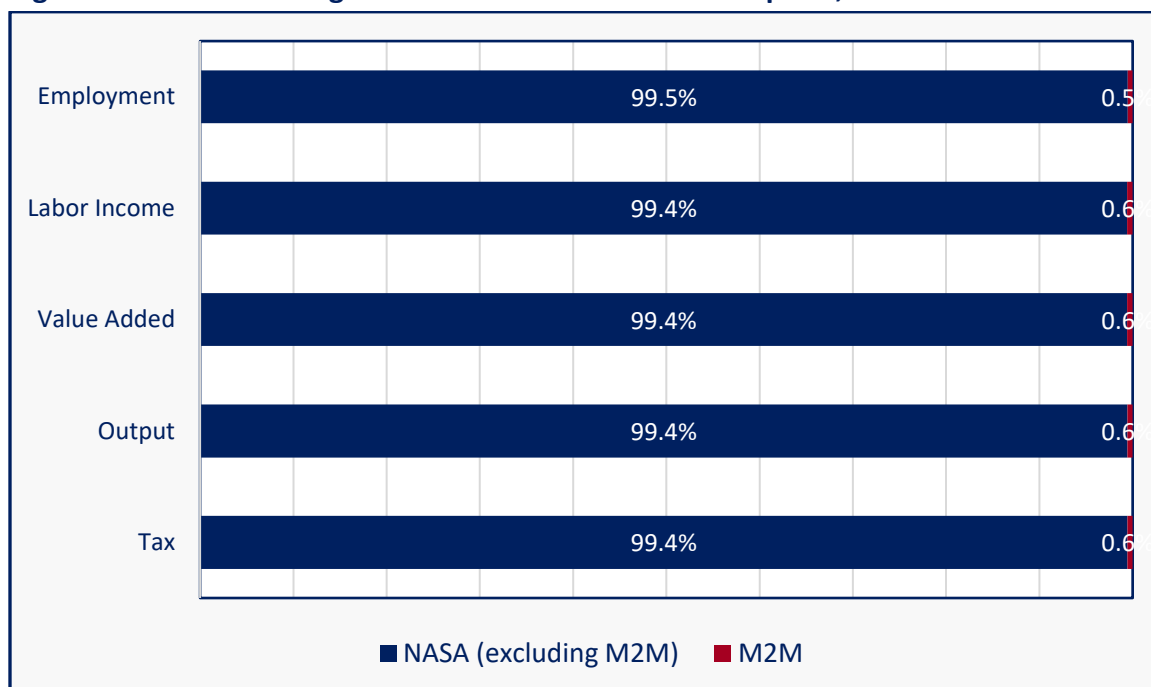
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	1	113	143	285	7
Induced	1	47	84	144	11
<b>Total</b>	<b>2</b>	<b>160</b>	<b>228</b>	<b>429</b>	<b>17</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.13.3. The M2M Program's Share of NASA Impacts

Less than 1% of overall NASA agency impacts in the state are attributable to the M2M program (Table 87 and Figure 44).

**Table 87: The M2M Program Portion of Overall NASA Impacts, Hawaii.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	412	26,858	38,036	74,827	3,039
M2M Portion	2	160	228	429	17
M2M Share (%)	0.5%	0.6%	0.6%	0.6%	0.6%

**Figure 44: The M2M Program Portion of Overall NASA Impacts, Hawaii.**



## 6.14. Economic Impacts on the State of Idaho

### 6.14.1. NASA Impacts

In 2019, 3 NASA civil service employees (1 FTE) residing in Idaho earned \$185,000 in labor income. NASA contracts sourced in Idaho in the same year totaled \$13.3 million. The total economic impact resulting from these activities is 176 jobs, \$11.9 million in labor income, and \$29.1 million in economic output. These economic activities generate \$1 million in tax revenues for the state and local governments in Idaho (Table 88).

**Table 88: Summary of NASA Impacts by Types of Impact, Idaho.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	185	215	450	6
Indirect	96	8,281	11,948	16,997	357
Induced	78	3,424	5,865	11,694	638
<b>Total</b>	<b>176</b>	<b>11,889</b>	<b>18,028</b>	<b>29,141</b>	<b>1,000</b>
<i>Multiplier</i>	<i>168.5</i>	<i>64.3</i>	<i>83.7</i>	<i>64.7</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Idaho economy. Table 89 examines the sources of the employment figures in the second column of Table 88. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 98% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 2%.

**Table 89: NASA Employment Impacts by Sources of Impact, Idaho.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	38.2	0	0.0	1	0.6	100.0	0.0
Indirect*	0	0.0	96	55.8	96	54.9	0.0	100.0
Induced	2	61.8	76	44.2	78	44.5	2.2	97.8
<b>Total</b>	<b>3</b>	<b>100</b>	<b>173</b>	<b>100</b>	<b>176</b>	<b>100</b>	<b>1.6</b>	<b>98.4</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 90 examines the sources of the output figures in the fifth column of Table 88. Procurement spending is responsible for approximately 98% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 2%.

**Table 90: NASA Output Impacts by Sources of Impact, Idaho.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	450	64.1	0	0.0	450	1.5	100.0	0.0
Indirect*	0	0.0	16,997	59.8	16,997	58.3	0.0	100.0
Induced	252	35.9	11,441	40.2	11,694	40.1	2.2	97.8
<b>Total</b>	<b>702</b>	<b>100</b>	<b>28,438</b>	<b>100</b>	<b>29,141</b>	<b>100</b>	<b>2.4</b>	<b>97.6</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### 6.14.2. M2M Program Impacts

In 2019, Idaho had one M2M-related civil service employee (less than 1 FTE) with a corresponding labor income of \$19,000. M2M program contracts sourced in the state in the same year totaled \$8.5 million. The total Idaho employment impact is 93 jobs. The labor income and economic output associated with this employment are approximately \$7.9 million and \$16 million, respectively. The M2M program generates approximately \$590,000 in tax revenues for the state and local governments in Idaho (Table 91).

**Table 91: Summary of M2M Program Impacts by Types of Impact, Idaho.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	19	21	44	1
Indirect	46	5,646	8,573	8,573	188
Induced	48	2,227	3,825	7,372	402
<b>Total</b>	<b>93</b>	<b>7,892</b>	<b>12,419</b>	<b>15,989</b>	<b>590</b>
<i>Multiplier</i>	<i>920.4</i>	<i>425.0</i>	<i>593.2</i>	<i>365.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Idaho economy. Nearly all employment and output impacts are due to NASA procurement sourced within the state.

**Table 92: M2M Program Employment Impacts by Sources of Impact, Idaho.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	<1	38.2	0	0.0	0	0.1	100.0	0.0
Indirect*	0	0.0	46	49.1	46	48.9	0.0	100.0
Induced	<1	61.8	47	50.9	48	50.9	0.3	99.7
<b>Total</b>	<b>&lt;1</b>	<b>100</b>	<b>93</b>	<b>100</b>	<b>93</b>	<b>100</b>	<b>0.3</b>	<b>99.7</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 93: M2M Program Output Impacts by Sources of Impact, Idaho.**

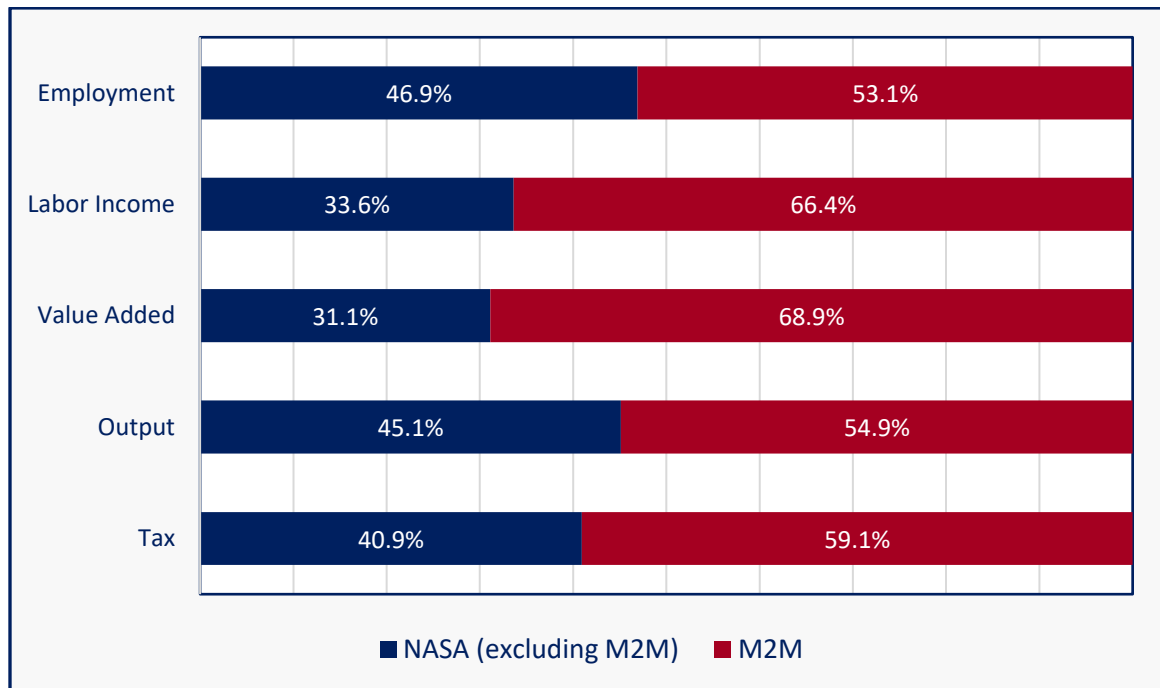
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	44	63.2	0	0.0	44	0.3	100.0	0.0
Indirect*	0	0.0	8,573	53.9	8,573	53.6	0.0	100.0
Induced	25	36.8	7,347	46.1	7,372	46.1	0.3	99.7
<b>Total</b>	<b>69</b>	<b>100</b>	<b>15,920</b>	<b>100</b>	<b>15,989</b>	<b>100</b>	<b>0.4</b>	<b>99.6</b>

### 6.14.3. The M2M Program's Share of NASA Impacts

Around 60% of overall NASA agency impacts in the state are attributable to the M2M program (Table 94 and Figure 45). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 94: The M2M Program Portion of Overall NASA Impacts, Idaho.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	176	11,889	18,028	29,141	1,000
M2M Portion	93	7,892	12,419	15,989	590
M2M Share (%)	53.1%	66.4%	68.9%	54.9%	59.1%

**Figure 45: The M2M Program Portion of Overall NASA Impacts, Idaho.**

## 6.15. Economic Impacts on the State of Illinois

### 6.15.1. NASA Impacts

In 2019, 30 NASA civil service employees (15 FTEs) residing in Illinois earned \$1.5 million in labor income. NASA contracts sourced in Illinois in the same year totaled \$33.5 million. The total economic impact resulting from these activities is 519 jobs, \$40.3 million in labor income, and \$113.1 million in economic output. These economic activities generate \$4.2 million in tax revenues for the state and local governments in Illinois (Table 95).

**Table 95: Summary of NASA Impacts by Types of Impact, Illinois.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	15	1,466	3,047	6,370	35
Indirect	269	24,886	35,177	64,049	1,495
Induced	235	13,958	24,504	42,687	2,632
<b>Total</b>	<b>519</b>	<b>40,310</b>	<b>62,727</b>	<b>113,106</b>	<b>4,162</b>
<i>Multiplier</i>	<i>35.2</i>	<i>27.5</i>	<i>20.6</i>	<i>17.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Illinois economy. Table 96 examines the sources of the employment figures in the second column of Table 95. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 94% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 6%.

**Table 96: NASA Employment Impacts by Sources of Impact, Illinois.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	15	49.6	0	0.0	15	2.8	100.0	0.0
Indirect*	0	0.0	269	55.0	269	51.8	0.0	100.0
Induced	15	50.4	220	45.0	235	45.3	6.4	93.6
<b>Total</b>	<b>30</b>	<b>100</b>	<b>489</b>	<b>100</b>	<b>519</b>	<b>100</b>	<b>5.7</b>	<b>94.3</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 97 examines the sources of the output figures in the fifth column of Table 95. Procurement spending is responsible for 92% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 8%.

**Table 97: NASA Output Impacts by Sources of Impact, Illinois.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	6,370	70.1	0	0.0	6,370	5.6	100.0	0.0
Indirect*	0	0.0	64,049	61.6	64,049	56.6	0.0	100.0
Induced	2,720	29.9	39,967	38.4	42,687	37.7	6.4	93.6
<b>Total</b>	<b>9,091</b>	<b>100</b>	<b>104,015</b>	<b>100</b>	<b>113,106</b>	<b>100</b>	<b>8.0</b>	<b>92.0</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.15.2. M2M Program Impacts

In 2019, Illinois had seven M2M-related civil service employees (4 FTEs) with a corresponding labor income of \$326,000. M2M program contracts sourced in the state in the same year totaled \$3.8 million. The total Illinois employment impact is 53 jobs. The labor income and economic output associated with this employment are \$4.6 million and \$13.4 million, respectively. The M2M program generates \$505,000 in tax revenues for the state and local governments in Illinois (Table 98).

**Table 98: Summary of M2M Program Impacts by Types of Impact, Illinois.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	326	755	1,578	8
Indirect	24	2,662	4,103	7,097	207
Induced	25	1,593	2,785	4,711	290
<b>Total</b>	<b>53</b>	<b>4,580</b>	<b>7,643</b>	<b>13,386</b>	<b>505</b>
<i>Multiplier</i>	<i>14.4</i>	<i>14.1</i>	<i>10.1</i>	<i>8.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Illinois economy. Approximately 87 percent of the employment impacts and more than 83 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 99: M2M Program Employment Impacts by Sources of Impact, Illinois.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	4	52.5	0	0.0	4	6.9	100.0	0.0
Indirect*	0	0.0	24	53.1	24	46.1	0.0	100.0
Induced	3	47.5	21	46.9	25	47.0	13.4	86.6
<b>Total</b>	<b>7</b>	<b>100</b>	<b>46</b>	<b>100</b>	<b>53</b>	<b>100</b>	<b>13.2</b>	<b>86.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 100: M2M Program Output Impacts by Sources of Impact, Illinois.**

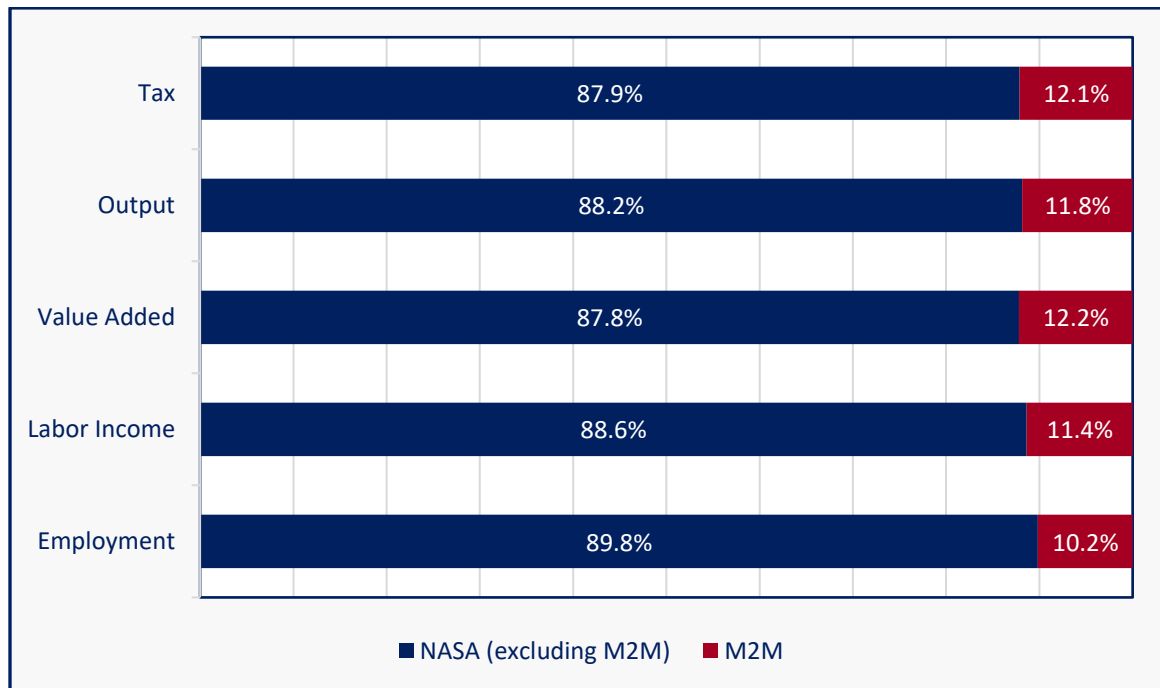
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,578	71.5	0	0.0	1,578	11.8	100.0	0.0
Indirect*	0	0.0	7,097	63.5	7,097	53.0	0.0	100.0
Induced	630	28.5	4,081	36.5	4,711	35.2	13.4	86.6
<b>Total</b>	<b>2,208</b>	<b>100</b>	<b>11,178</b>	<b>100</b>	<b>13,386</b>	<b>100</b>	<b>16.5</b>	<b>83.5</b>

### 6.15.3. The M2M Program's Share of NASA Impacts

Around 12% of overall NASA agency impacts in the state are attributable to the M2M program (Table 101 and Figure 46). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 101: The M2M Program Portion of Overall NASA Impacts, Illinois.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	519	40,310	62,727	113,106	4,162
M2M Portion	53	4,580	7,643	13,386	505
M2M Share (%)	10.2%	11.4%	12.2%	11.8%	12.1%

**Figure 46: The M2M Program Portion of Overall NASA Impacts, Illinois.**



## 6.16. Economic Impacts on the State of Indiana

### 6.16.1. NASA Impacts

In 2019, 28 NASA civil service employees (9 FTEs) residing in Indiana earned more than \$867,000 in labor income. NASA contracts sourced in Indiana in the same year totaled \$131.8 million. The total economic impact resulting from these activities is 1,778 jobs, \$114 million in labor income, and \$332.9 million in economic output. These economic activities generate nearly \$10 million in tax revenues for the state and local governments in Indiana (Table 102).

**Table 102: Summary of NASA Impacts by Types of Impact, Indiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	867	1,757	3,674	35
Indirect	1,071	77,643	120,906	216,841	4,029
Induced	698	35,482	59,404	112,380	5,921
<b>Total</b>	<b>1,778</b>	<b>113,991</b>	<b>182,067</b>	<b>332,895</b>	<b>9,986</b>
<i>Multiplier</i>	<i>209.1</i>	<i>131.5</i>	<i>103.6</i>	<i>90.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Indiana economy. Table 103 examines the sources of the employment figures in the second column of Table 102. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-nine (99) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 1%.

**Table 103: NASA Employment Impacts by Sources of Impact, Indiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	9	49.5	0	0.0	9	0.5	100.0	0.0
Indirect*	0	0.0	1,071	60.8	1,071	60.2	0.0	100.0
Induced	9	50.5	690	39.2	698	39.3	1.2	98.8
<b>Total</b>	<b>17</b>	<b>100</b>	<b>1,761</b>	<b>100</b>	<b>1,778</b>	<b>100</b>	<b>1.0</b>	<b>99.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 104 examines the sources of the output figures in the fifth column of Table 102. Procurement spending is responsible for more than 98% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 2%.

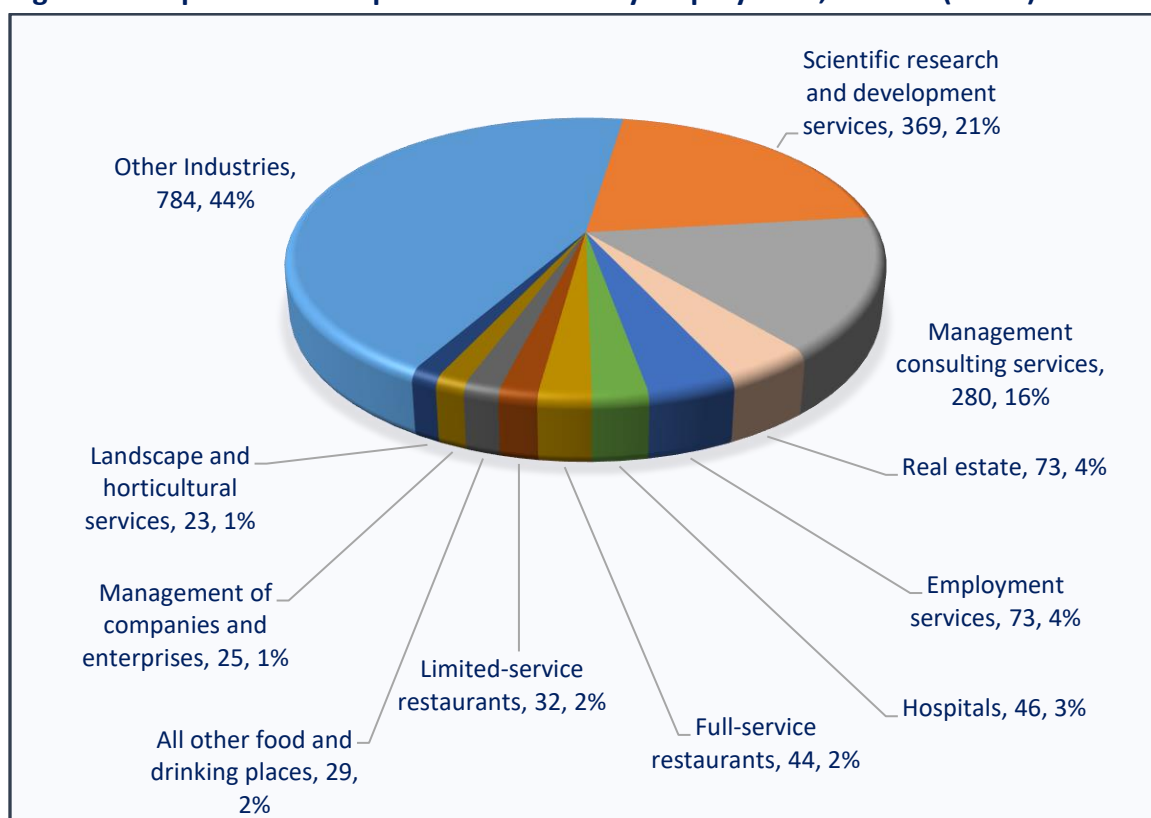
**Table 104: NASA Output Impacts by Sources of Impact, Indiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	3,674	72.5	0	0.0	3,674	1.1	100.0	0.0
Indirect*	0	0.0	216,841	66.1	216,841	65.1	0.0	100.0
Induced	1,394	27.5	110,986	33.9	112,380	33.8	1.2	98.8
<b>Total</b>	<b>5,068</b>	<b>100</b>	<b>327,827</b>	<b>100</b>	<b>332,895</b>	<b>100</b>	<b>1.5</b>	<b>98.5</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

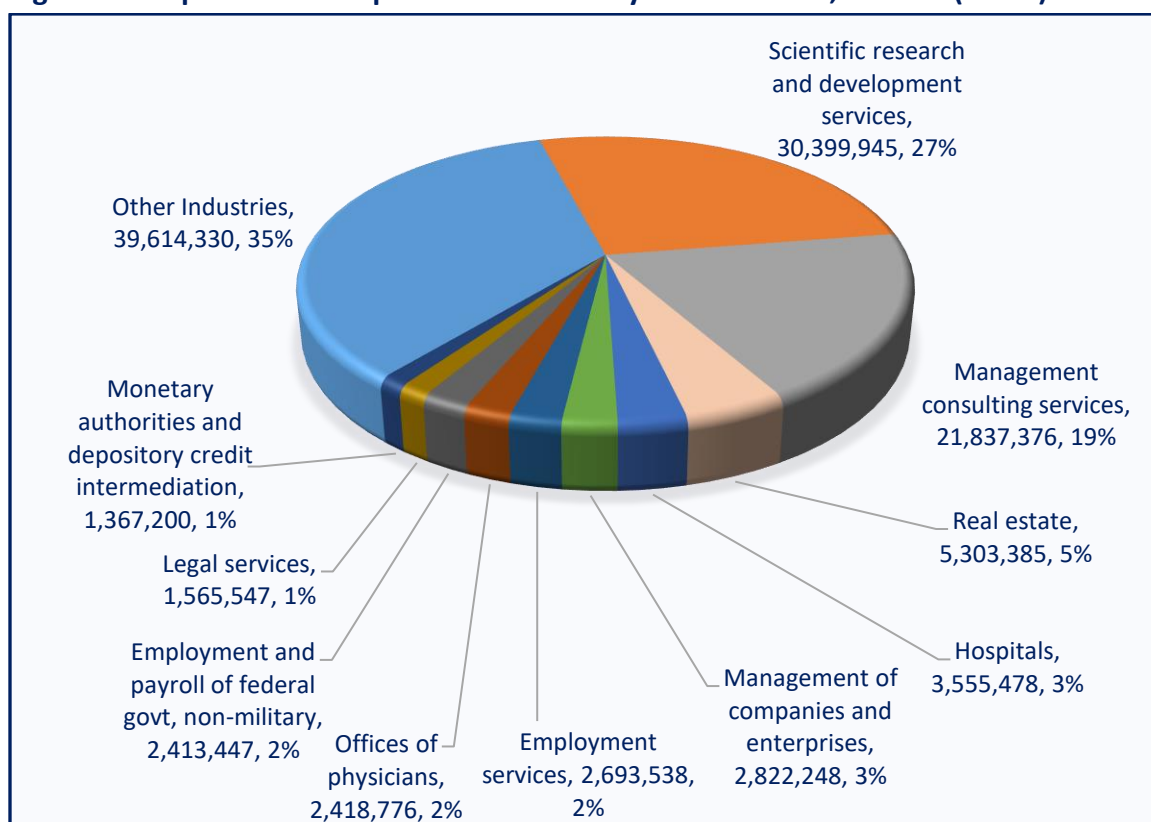
**1,778 jobs in the Indiana economy were supported by NASA activities in Fiscal Year 2019.** Of these, 9 (<1%) were directly located at NASA centers. As a result of the procurement of goods and services in the Indiana economy, 1,071 additional jobs (60%) were created. The remaining employment—698 jobs (39%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 47 depicts the ten most impacted industries by employment. Scientific research and development services and management consulting services are the most impacted industries, respectively. These two industries together account for 37% of the jobs created. The employment in these industries is driven largely by NASA procurement spending; these two industries accounted for approximately 97% of NASA procurement spending in the state in Fiscal Year 2019.

**Figure 47: Top Ten Most Impacted Industries by Employment, Indiana (NASA).**

**The total income impact of NASA in Indiana was \$114 million in Fiscal Year 2019.** Of this amount, \$867,000 (1%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$77.6 million (68%). The remaining income (induced impact), estimated to be \$35.4 million (31%), resulted from expenditures by those earning income through the direct and indirect impacts.

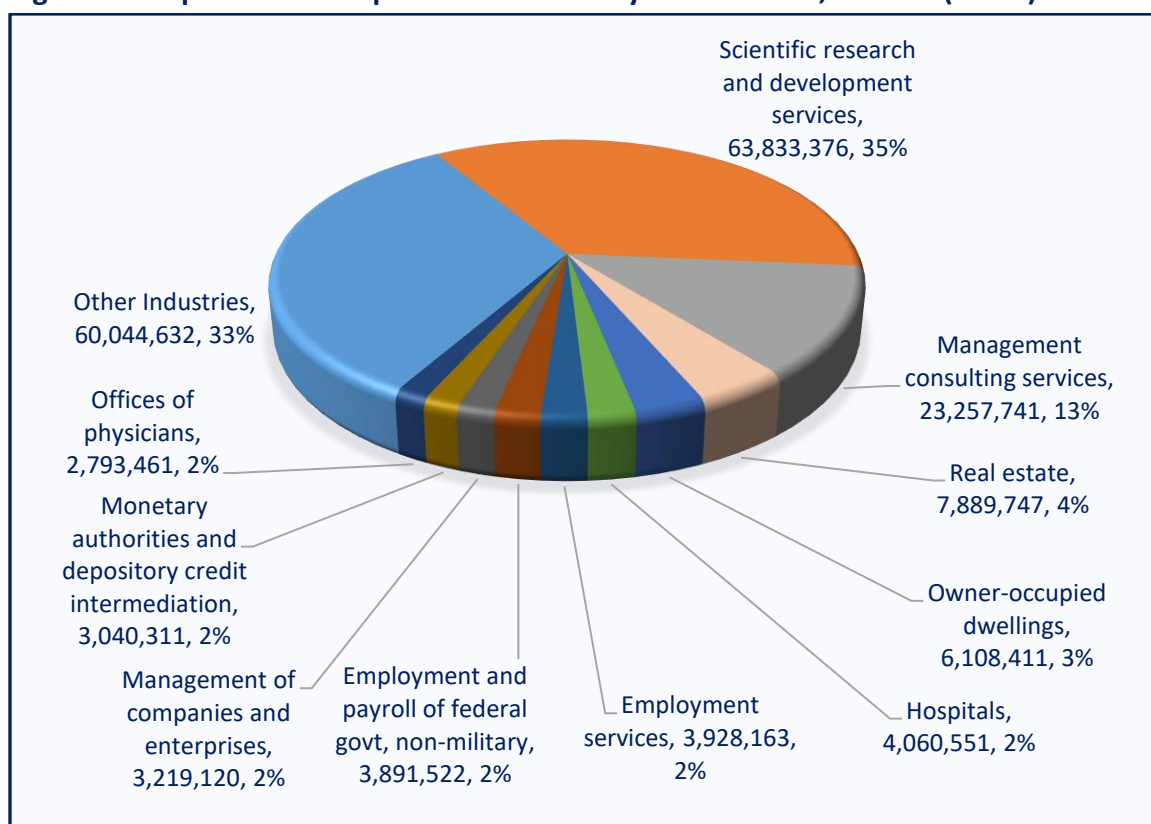
Figure 48 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development services and management consulting services are the most impacted industries by income. The two industries together account for 46% of the total labor income earned.

**Figure 48: Top Ten Most Impacted Industries by Labor Income, Indiana (NASA).**

**The total value added impact of NASA in Indiana was \$182 million in Fiscal Year 2019.**

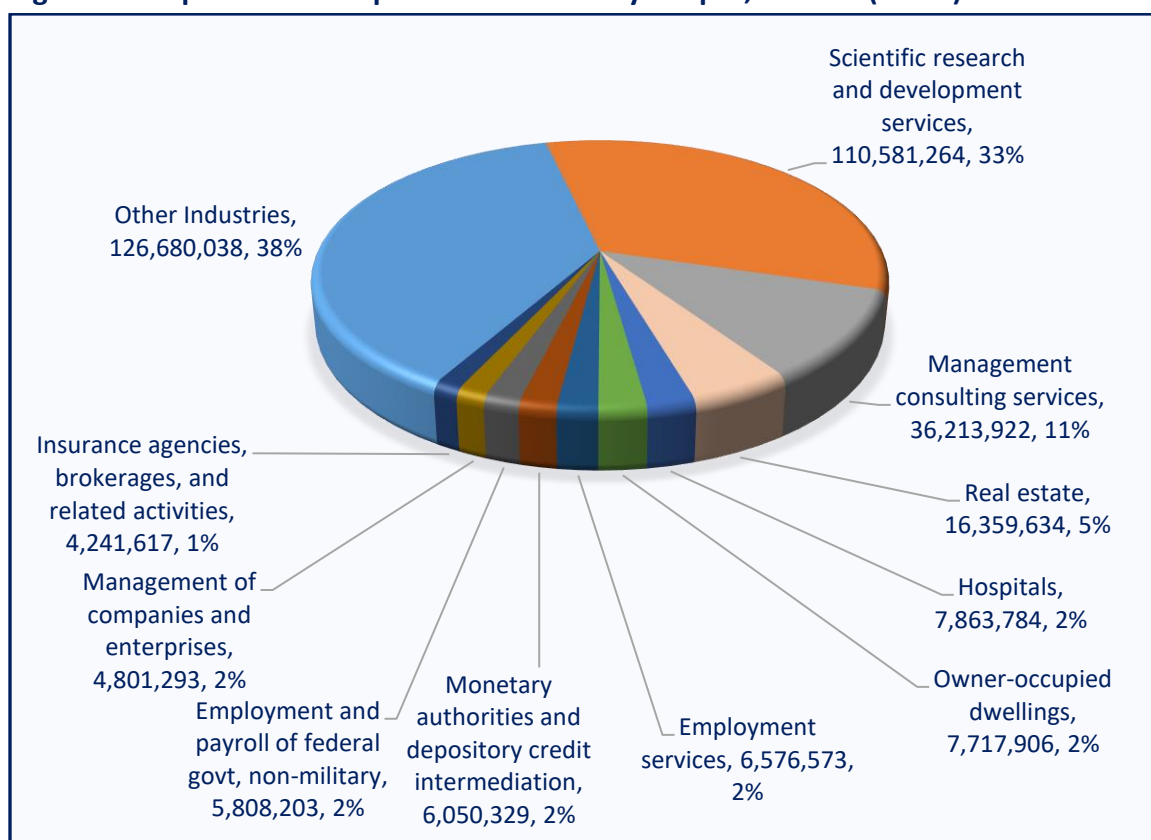
Of this amount, more than \$1.7 million (1%) was created by civil service employees and \$121 million (66%) was created indirectly by the \$131 million in procurement spending across all industry sectors in Indiana. \$59.4 million (33%) was generated by increased consumption spending supported by increased earnings.

Figure 49 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services and management consulting services are the most impacted industries. The two industries together account for 48% of the total value added created. NASA activities accounted for an increase of \$63.8 million in value added in scientific research and development services and an increase of \$23.3 million in value added in management consulting services.

**Figure 49: Top Ten Most Impacted Industries by Value Added, Indiana (NASA).**

**The total output impact of NASA in Indiana was \$332.9 million in Fiscal Year 2019.** The direct impact of \$3.6 million constitutes the value of production by NASA employees, accounting for around 1% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$131.8 million resulted in an additional increase in output (gross sales) of \$85 million across all industry sectors (adding up to the indirect total of \$216.8 million in Table 102). Approximately \$112.3 million (34%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$110.6 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services, and an \$36.2 million increase in management consulting services (Figure 50). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 97% of NASA procurement spending in the state in Fiscal Year 2019.

**Figure 50: Top Ten Most Impacted Industries by Output, Indiana (NASA).**

### 6.16.2 M2M Program Impacts

In 2019, Indiana had six M2M-related civil service employees (1 FTE) with a corresponding labor income of \$53,000. M2M program contracts sourced in the state in the same year totaled approximately 4 million. The total Indiana employment impact is 65 jobs. The labor income and economic output associated with this employment are \$4.4 million and \$13.3 million, respectively. The M2M program generates approximately \$415,000 in tax revenues for the state and local governments in Indiana (Table 105).

**Table 105: Summary of M2M Program Impacts by Types of Impact, Indiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	53	158	330	2
Indirect	39	3,018	3,490	8,905	194
Induced	25	1,348	2,261	4,150	219
<b>Total</b>	<b>65</b>	<b>4,418</b>	<b>5,908</b>	<b>13,384</b>	<b>415</b>
<i>Multiplier</i>	<i>84.7</i>	<i>84.0</i>	<i>37.5</i>	<i>40.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the estimated ratios

*of value-added-to-employee-compensation in guided missile and space vehicle manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratio of output-to-employee-compensation in the same industry.*

The following two tables examine the contribution of different NASA activities to the Indiana economy. Ninety-eight (98) percent of the employment impacts and ninety-seven (97) percent of the output impacts are due to NASA procurement sourced within the state.

**Table 106: M2M Program Employment Impacts by Sources of Impact, Indiana.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	59.5	0	0.0	1	1.2	100.0	0.0
Indirect*	0	0.0	39	61.9	39	60.7	0.0	100.0
Induced	1	40.5	24	38.1	25	38.1	2.1	97.9
<b>Total</b>	<b>1</b>	<b>100</b>	<b>63</b>	<b>100</b>	<b>65</b>	<b>100</b>	<b>2.0</b>	<b>98.0</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

**Table 107: M2M Program Output Impacts by Sources of Impact, Indiana.**

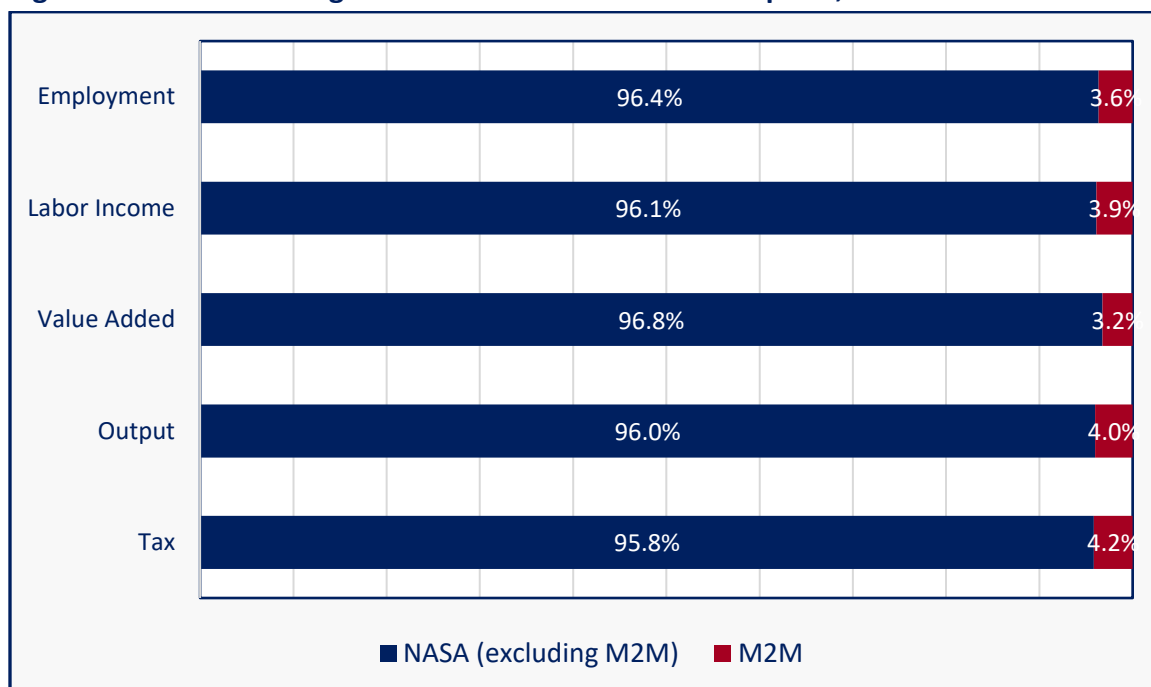
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	330	79.0	0	0.0	330	2.5	100.0	0.0
Indirect*	0	0.0	8,905	68.7	8,905	66.5	0.0	100.0
Induced	87	21.0	4,062	31.3	4,150	31.0	2.1	97.9
<b>Total</b>	<b>417</b>	<b>100</b>	<b>12,967</b>	<b>100</b>	<b>13,384</b>	<b>100</b>	<b>3.1</b>	<b>96.9</b>

### 6.16.3 The M2M Program's Share of NASA Impacts

Around 4% of overall NASA agency impacts in the state are attributable to the M2M program (Table 108 and Figure 51). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 108: The M2M Program Portion of Overall NASA Impacts, Indiana.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	1,778	113,991	182,067	332,895	9,986
M2M Portion	65	4,418	5,908	13,384	415
M2M Share (%)	3.6%	3.9%	3.2%	4.0%	4.2%

**Figure 51: The M2M Program Portion of Overall NASA Impacts, Indiana.**



## 6.17. Economic Impacts on the State of Iowa

### 6.17.1 NASA Impacts

In 2019, 4 NASA civil service employees (2 FTEs) residing in Iowa earned more than \$270,000 in labor income. NASA contracts sourced in Iowa in the same year totaled \$12.2 million. The total economic impact resulting from these activities is 158 jobs, \$9.4 million in labor income, and \$29.6 million in economic output. These economic activities generate \$983,000 in tax revenues for the state and local governments in Iowa (Table 109).

**Table 109: Summary of NASA Impacts by Types of Impact, Iowa.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	270	415	867	8
Indirect	102	6,648	9,735	20,165	498
Induced	55	2,455	4,408	8,561	477
<b>Total</b>	<b>158</b>	<b>9,373</b>	<b>14,558</b>	<b>29,594</b>	<b>983</b>
<i>Multiplier</i>	<i>78.9</i>	<i>34.7</i>	<i>35.1</i>	<i>34.1</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Iowa economy. Table 110 examines the sources of the employment figures in the second column of Table 109. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 97% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 3%.

**Table 110: NASA Employment Impacts by Sources of Impact, Iowa.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	45.3	0	0.0	2	1.3	100.0	0.0
Indirect*	0	0.0	102	66.1	102	64.3	0.0	100.0
Induced	2	54.7	52	33.9	55	34.5	4.4	95.6
<b>Total</b>	<b>4</b>	<b>100</b>	<b>154</b>	<b>100</b>	<b>158</b>	<b>100</b>	<b>2.8</b>	<b>97.2</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 111 examines the sources of the output figures in the fifth column of Table 109. Procurement spending is responsible for nearly 96% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 4%.

**Table 111: NASA Output Impacts by Sources of Impact, Iowa.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	867	69.6	0	0.0	867	2.9	100.0	0.0
Indirect*	0	0.0	20,165	71.1	20,165	68.1	0.0	100.0
Induced	380	30.4	8,181	28.9	8,561	28.9	4.4	95.6
<b>Total</b>	<b>1,247</b>	<b>100</b>	<b>28,347</b>	<b>100</b>	<b>29,594</b>	<b>100</b>	<b>4.2</b>	<b>95.8</b>

\* Note that direct output impacts include only NASA civil service employees, and indirect output impacts include both NASA contractor employees and employees in the supply chain of those contractors.

### 6.17.2 M2M Program Impacts

There were no M2M-specific NASA employees in Iowa in FY 2019, but \$1.3 million in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is 21 jobs, \$1.3 million in labor income, and \$3.6 million worth of output (Table 112).

**Table 112: Summary of M2M Program Impacts by Types of Impact, Iowa.**

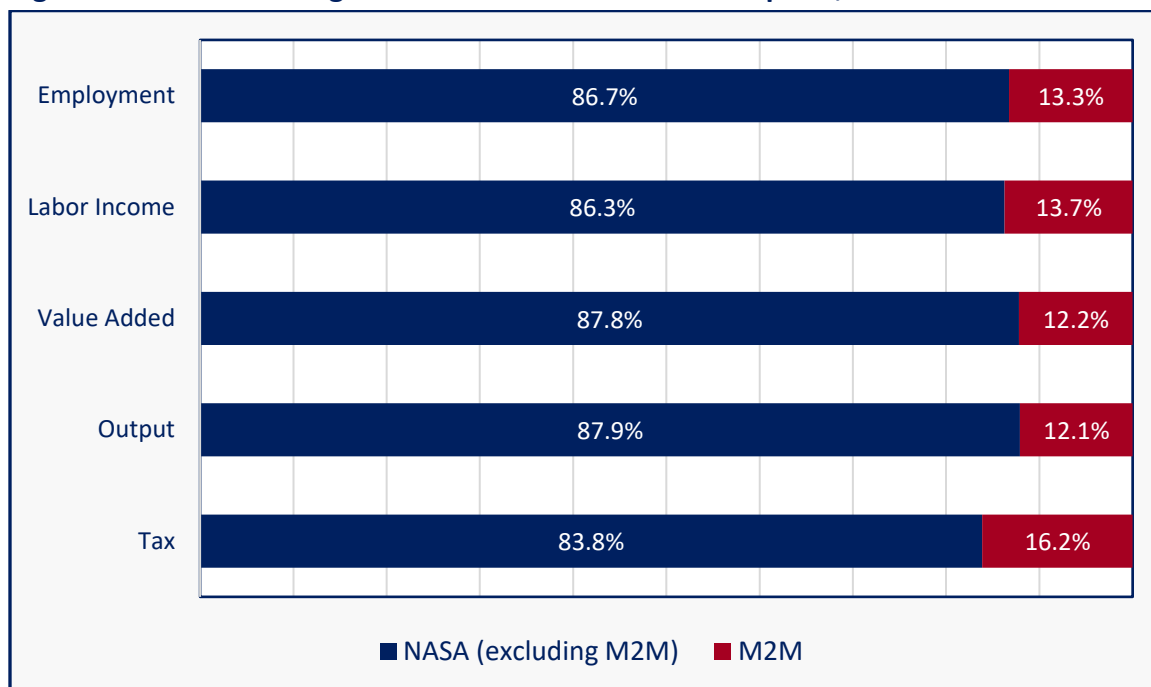
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	15	1,008	1,276	2,624	106
Induced	6	280	500	950	53
<b>Total</b>	<b>21</b>	<b>1,288</b>	<b>1,776</b>	<b>3,574</b>	<b>159</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.17.3. The M2M Program's Share of NASA Impacts

Around 13% of overall NASA agency impacts in the state are attributable to the M2M program (Table 113 and Figure 52). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 113: The M2M Program Portion of Overall NASA Impacts, Iowa.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	158	9,373	14,558	29,594	983
M2M Portion	21	1,288	1,776	3,574	159
M2M Share (%)	13.3%	13.7%	12.2%	12.1%	16.2%

**Figure 52: The M2M Program Portion of Overall NASA Impacts, Iowa.**

## 6.18. Economic Impacts on the State of Kansas

### 6.18.1. NASA Impacts

In 2019, 6 NASA civil service employees (2 FTEs) residing in Kansas earned \$326,000 in labor income. NASA contracts sourced in Kansas in the same year totaled \$6 million. The total economic impact resulting from these activities is 80 jobs, \$5 million in labor income, and \$15.6 million in economic output. These economic activities generate \$501,000 in tax revenues for the state and local governments in Kansas (Table 114).

**Table 114: Summary of NASA Impacts by Types of Impact, Kansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	326	479	1,002	8
Indirect	49	3,307	4,939	9,950	216
Induced	29	1,386	2,424	4,692	276
<b>Total</b>	<b>80</b>	<b>5,020</b>	<b>7,841</b>	<b>15,644</b>	<b>501</b>
<i>Multiplier</i>	<i>34.5</i>	<i>15.4</i>	<i>16.4</i>	<i>15.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Kansas economy. Table 115 examines the sources of the employment figures in the second column of Table 114. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 94% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 6%.

**Table 115: NASA Employment Impacts by Sources of Impact, Kansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	45.0	0	0.0	2	2.9	100.0	0.0
Indirect*	0	0.0	49	65.2	49	61.0	0.0	100.0
Induced	3	55.0	26	34.8	29	36.1	9.8	90.2
<b>Total</b>	<b>5</b>	<b>100</b>	<b>75</b>	<b>100</b>	<b>80</b>	<b>100</b>	<b>6.4</b>	<b>93.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 116 examines the sources of the output figures in the fifth column of Table 114. Procurement spending is responsible for approximately 91% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 9%.

**Table 116: NASA Output Impacts by Sources of Impact, Kansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,002	68.6	0	0.0	1,002	6.4	100.0	0.0
Indirect*	0	0.0	9,950	70.2	9,950	63.6	0.0	100.0
Induced	460	31.4	4,233	29.8	4,692	30.0	9.8	90.2
<b>Total</b>	<b>1,462</b>	<b>100</b>	<b>14,182</b>	<b>100</b>	<b>15,644</b>	<b>100</b>	<b>9.3</b>	<b>90.7</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.18.2. M2M Program Impacts

In 2019, Kansas had one M2M-related civil service employee (less than 1 FTE) with a corresponding labor income of \$9,000. M2M program contracts sourced in the state in the same year totaled \$103,000. The total Kansas employment impact is one job. The labor income and economic output associated with this employment are \$94,000 and \$310,000, respectively. The M2M program generates \$9,000 in tax revenues for the state and local governments in Kansas (Table 117).

**Table 117: Summary of M2M Program Impacts by Types of Impact, Kansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	9	25	51	0
Indirect	<1	59	88	174	4
Induced	<1	26	45	85	5
<b>Total</b>	<b>1</b>	<b>94</b>	<b>158</b>	<b>310</b>	<b>9</b>
<i>Multiplier</i>	<i>11.9</i>	<i>10.2</i>	<i>6.4</i>	<i>6.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Kansas economy. More than 86 percent of the employment impacts and 79 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 118: M2M Program Employment Impacts by Sources of Impact, Kansas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	<1	60.1	0	0.0	<1	8.4	100.0	0.0
Indirect*	0	0.0	<1	64.9	<1	55.8	0.0	100.0
Induced	<1	39.9	<1	35.1	<1	35.8	15.5	84.5
<b>Total</b>	<b>&lt;1</b>	<b>100</b>	<b>&lt;1</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>13.9</b>	<b>86.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 119: M2M Program Output Impacts by Sources of Impact, Kansas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	51	79.6	0	0.0	51	16.5	100.0	0.0
Indirect*	0	0.0	174	70.9	174	56.2	0.0	100.0
Induced	13	20.4	72	29.1	85	27.3	15.5	84.5
<b>Total</b>	<b>64</b>	<b>100</b>	<b>246</b>	<b>100</b>	<b>310</b>	<b>100</b>	<b>20.8</b>	<b>79.2</b>

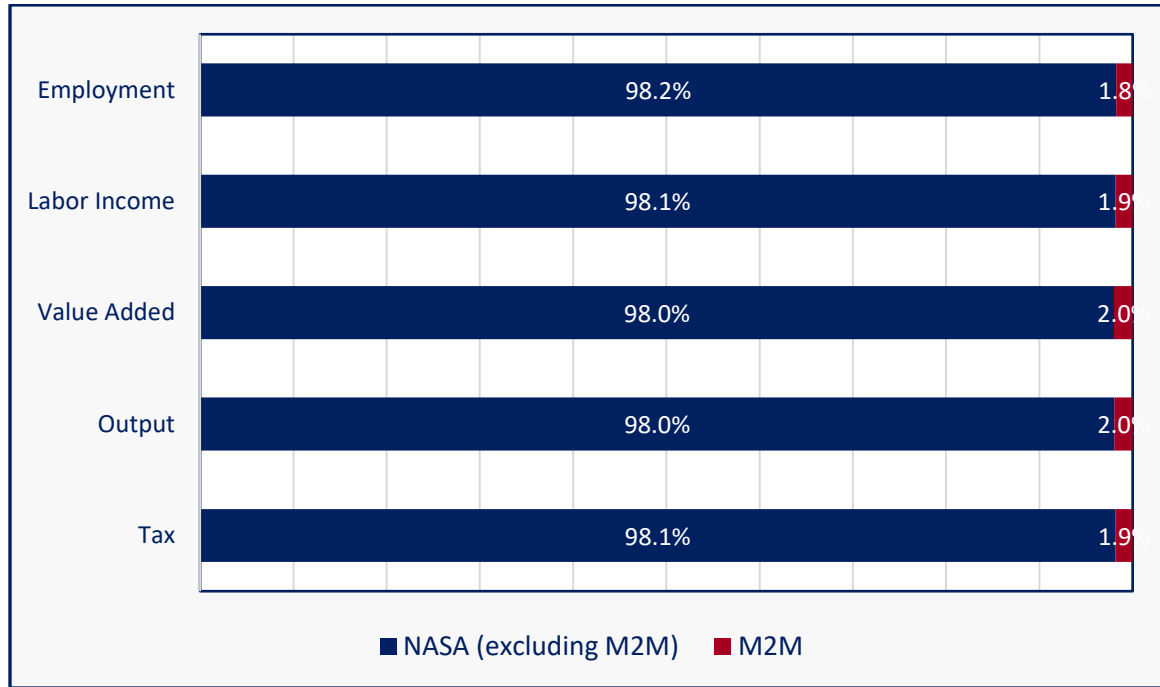
### 6.18.3. The M2M Program's Share of NASA Impacts

Around 2% of overall NASA agency impacts in the state are attributable to the M2M program (Table 120 and Figure 53). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 120: The M2M Program Portion of Overall NASA Impacts, Kansas.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	80	5,020	7,841	15,644	501
M2M Portion	1	94	158	310	9
M2M Share (%)	1.8%	1.9%	2.0%	2.0%	1.9%

**Figure 53: The M2M Program Portion of Overall NASA Impacts, Kansas.**



## 6.19. Economic Impacts on the State of Kentucky

### 6.19.1. NASA Impacts

In 2019, 23 NASA civil service employees (11 FTEs) residing in Kentucky earned more than \$1 million in labor income. NASA contracts sourced in Kentucky in the same year totaled \$13.7 million. The total economic impact resulting from these activities is 261 jobs, \$15 million in labor income, and \$41 million in economic output. These economic activities generate nearly \$1.4 million in tax revenues for the state and local governments in Kentucky (Table 121).

**Table 121: Summary of NASA Impacts by Types of Impact, Kentucky.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	11	1,087	2,187	4,574	32
Indirect	158	9,670	10,508	22,552	613
Induced	93	4,255	7,203	13,935	746
<b>Total</b>	<b>261</b>	<b>15,012</b>	<b>19,899</b>	<b>41,060</b>	<b>1,391</b>
<i>Multiplier</i>	<i>24.7</i>	<i>13.8</i>	<i>9.1</i>	<i>9.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Kentucky economy. Table 122 examines the sources of the employment figures in the second column of Table 121. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-two (92) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 8%.

**Table 122: NASA Employment Impacts by Sources of Impact, Kentucky.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	11	50.7	0	0.0	11	4.0	100.0	0.0
Indirect*	0	0.0	158	65.7	158	60.4	0.0	100.0
Induced	10	49.3	83	34.3	93	35.5	11.1	88.9
<b>Total</b>	<b>21</b>	<b>100</b>	<b>241</b>	<b>100</b>	<b>261</b>	<b>100</b>	<b>8.0</b>	<b>92.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.



Table 123 examines the sources of the output figures in the fifth column of Table 121. Procurement spending is responsible for 85% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 15%.

**Table 123: NASA Output Impacts by Sources of Impact, Kentucky.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	4,574	74.8	0	0.0	4,574	11.1	100.0	0.0
Indirect*	0	0.0	22,552	64.5	22,552	54.9	0.0	100.0
Induced	1,543	25.2	12,391	35.5	13,935	33.9	11.1	88.9
<b>Total</b>	<b>6,117</b>	<b>100</b>	<b>34,943</b>	<b>100</b>	<b>41,060</b>	<b>100</b>	<b>14.9</b>	<b>85.1</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.19.2. M2M Program Impacts

In 2019, Kentucky had seven M2M-related civil service employees (3 FTEs) with a corresponding labor income of \$242,000. M2M program contracts sourced in the state in the same year totaled \$6.7 million. The total Kentucky employment impact is 156 jobs. The labor income and economic output associated with this employment are \$9.2 million and \$20 million, respectively. The M2M program generates \$792,000 in tax revenues for the state and local governments in Kentucky (Table 124).

**Table 124: Summary of M2M Program Impacts by Types of Impact, Kentucky.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	242	534	1,117	7
Indirect	102	6,479	4,826	10,915	361
Induced	51	2,503	4,227	7,920	424
<b>Total</b>	<b>156</b>	<b>9,224</b>	<b>9,587</b>	<b>19,952</b>	<b>792</b>
<i>Multiplier</i>	<i>60.4</i>	<i>38.1</i>	<i>17.9</i>	<i>17.9</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Kentucky economy. Nearly 97 percent of the employment impacts and 93 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 125: M2M Program Employment Impacts by Sources of Impact, Kentucky.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3	53.5	0	0.0	3	1.7	100.0	0.0
Indirect*	0	0.0	102	67.6	102	65.6	0.0	100.0
Induced	2	46.5	49	32.4	51	32.8	4.4	95.6
<b>Total</b>	<b>5</b>	<b>100</b>	<b>151</b>	<b>100</b>	<b>156</b>	<b>100</b>	<b>3.1</b>	<b>96.9</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 126: M2M Program Output Impacts by Sources of Impact, Kentucky.**

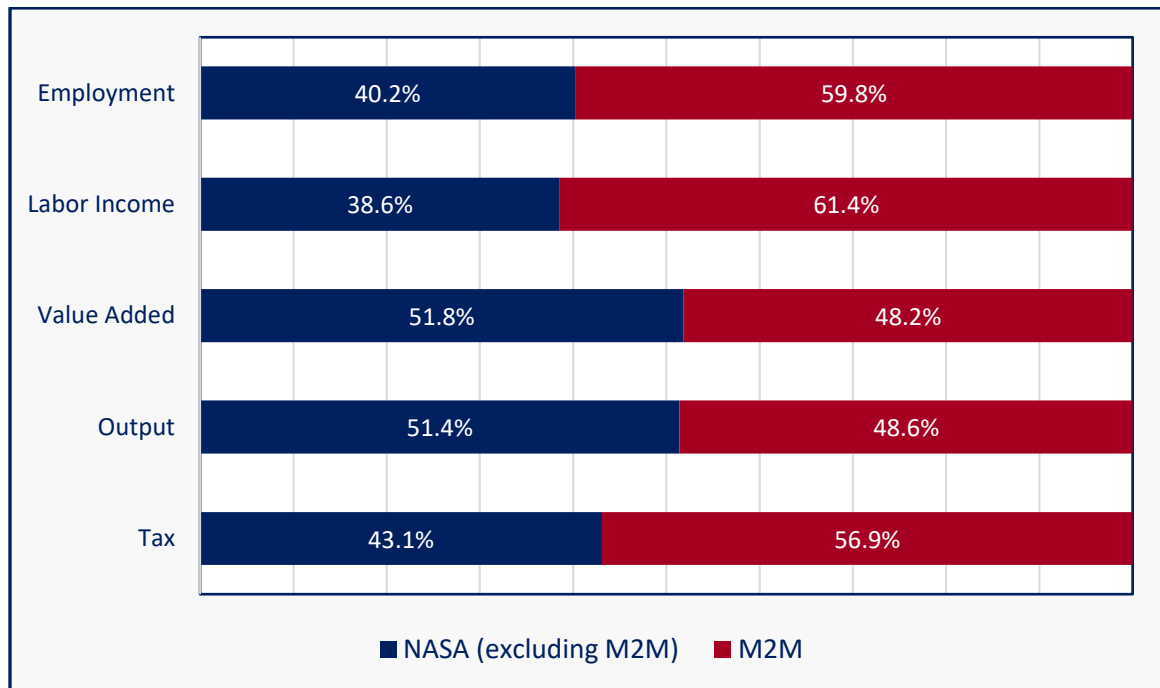
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,117	76.3	0	0.0	1,117	5.6	100.0	0.0
Indirect*	0	0.0	10,915	59.0	10,915	54.7	0.0	100.0
Induced	348	23.7	7,572	41.0	7,920	39.7	4.4	95.6
<b>Total</b>	<b>1,465</b>	<b>100</b>	<b>18,487</b>	<b>100</b>	<b>19,952</b>	<b>100</b>	<b>7.3</b>	<b>92.7</b>

### 6.19.3. The M2M Program's Share of NASA Impacts

Around 50% of overall NASA agency impacts in the state are attributable to the M2M program (Table 127 and Figure 54). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 127: The M2M Program Portion of Overall NASA Impacts, Kentucky.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	261	15,012	19,899	41,060	1,391
M2M Portion	156	9,224	9,587	19,952	792
M2M Share (%)	59.8%	61.4%	48.2%	48.6%	56.9%

**Figure 54: The M2M Program Portion of Overall NASA Impacts, Kentucky.**

## 6.20. Economic Impacts on the State of Louisiana

### 6.20.1. NASA Impacts

In 2019, 200 NASA civil service employees (182 FTEs) residing in Louisiana earned more than \$29.6 million in labor income. NASA contracts sourced in Louisiana in the same year totaled more than \$116.6 million. The total economic impact resulting from these activities is 2,474 jobs, \$141.5 million in labor income, and \$425 million in economic output. These economic activities generate nearly \$14 million in tax revenues for the state and local governments in Louisiana (Table 128).

The employment multiplier is 13.6, meaning that for every NASA job located in Louisiana, an additional 12.6 jobs are supported in the state economy. The output multiplier of 5.4 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$4.4 million worth of output is sustained throughout the state economy.

**Table 128: Summary of NASA Impacts by Types of Impact, Louisiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	182	29,616	37,654	78,732	600
Indirect	1,425	73,446	95,614	214,312	5,518
Induced	867	38,404	71,818	132,031	7,786
<b>Total</b>	<b>2,474</b>	<b>141,467</b>	<b>205,085</b>	<b>425,076</b>	<b>13,904</b>
<i>Multiplier</i>	<i>13.6</i>	<i>4.8</i>	<i>5.4</i>	<i>5.4</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Louisiana economy. Table 129 examines the sources of the employment figures in the second column of Table 128. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 82% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 18%.

**Table 129: NASA Employment Impacts by Sources of Impact, Louisiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	182	39.8	0	0.0	182	7.4	100.0	0.0
Indirect*	0	0.0	1,425	70.7	1,425	57.6	0.0	100.0
Induced	276	60.2	591	29.3	867	35.0	31.8	68.2
<b>Total</b>	<b>458</b>	<b>100</b>	<b>2,016</b>	<b>100</b>	<b>2,474</b>	<b>100</b>	<b>18.5</b>	<b>81.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 130 examines the sources of the output figures in the fifth column of Table 128. Procurement spending is responsible for nearly 72% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 28%.

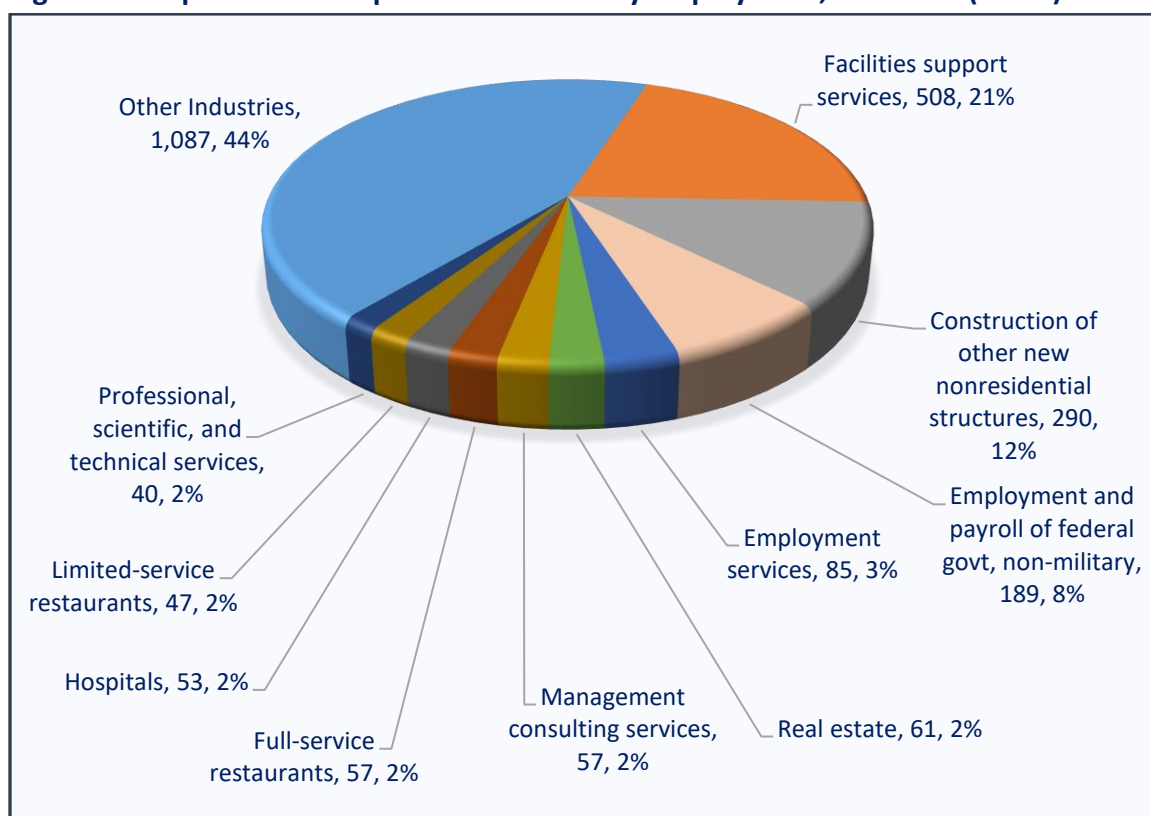
**Table 130: NASA Output Impacts by Sources of Impact, Louisiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	78,732	65.2	0	0.0	78,732	18.5	100.0	0.0
Indirect*	0	0.0	214,312	70.4	214,312	50.4	0.0	100.0
Induced	41,987	34.8	90,044	29.6	132,031	31.1	31.8	68.2
<b>Total</b>	<b>120,719</b>	<b>100</b>	<b>304,357</b>	<b>100</b>	<b>425,076</b>	<b>100</b>	<b>28.4</b>	<b>71.6</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

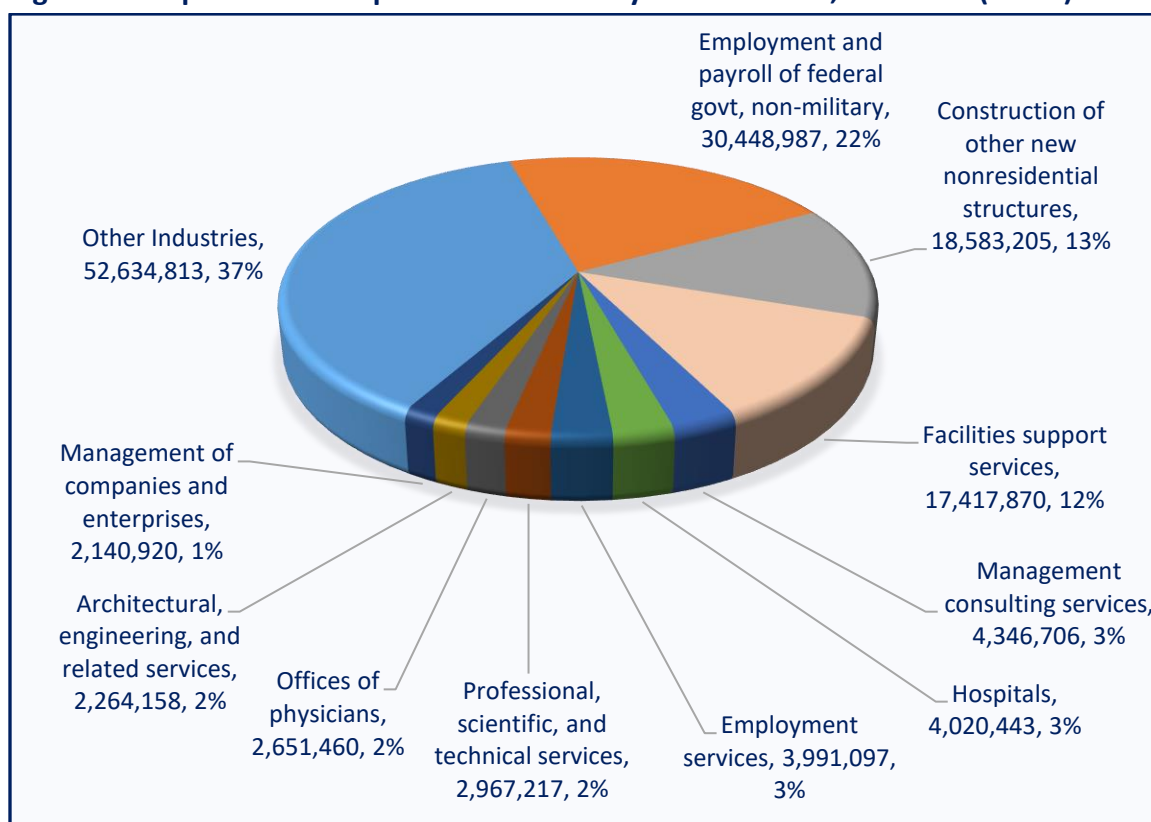
**2,474 jobs in the Louisiana economy were supported by NASA activities in Fiscal Year 2019.** Of these, 182 (7%) were directly located at NASA centers. As a result of the procurement of goods and services in the Louisiana economy, 1,425 additional jobs (58%) were created. The remaining employment—867 jobs (35%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 55 depicts the ten most impacted industries by employment. Facilities support services and construction are the most impacted industries, respectively. These two industries together account for 33% of the jobs created. The employment in these industries is driven largely by NASA procurement spending; these two industries accounted for approximately 64% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.

**Figure 55: Top Ten Most Impacted Industries by Employment, Louisiana (NASA).**

**The total income impact of NASA in Louisiana was \$141.5 million in Fiscal Year 2019.** Of this amount, more than \$29.6 million (21%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$73.4 million (52%). The remaining income (induced impact), estimated to be \$38.4 million (27%), resulted from expenditures by those earning income through the direct and indirect impacts.

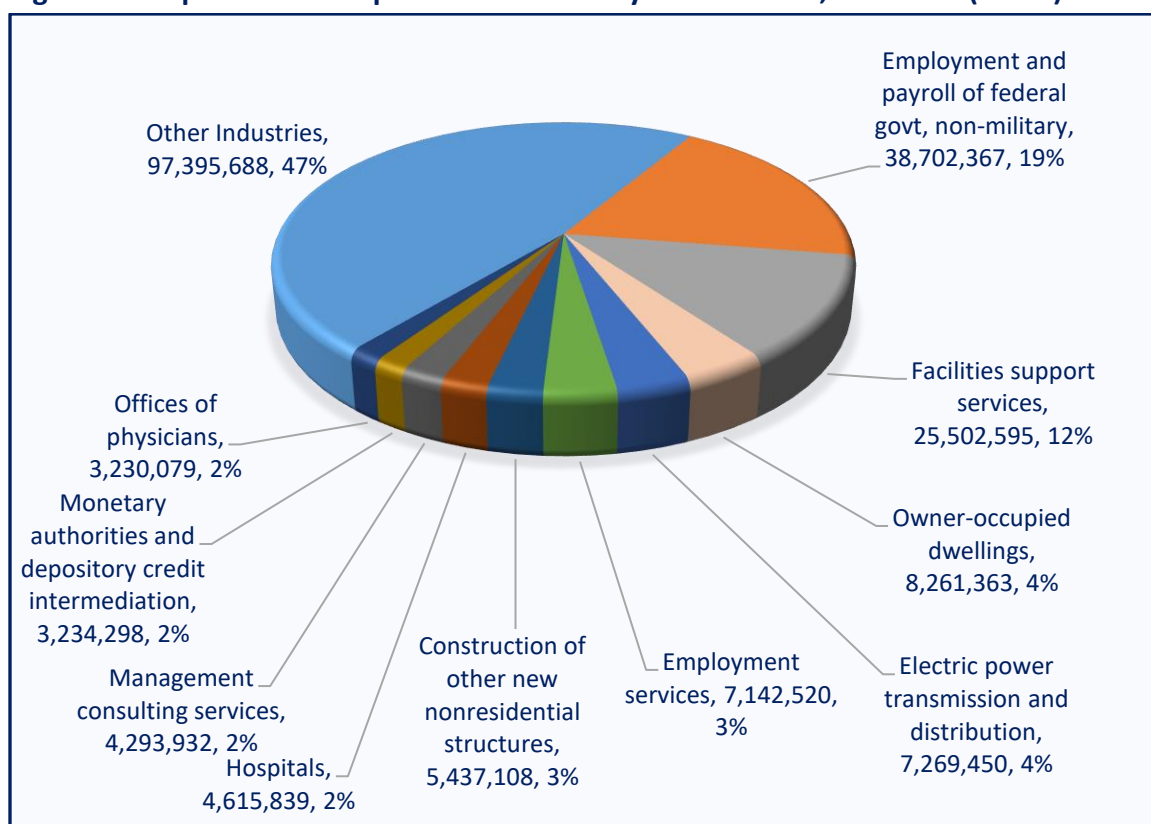
Figure 56 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, construction and facilities support services are the most impacted industries by income (along with the federal government sector). The three industries together account for 47% of the total labor income earned.

**Figure 56: Top Ten Most Impacted Industries by Labor Income, Louisiana (NASA).**

**The total value added impact of NASA in Louisiana was \$205 million in Fiscal Year 2019.**

Of this amount, more than \$37.6 million (18%) was created by civil service employees and \$95.6 million (47%) was created indirectly by the \$116.6 million in procurement spending across all industry sectors in Louisiana. \$71.8 million (35%) was generated by increased consumption spending supported by increased earnings.

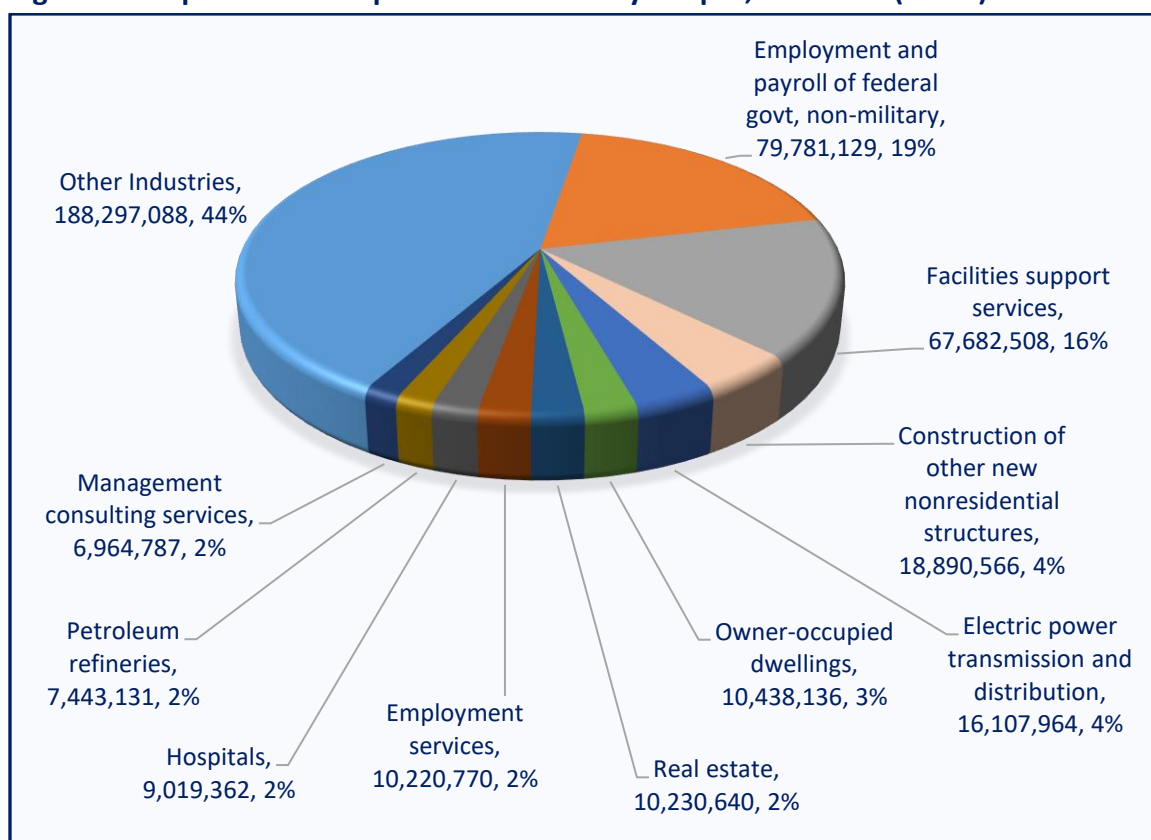
Figure 57 depicts the ten most heavily impacted industries in terms of value added. Facilities support services and the federal government sector are the most impacted industries. The two industries together account for 31% of the total value added created. NASA activities accounted for an increase of \$25.5 million in value added in facilities support services. Thirty eight (38) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 57: Top Ten Most Impacted Industries by Value Added, Louisiana (NASA).**

**The total output impact of NASA in Louisiana was \$425 million in Fiscal Year 2019.** The direct impact of \$78.7 million constitutes the value of production by NASA employees, accounting for around 19% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$116.6 million resulted in an additional increase in output (gross sales) of \$97.7 million across all industry sectors (adding up to the indirect total of \$214.3 million in Table 128). Around \$132 million (31%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of more than \$67.6 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in facilities support services, and an \$18.8 million increase in construction (Figure 58). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 64% of NASA procurement spending in the state in Fiscal Year 2019.



**Figure 58: Top Ten Most Impacted Industries by Output, Louisiana (NASA).**

### 6.20.2. M2M Program Impacts

In 2019, Louisiana had 79 M2M-related civil service employees (44 FTEs) with a corresponding labor income of nearly \$7 million. M2M program contracts sourced in the state in the same year totaled more than \$71.8 million. The total Louisiana employment impact is 1,220 jobs. The labor income and economic output associated with this employment are \$68.5 million and \$209.5 million, respectively. The M2M program generates approximately \$7.2 million in tax revenues for the state and local governments in Louisiana (Table 131).

**Table 131: Summary of M2M Program Impacts by Types of Impact, Louisiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	44	6,991	9,083	18,993	142
Indirect	788	43,193	61,099	129,682	3,434
Induced	388	18,349	34,093	60,868	3,589
<b>Total</b>	<b>1,220</b>	<b>68,533</b>	<b>104,275</b>	<b>209,543</b>	<b>7,164</b>
<i>Multiplier</i>	<i>27.8</i>	<i>9.8</i>	<i>11.5</i>	<i>11.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Louisiana economy. Ninety-one (91) percent of the employment impacts and eighty-six (86) percent of the output impacts are due to NASA procurement sourced within the state.

**Table 132: M2M Program Employment Impacts by Sources of Impact, Louisiana.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	44	40.8	0	0.0	44	3.6	100.0	0.0
Indirect*	0	0.0	788	70.8	788	64.6	0.0	100.0
Induced	64	59.2	325	29.2	388	31.8	16.4	83.6
<b>Total</b>	<b>108</b>	<b>100</b>	<b>1,113</b>	<b>100</b>	<b>1,220</b>	<b>100</b>	<b>8.8</b>	<b>91.2</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 133: M2M Program Output Impacts by Sources of Impact, Louisiana.**

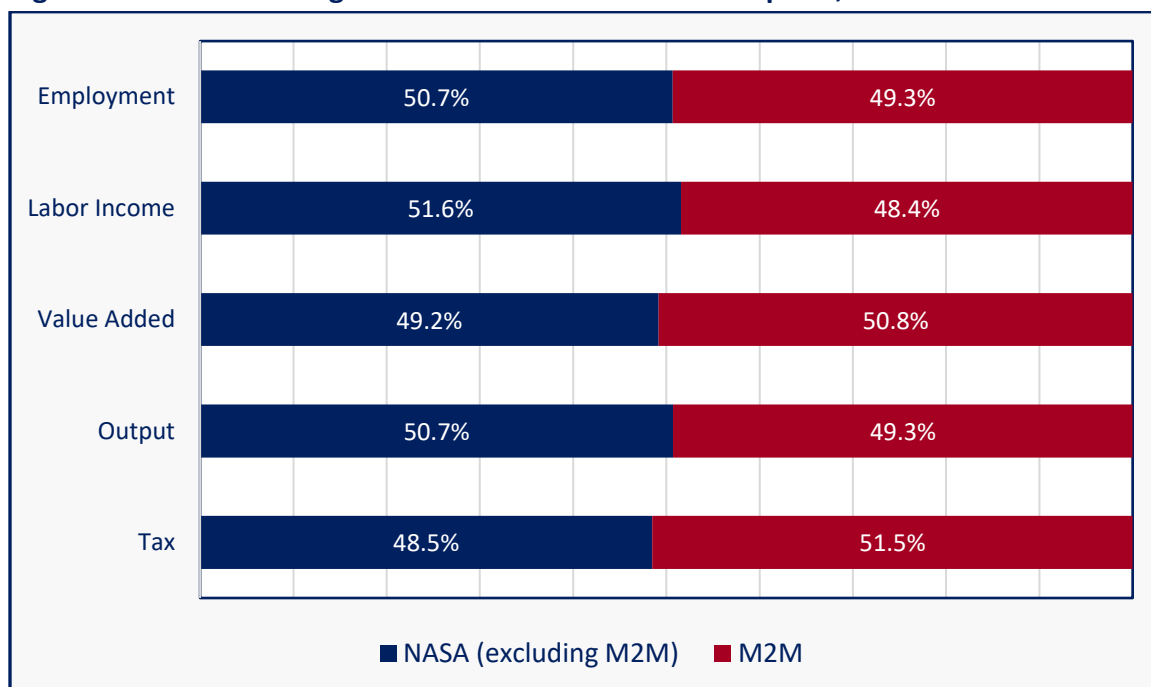
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	18,993	65.5	0	0.0	18,993	9.1	100.0	0.0
Indirect*	0	0.0	129,682	71.8	129,682	61.9	0.0	100.0
Induced	9,998	34.5	50,870	28.2	60,868	29.0	16.4	83.6
<b>Total</b>	<b>28,991</b>	<b>100</b>	<b>180,552</b>	<b>100</b>	<b>209,543</b>	<b>100</b>	<b>13.8</b>	<b>86.2</b>

### 6.20.3. The M2M Program's Share of NASA Impacts

Nearly half of overall NASA agency impacts in the state are attributable to the M2M program (Table 134 and Figure 59). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 134: The M2M Program Portion of Overall NASA Impacts, Louisiana.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	2,474	141,467	205,085	425,076	13,904
M2M Portion	1,220	68,533	104,275	209,543	7,164
M2M Share (%)	49.3%	48.4%	50.8%	49.3%	51.5%

**Figure 59: The M2M Program Portion of Overall NASA Impacts, Louisiana.**

## 6.21. Economic Impacts on the State of Maine

### 6.21.1. NASA Impacts

In 2019, 19 NASA civil service employees (2 FTEs) residing in Maine earned \$368,000 in labor income. NASA contracts sourced in Maine in the same year totaled \$3.2 million. The total economic impact resulting from these activities is 55 jobs, \$3.4 million in labor income, and \$9.8 million in economic output. These economic activities generate \$379,000 in tax revenues for the state and local governments in Maine (Table 135).

**Table 135: Summary of NASA Impacts by Types of Impact, Maine.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	368	493	1,030	9
Indirect	29	1,953	2,672	5,241	143
Induced	24	1,115	1,908	3,523	227
<b>Total</b>	<b>55</b>	<b>3,436</b>	<b>5,072</b>	<b>9,793</b>	<b>379</b>
<i>Multiplier</i>	<i>23.2</i>	<i>9.3</i>	<i>10.3</i>	<i>9.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Maine economy. Table 136 examines the sources of the employment figures in the second column of Table 135. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 88% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 12%.

**Table 136: NASA Employment Impacts by Sources of Impact, Maine.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	37.0	0	0.0	2	4.3	100.0	0.0
Indirect*	0	0.0	29	58.5	29	51.7	0.0	100.0
Induced	4	63.0	20	41.5	24	44.0	16.6	83.4
<b>Total</b>	<b>6</b>	<b>100</b>	<b>49</b>	<b>100</b>	<b>55</b>	<b>100</b>	<b>11.6</b>	<b>88.4</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 137 examines the sources of the output figures in the fifth column of Table 135. Procurement spending is responsible for more than 83% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 17%.

**Table 137: NASA Output Impacts by Sources of Impact, Maine.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,030	63.7	0	0.0	1,030	10.5	100.0	0.0
Indirect*	0	0.0	5,241	64.1	5,241	53.5	0.0	100.0
Induced	586	36.3	2,936	35.9	3,523	36.0	16.6	83.4
<b>Total</b>	<b>1,616</b>	<b>100</b>	<b>8,177</b>	<b>100</b>	<b>9,793</b>	<b>100</b>	<b>16.5</b>	<b>83.5</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.21.2. M2M Program Impacts

There were no M2M-specific NASA employees in Maine in FY 2019, but \$22,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is less than one job, \$19,000 in labor income, and \$57,000 worth of output (Table 138).

**Table 138: Summary of M2M Program Impacts by Types of Impact, Maine.**

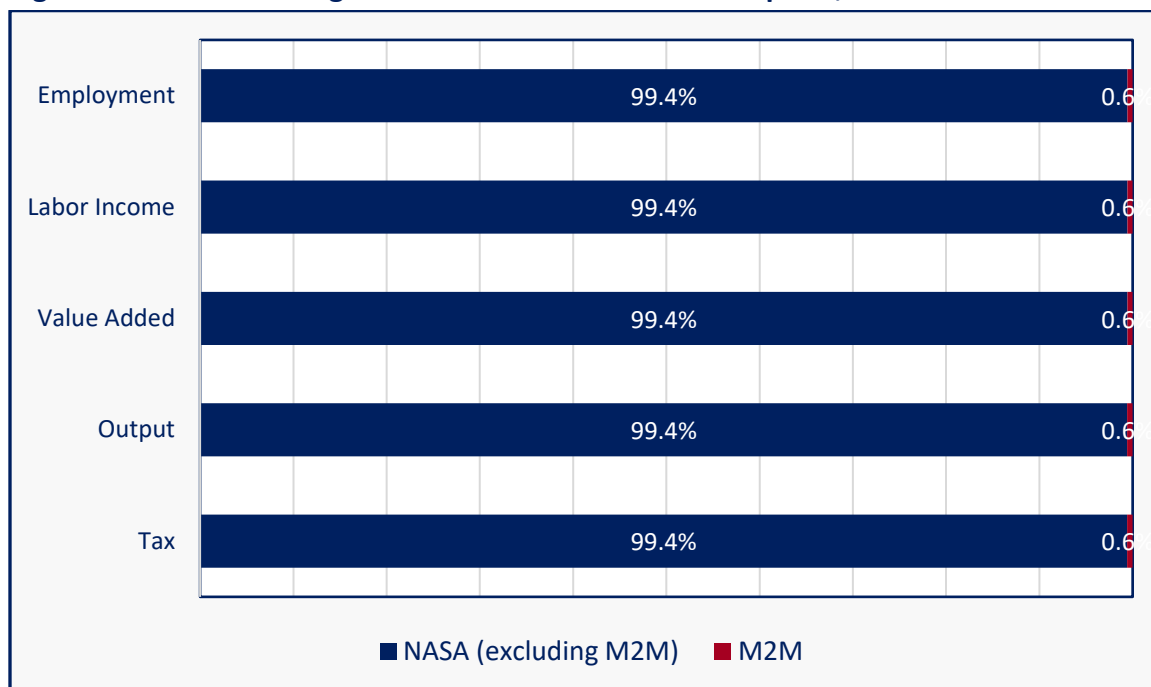
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	<1	13	19	38	1
Induced	<1	6	10	19	1
<b>Total</b>	<b>&lt;1</b>	<b>19</b>	<b>29</b>	<b>57</b>	<b>2</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.21.3. The M2M Program's Share of NASA Impacts

Less than 1% of overall NASA agency impacts in the state are attributable to the M2M program (Table 139 and Figure 60).

**Table 139: The M2M Program Portion of Overall NASA Impacts, Maine.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	55	3,436	5,072	9,793	379
M2M Portion	<1	19	29	57	2
M2M Share (%)	0.6%	0.6%	0.6%	0.6%	0.6%

**Figure 60: The M2M Program Portion of Overall NASA Impacts, Maine.**

## 6.22. Economic Impacts on the State of Maryland

### 6.22.1. NASA Impacts

In 2019, 3,305 NASA civil service employees (3,117 FTEs) residing in Maryland earned more than \$560 million in labor income. NASA contracts sourced in Maryland in the same year totaled more than \$2.1 billion. The total economic impact resulting from these activities is 35,563 jobs, \$3 billion in labor income, and \$7.5 billion in economic output. These economic activities generate \$321.8 million in tax revenues for the state and local governments in Maryland (Table 140).

The employment multiplier is 11.4, meaning that for every NASA job located in Maryland, an additional 10.4 jobs are supported in the state economy. The output multiplier of 5.5 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$4.5 million worth of output is sustained throughout the state economy.

**Table 140: Summary of NASA Impacts by Types of Impact, Maryland.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3,117	560,544	644,057	1,346,702	22,094
Indirect	16,462	1,530,938	2,006,195	3,442,197	118,462
Induced	15,984	924,595	1,619,082	2,670,799	181,288
<b>Total</b>	<b>35,563</b>	<b>3,016,078</b>	<b>4,269,335</b>	<b>7,459,698</b>	<b>321,844</b>
<i>Multiplier</i>	<i>11.4</i>	<i>5.4</i>	<i>6.6</i>	<i>5.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Maryland economy. Table 141 examines the sources of the employment figures in the second column of Table 140. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 78% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 22%.

**Table 141: NASA Employment Impacts by Sources of Impact, Maryland.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3,117	40.4	0	0.0	3,117	8.8	100.0	0.0
Indirect*	0	0.0	16,462	59.1	16,462	46.3	0.0	100.0
Induced	4,606	59.6	11,379	40.9	15,984	44.9	28.8	71.2
<b>Total</b>	<b>7,723</b>	<b>100</b>	<b>27,841</b>	<b>100</b>	<b>35,563</b>	<b>100</b>	<b>21.7</b>	<b>78.3</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 142 examines the sources of the output figures in the fifth column of Table 140. Procurement spending is responsible for nearly 72% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 28%.

**Table 142: NASA Output Impacts by Sources of Impact, Maryland.**

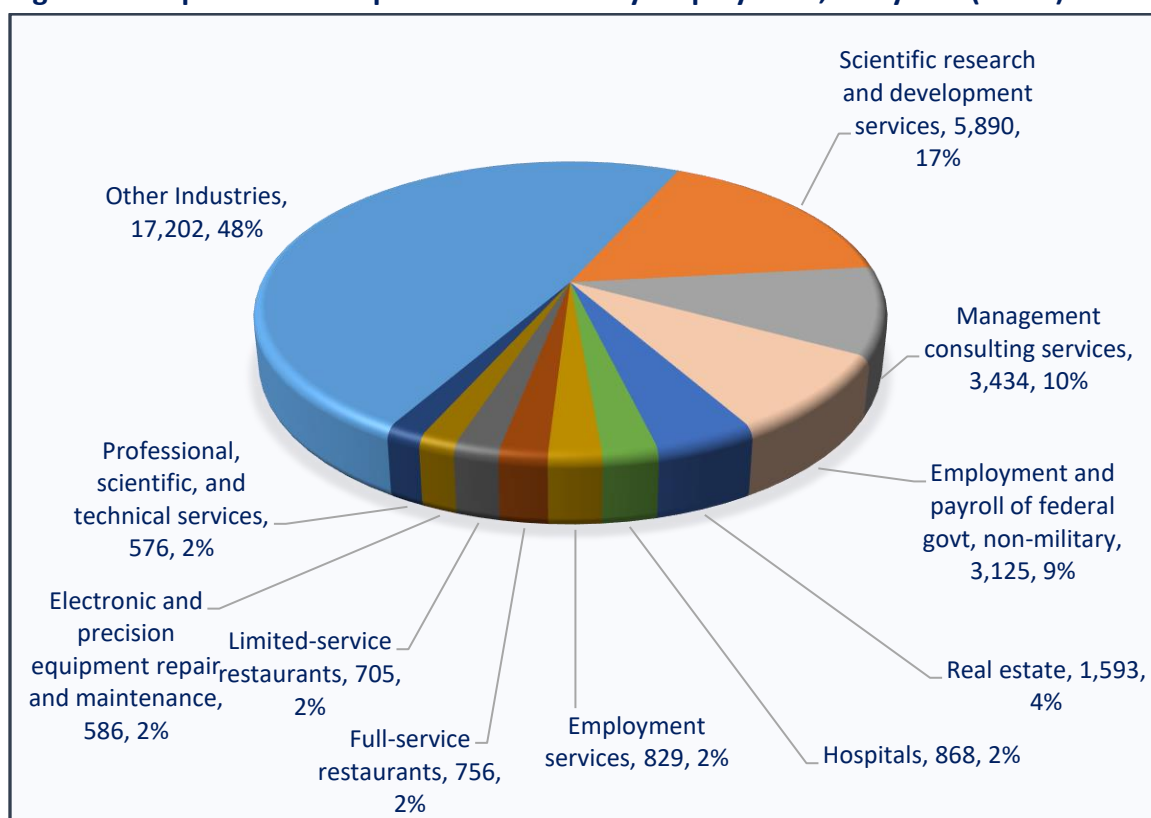
Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,346,702	63.6	0	0.0	1,346,702	18.1	100.0	0.0
Indirect*	0	0.0	3,442,197	64.4	3,442,197	46.1	0.0	100.0
Induced	770,006	36.4	1,900,793	35.6	2,670,799	35.8	28.8	71.2
<b>Total</b>	<b>2,116,709</b>	<b>100</b>	<b>5,342,989</b>	<b>100</b>	<b>7,459,698</b>	<b>100</b>	<b>28.4</b>	<b>71.6</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**35,563 jobs in the Maryland economy were supported by NASA activities in Fiscal Year 2019.** Of these, 3,117 (9%) were directly located at NASA centers. As a result of the procurement of goods and services in the Maryland economy, 16,462 additional jobs (46%) were created. The remaining employment—15,984 jobs (45%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

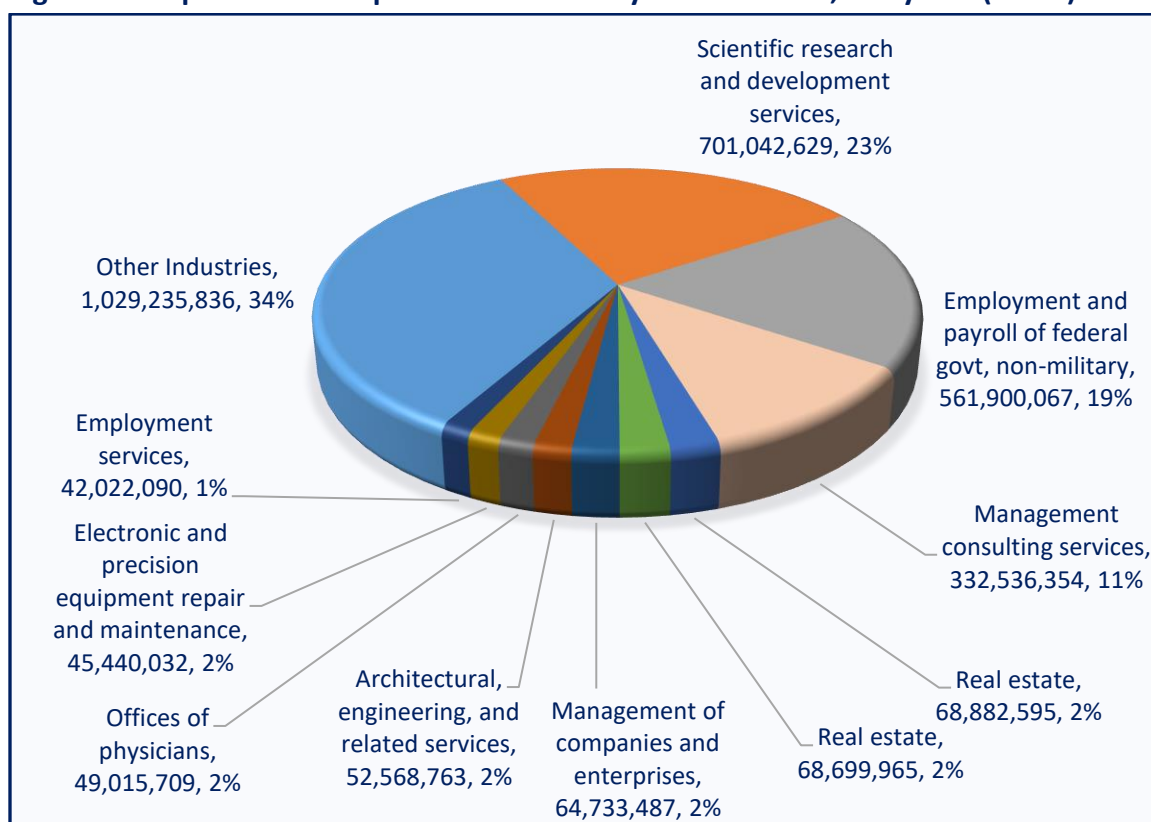
Figure 61 depicts the ten most impacted industries by employment. Management consulting services as well as scientific research and development services are the most impacted industries, respectively. These two industries together account for more than a quarter of the jobs created. The employment in these industries is driven largely by NASA procurement spending; these two industries accounted for approximately 89% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.



**Figure 61: Top Ten Most Impacted Industries by Employment, Maryland (NASA).**

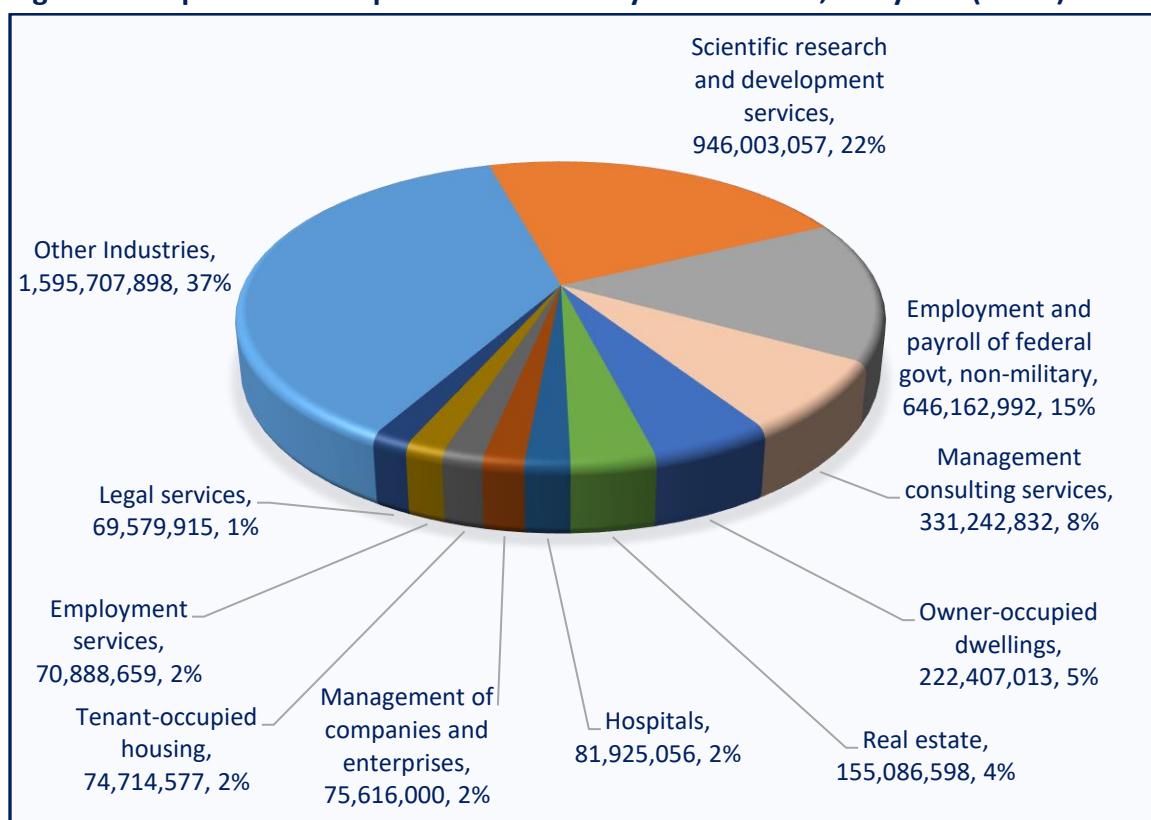
**The total income impact of NASA in Maryland was \$3 billion in Fiscal Year 2019.** Of this amount, more than \$560.5 million (18%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$1.5 billion (51%). The remaining income (induced impact), estimated to be \$924.6 million (31%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 62 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development and management consulting services are the most impacted industries by income (along with the federal government sector). The three industries together account for 53% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$121,891 (including benefits), compared to an average of \$69,673 across Maryland.

**Figure 62: Top Ten Most Impacted Industries by Labor Income, Maryland (NASA).****The total value added impact of NASA in Maryland was \$4.2 billion in Fiscal Year 2019.**

Of this amount, \$644 million (15%) was created by civil service employees and \$2 billion (47%) was created indirectly by the \$2.1 billion in procurement spending across all industry sectors in Maryland. \$1.6 billion (38%) was generated by increased consumption spending supported by increased earnings.

Figure 63 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services and management consulting services are the most impacted industries (along with the federal government sector). The three industries together account for 45% of the total value added created. NASA activities accounted for an increase of more than \$946 million in value added in scientific research and development services, and a \$331.2 million increase in value added in management consulting services. Six hundred forty six (646) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

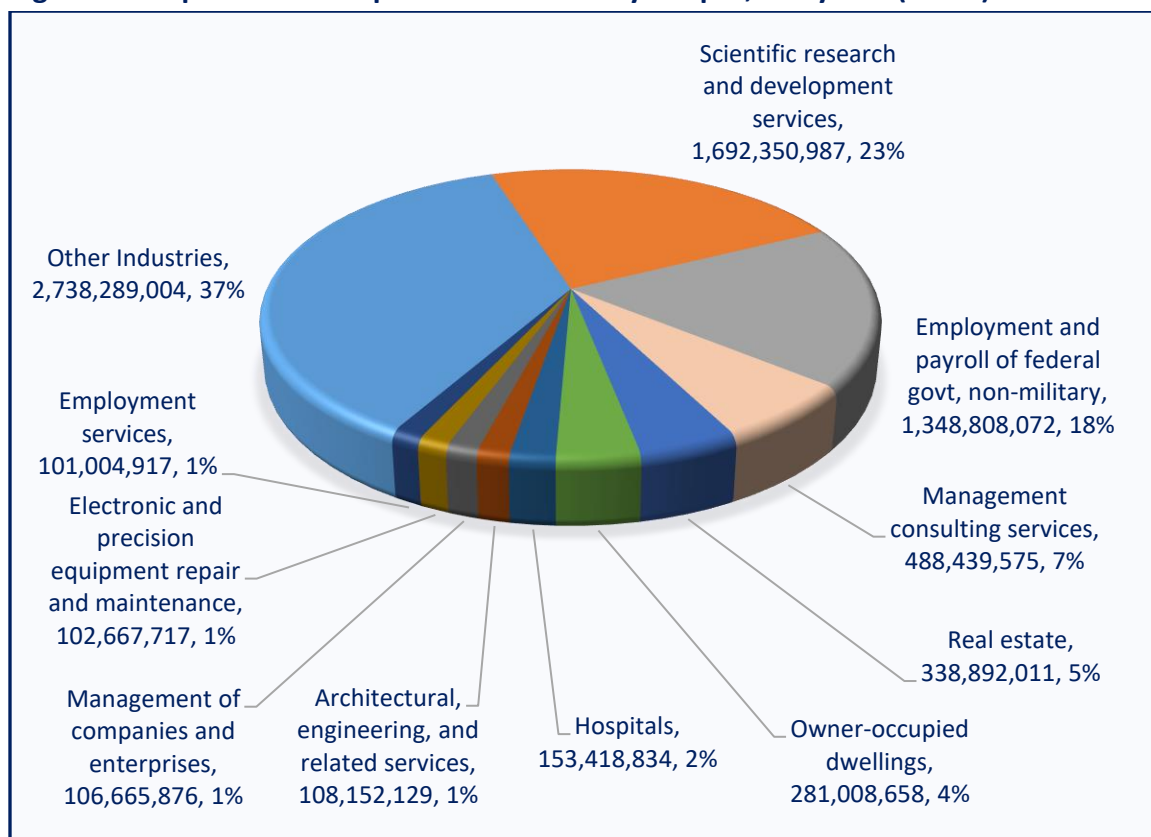
**Figure 63: Top Ten Most Impacted Industries by Value Added, Maryland (NASA).**

**The total output impact of NASA in Maryland was \$7.5 billion in Fiscal Year 2019.** The direct impact of \$1.3 billion constitutes the value of production by NASA employees, accounting for around 18% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$2.2 billion resulted in an additional increase in output (gross sales) of \$1.3 billion across all industry sectors (adding up to the indirect total of \$3.5 billion in Table 140). Approximately \$2.7 billion (36%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$1.7 billion in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services, and a \$488.4 million increase in management consulting services (Figure 64). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 89% of NASA procurement spending in the state in Fiscal Year 2019. Aside from equipment repair and maintenance and architectural, engineering, and related services, the output impacts reported in other industries mainly result from increases in consumption spending (induced impacts). The sizable impacts in the real estate industry

are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 64: Top Ten Most Impacted Industries by Output, Maryland (NASA).**



### 6.22.2. M2M Program Impacts

In 2019, Maryland had 284 M2M-related civil service employees (55 FTEs) with a corresponding labor income of \$9.7 million. M2M program contracts sourced in the state in the same year totaled more than \$18.6 million. The total Maryland employment impact is 361 jobs. The labor income and economic output associated with this employment are \$34 million and \$82.6 million, respectively. The M2M program generates \$3.4 million in tax revenues for the state and local governments in Maryland (Table 143).

**Table 143: Summary of M2M Program Impacts by Types of Impact, Maryland.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	55	9,725	11,366	23,766	383
Indirect	132	13,236	17,623	28,784	1,018
Induced	174	11,079	18,781	30,088	2,042
<b>Total</b>	<b>361</b>	<b>34,039</b>	<b>47,770</b>	<b>82,638</b>	<b>3,444</b>
<i>Multiplier</i>	<i>6.6</i>	<i>3.5</i>	<i>4.2</i>	<i>3.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Maryland economy. Nearly 63 percent of the employment impacts and 55 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 144: M2M Program Employment Impacts by Sources of Impact, Maryland.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	55	40.8	0	0.0	55	15.3	100.0	0.0
Indirect*	0	0.0	132	58.5	132	36.6	0.0	100.0
Induced	80	59.2	94	41.5	174	48.1	46.0	54.0
<b>Total</b>	<b>135</b>	<b>100</b>	<b>226</b>	<b>100</b>	<b>361</b>	<b>100</b>	<b>37.4</b>	<b>62.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 145: M2M Program Output Impacts by Sources of Impact, Maryland.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	23,766	63.2	0	0.0	23,766	28.8	100.0	0.0
Indirect*	0	0.0	28,784	63.9	28,784	34.8	0.0	100.0
Induced	13,852	36.8	16,237	36.1	30,088	36.4	46.0	54.0
<b>Total</b>	<b>37,618</b>	<b>100</b>	<b>45,020</b>	<b>100</b>	<b>82,638</b>	<b>100</b>	<b>45.5</b>	<b>54.5</b>

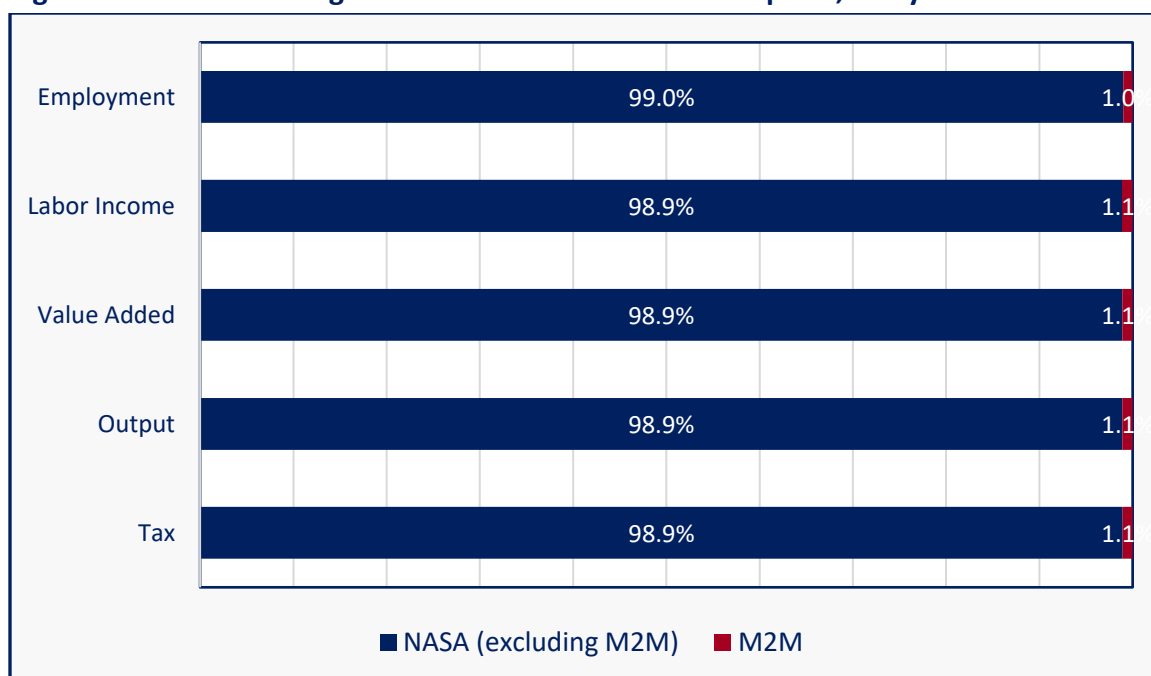
### 6.22.3. The M2M Program's Share of NASA Impacts

Around 1% of overall NASA agency impacts in the state are attributable to the M2M program (Table 146 and Figure 65).

**Table 146: The M2M Program Portion of Overall NASA Impacts, Maryland.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	35,563	3,016,078	4,269,335	7,459,698	321,844
M2M Portion	361	34,039	47,770	82,638	3,444
M2M Share (%)	1.0%	1.1%	1.1%	1.1%	1.1%

**Figure 65: The M2M Program Portion of Overall NASA Impacts, Maryland.**



## 6.23. Economic Impacts on the State of Massachusetts

### 6.23.1. NASA Impacts

In 2019, 19 NASA civil service employees (11 FTEs) residing in Massachusetts earned \$1.7 million in labor income. NASA contracts sourced in Massachusetts in the same year totaled approximately \$213.7 million. The total economic impact resulting from these activities is 2,600 jobs, \$241.3 million in labor income, and \$582.1 million in economic output. These economic activities generate nearly \$20.9 million in tax revenues for the state and local governments in Massachusetts (Table 147).

**Table 147: Summary of NASA Impacts by Types of Impact, Massachusetts.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	11	1,695	2,288	4,783	50
Indirect	1,332	154,397	206,250	354,060	9,301
Induced	1,257	85,217	136,750	223,271	11,541
<b>Total</b>	<b>2,600</b>	<b>241,310</b>	<b>345,288</b>	<b>582,114</b>	<b>20,893</b>
<i>Multiplier</i>	<i>234.9</i>	<i>142.3</i>	<i>150.9</i>	<i>121.7</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Massachusetts economy. Table 148 examines the sources of the employment figures in the second column of Table 147. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-nine (99) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 1%.

**Table 148: NASA Employment Impacts by Sources of Impact, Massachusetts.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	11	42.3	0	0.0	11	0.4	100.0	0.0
Indirect*	0	0.0	1,332	51.8	1,332	51.2	0.0	100.0
Induced	15	57.7	1,242	48.2	1,257	48.3	1.2	98.8
<b>Total</b>	<b>26</b>	<b>100</b>	<b>2,574</b>	<b>100</b>	<b>2,600</b>	<b>100</b>	<b>1.0</b>	<b>99.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 149 examines the sources of the output figures in the fifth column of Table 147. Procurement spending is responsible for nearly 99% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 1%.

**Table 149: NASA Output Impacts by Sources of Impact, Massachusetts.**

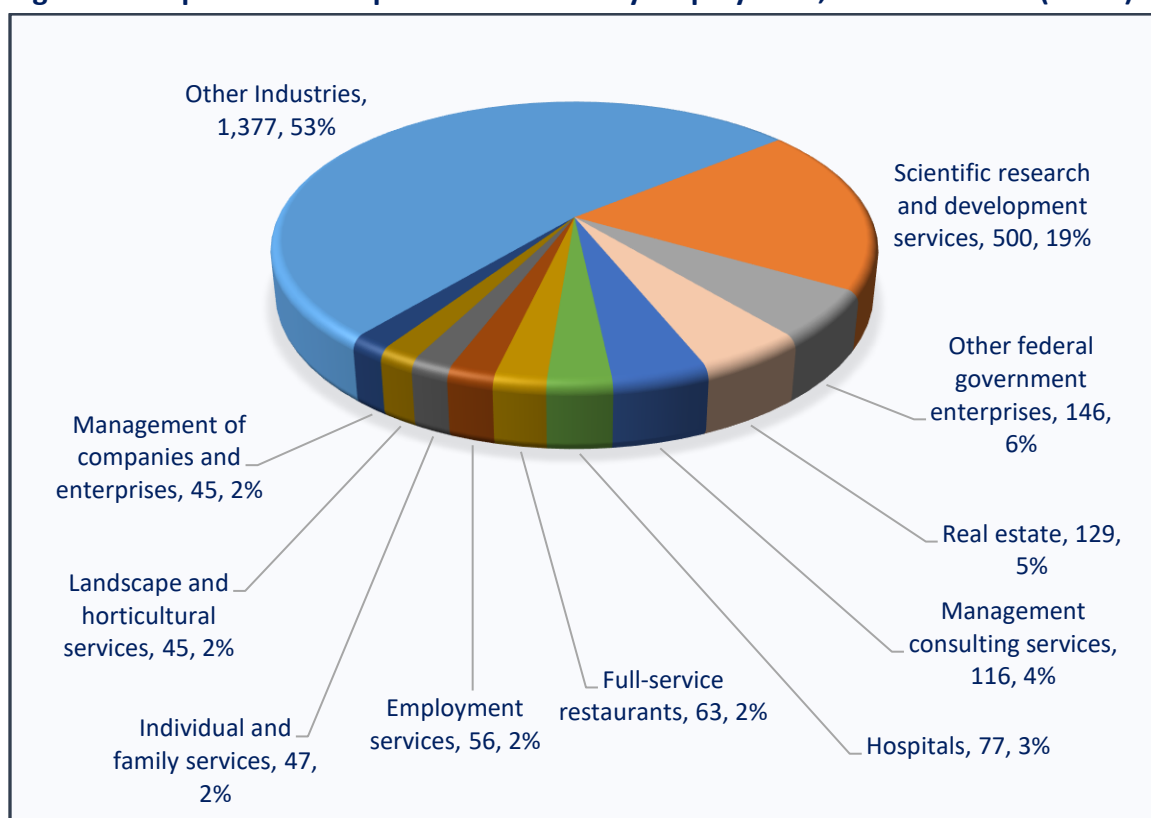
Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	4,783	64.1	0	0.0	4,783	0.8	100.0	0.0
Indirect*	0	0.0	354,060	61.6	354,060	60.8	0.0	100.0
Induced	2,685	35.9	220,587	38.4	223,271	38.4	1.2	98.8
<b>Total</b>	<b>7,468</b>	<b>100</b>	<b>574,646</b>	<b>100</b>	<b>582,114</b>	<b>100</b>	<b>1.3</b>	<b>98.7</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**2,600 jobs in the Massachusetts economy were supported by NASA activities in Fiscal Year 2019.** Of these, 11 (<1%) were directly located at NASA centers. As a result of the procurement of goods and services in the Massachusetts economy, 1,332 additional jobs (51%) were created. The remaining employment—1,257 jobs (48%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

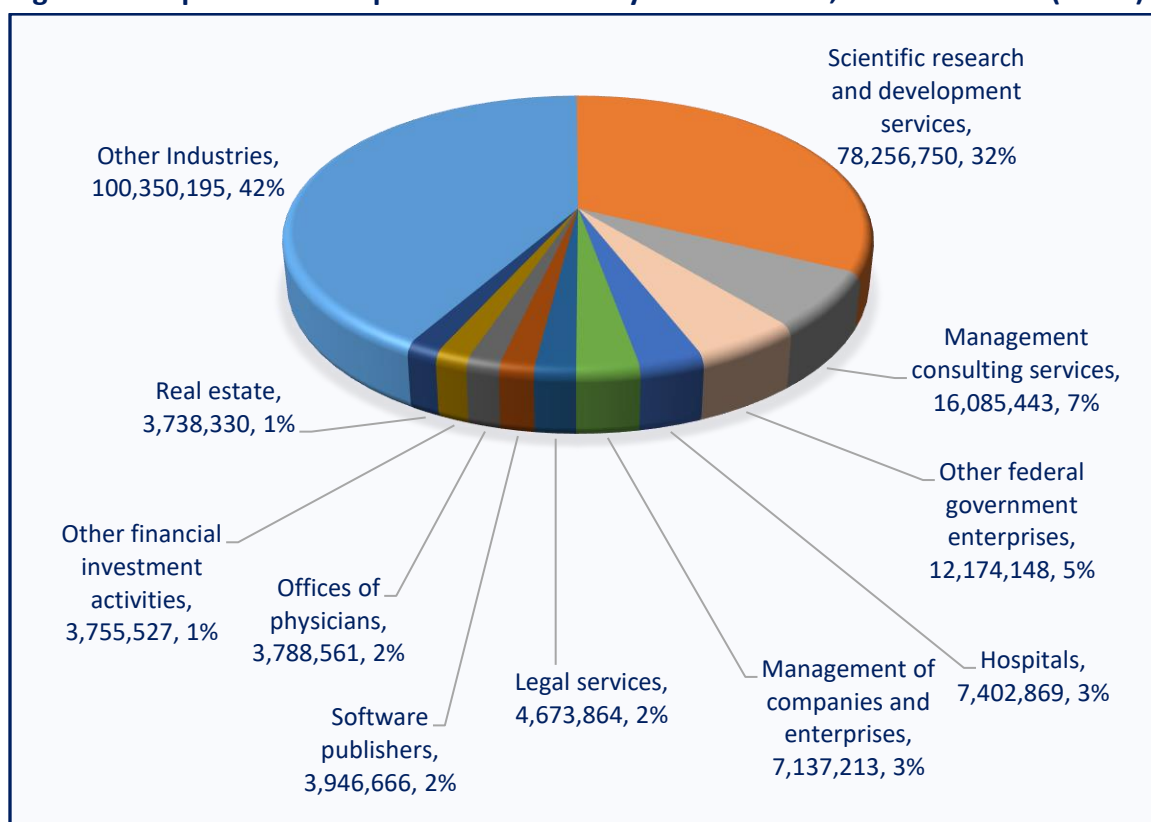
Figure 66 depicts the ten most impacted industries by employment. Scientific research and development services is the most impacted industry, accounting for 19% of the jobs created. The employment in this industry is driven largely by NASA procurement spending; scientific research and development services accounted for approximately 70% of NASA procurement spending in the state in Fiscal Year 2019.



**Figure 66: Top Ten Most Impacted Industries by Employment, Massachusetts (NASA).**

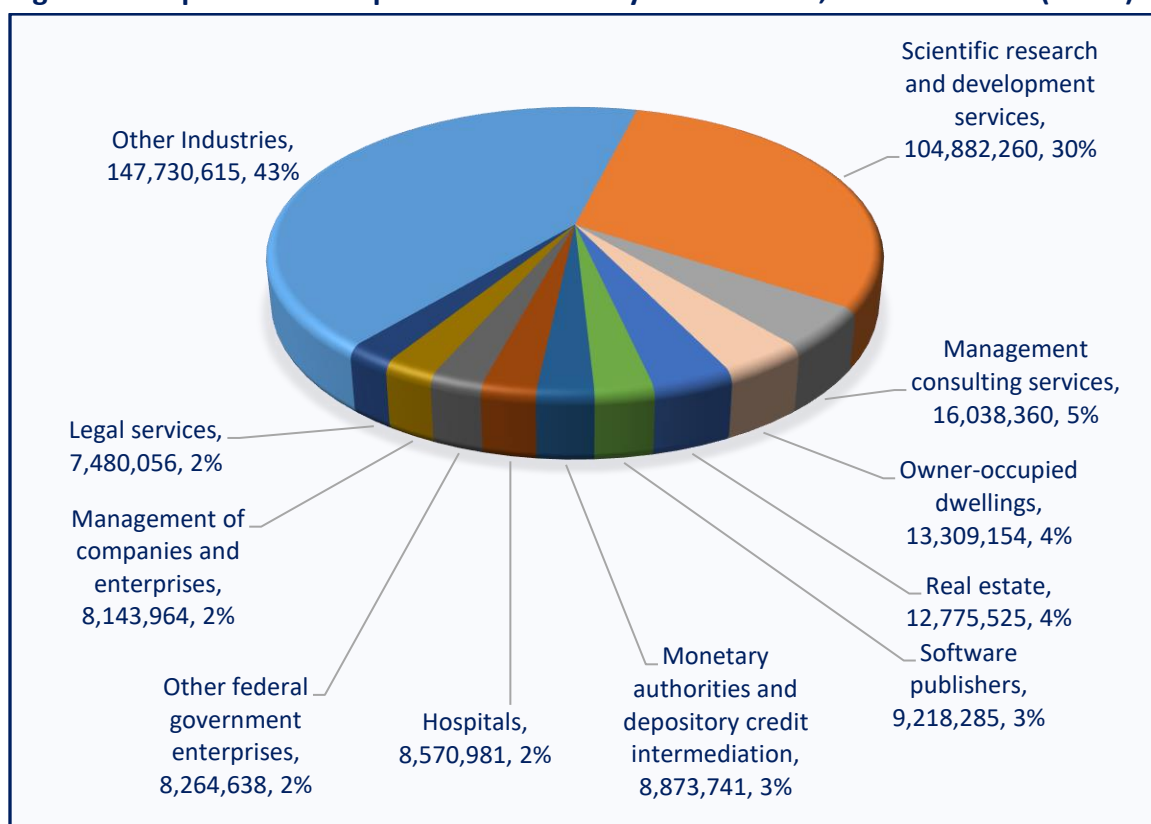
**The total income impact of NASA in Massachusetts was \$241.3 million in Fiscal Year 2019.** Of this amount, approximately \$1.7 million (1%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$154.4 million (64%). The remaining income (induced impact), estimated to be \$85.2 million (35%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 67 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development services is the most impacted industry by income (32%). The reason that this industry's share of labor income is larger than its share of employment is that employee compensation in this industry is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$160,380 (including benefits), compared to an average of \$77,247 across Massachusetts.

**Figure 67: Top Ten Most Impacted Industries by Labor Income, Massachusetts (NASA).**

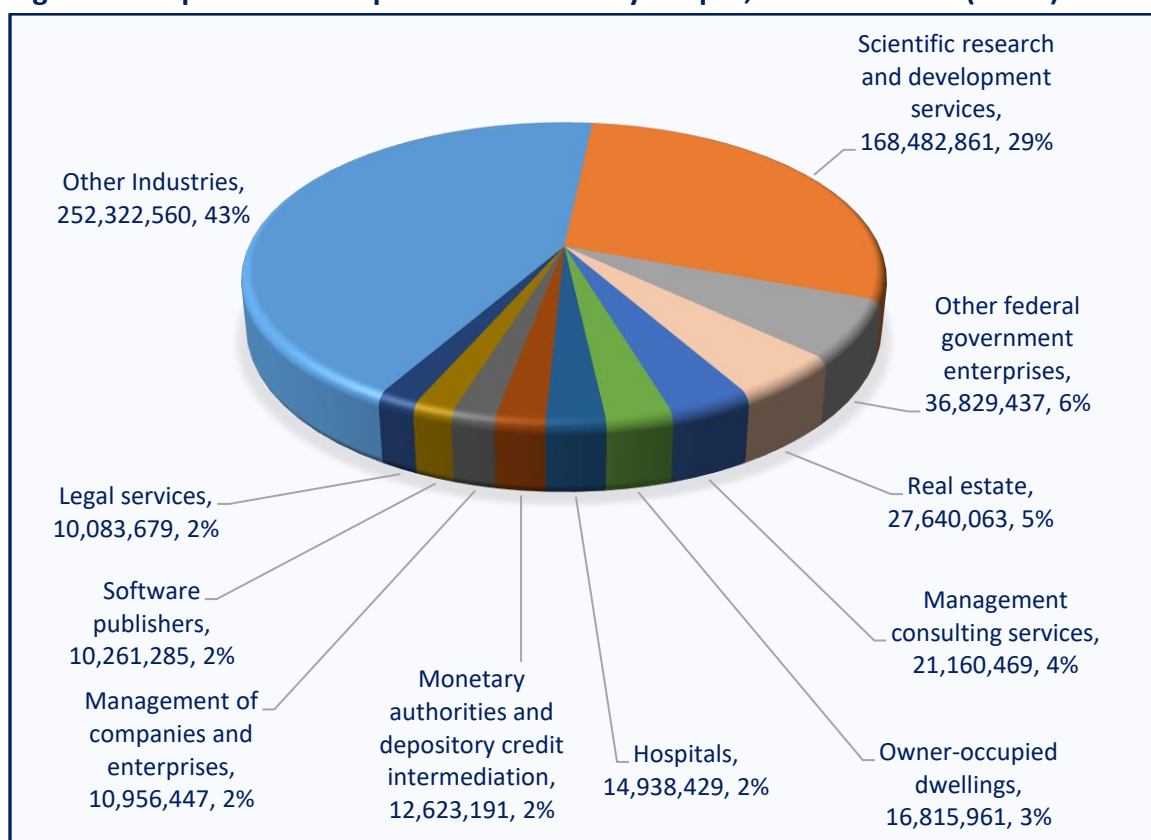
**The total value added impact of NASA in Massachusetts was \$345.2 million in Fiscal Year 2019.** Of this amount, more than \$2.2 million (<1%) was created by civil service employees and \$206.2 million (60%) was created indirectly by the \$213.7 million in procurement spending across all industry sectors in Massachusetts. \$136.7 million (40%) was generated by increased consumption spending supported by increased earnings.

Figure 68 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services is the most impacted industry, accounting for 30% of the total value added created. NASA activities accounted for an increase of \$104.9 million in value added in this industry.

**Figure 68: Top Ten Most Impacted Industries by Value Added, Massachusetts (NASA).**

**The total output impact of NASA in Massachusetts was \$582.1 million in Fiscal Year 2019.** The direct impact of \$4.7 million constitutes the value of production by NASA employees, accounting for around 1% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$213.7 million resulted in an additional increase in output (gross sales) of 140.3 million across all industry sectors (adding up to the indirect total of \$354 million in Table 147). More than \$223.2 million (38%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$168.4 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 69). Similar to employment, impacts in this industries are largely driven by NASA procurement spending; scientific research and development services accounted for approximately 70% of NASA procurement spending in the state in Fiscal Year 2019.

**Figure 69: Top Ten Most Impacted Industries by Output, Massachusetts (NASA).**

### 6.23.2. M2M Program Impacts

In 2019, Massachusetts had five M2M-related civil service employees (2 FTEs) with a corresponding labor income of 202,000. M2M program contracts sourced in the state in the same year totaled \$8 million. The total Massachusetts employment impact is 99 jobs. The labor income and economic output associated with this employment are \$10.6 million and \$22.8 million, respectively. The M2M program generates \$868,000 in tax revenues for the state and local governments in Massachusetts (Table 150).

**Table 150: Summary of M2M Program Impacts by Types of Impact, Massachusetts.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	202	430	900	6
Indirect	46	6,584	8,830	12,520	379
Induced	51	3,769	5,883	9,347	483
<b>Total</b>	<b>99</b>	<b>10,555</b>	<b>15,144</b>	<b>22,767</b>	<b>868</b>
<i>Multiplier</i>	47.5	52.2	35.2	25.3	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-

employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Massachusetts economy. More than 96 percent of the employment and nearly 95 percent output impacts are due to NASA procurement sourced within the state.

**Table 151: M2M Program Employment Impacts by Sources of Impact, Massachusetts.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	53.4	0	0.0	2	2.1	100.0	0.0
Indirect*	0	0.0	46	48.3	46	46.4	0.0	100.0
Induced	2	46.6	49	51.7	51	51.5	3.6	96.4
<b>Total</b>	<b>4</b>	<b>100</b>	<b>95</b>	<b>100</b>	<b>99</b>	<b>100</b>	<b>3.9</b>	<b>96.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 152: M2M Program Output Impacts by Sources of Impact, Massachusetts.**

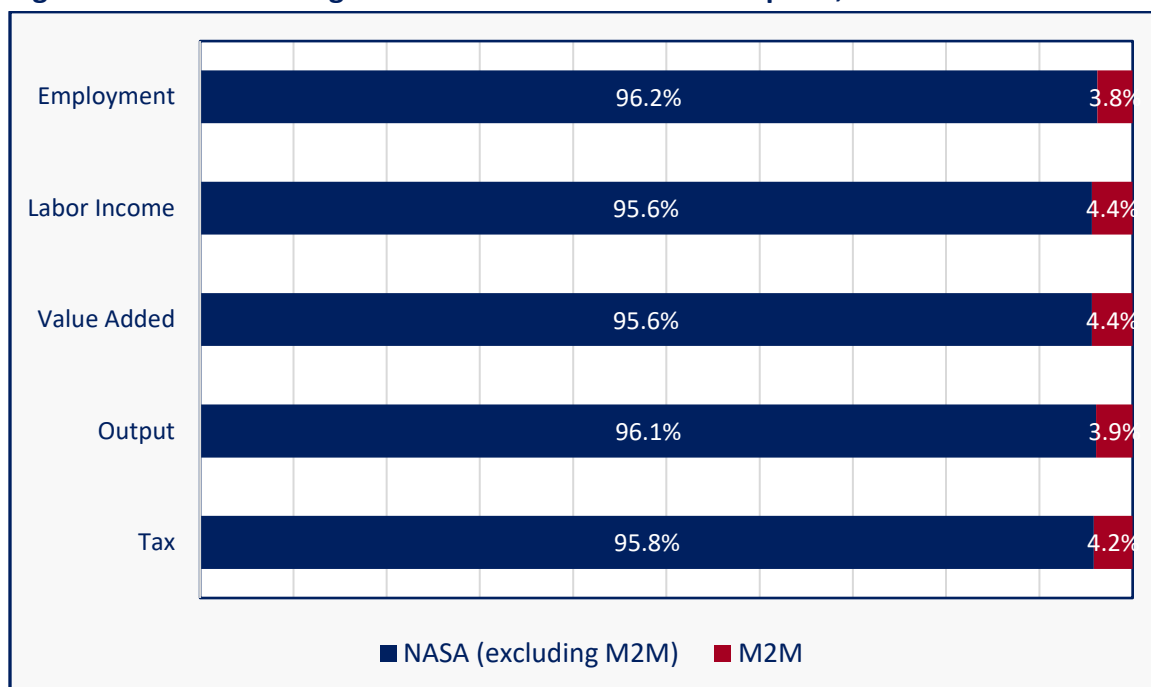
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	900	72.9	0	0.0	900	4.0	100.0	0.0
Indirect*	0	0.0	12,520	58.1	12,520	55.0	0.0	100.0
Induced	334	27.1	9,013	41.9	9,347	41.1	3.6	96.4
<b>Total</b>	<b>1,234</b>	<b>100</b>	<b>21,533</b>	<b>100</b>	<b>22,767</b>	<b>100</b>	<b>5.4</b>	<b>94.6</b>

### 6.23.3. The M2M Program's Share of NASA Impacts

Around 4% of overall NASA agency impacts in the state are attributable to the M2M program (Table 153 and Figure 70). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 153: The M2M Program Portion of Overall NASA Impacts, Massachusetts.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	2,600	241,310	345,288	582,114	20,893
M2M Portion	99	10,555	15,144	22,767	868
M2M Share (%)	3.8%	4.4%	4.4%	3.9%	4.2%

**Figure 70: The M2M Program Portion of Overall NASA Impacts, Massachusetts.**

## 6.24. Economic Impacts on the State of Michigan

### 6.24.1. NASA Impacts

In 2019, 18 NASA civil service employees (10 FTEs) residing in Michigan earned nearly \$1.3 million in labor income. NASA contracts sourced in Michigan in the same year totaled \$39 million. The total economic impact resulting from these activities is 610 jobs, \$42 million in labor income, and \$119.7 million in economic output. These economic activities generate \$4.2 million in tax revenues for the state and local governments in Michigan (Table 154).

**Table 154: Summary of NASA Impacts by Types of Impact, Michigan.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	10	1,297	2,072	4,332	33
Indirect	324	26,732	36,813	70,597	1,675
Induced	276	14,058	23,485	44,752	2,510
<b>Total</b>	<b>610</b>	<b>42,087</b>	<b>62,369</b>	<b>119,681</b>	<b>4,218</b>
<i>Multiplier</i>	<i>60.8</i>	<i>32.5</i>	<i>30.1</i>	<i>27.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Michigan economy. Table 155 examines the sources of the employment figures in the second column of Table 154. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-six (96) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 4%.

**Table 155: NASA Employment Impacts by Sources of Impact, Michigan.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	10	41.2	0	0.0	10	1.6	100.0	0.0
Indirect*	0	0.0	324	55.3	324	53.1	0.0	100.0
Induced	14	58.8	262	44.7	276	45.3	5.2	94.8
<b>Total</b>	<b>24</b>	<b>100</b>	<b>585</b>	<b>100</b>	<b>610</b>	<b>100</b>	<b>4.0</b>	<b>96.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 156 examines the sources of the output figures in the fifth column of Table 155. Procurement spending is responsible for more than 94% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 6%.

**Table 156: NASA Output Impacts by Sources of Impact, Michigan.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	4,332	65.1	0	0.0	4,332	3.6	100.0	0.0
Indirect*	0	0.0	70,597	62.5	70,597	59.0	0.0	100.0
Induced	2,318	34.9	42,434	37.5	44,752	37.4	5.2	94.8
<b>Total</b>	<b>6,650</b>	<b>100</b>	<b>113,031</b>	<b>100</b>	<b>119,681</b>	<b>100</b>	<b>5.6</b>	<b>94.4</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.24.2. M2M Program Impacts

In 2019, Michigan had three M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$212,000. M2M program contracts sourced in the state in the same year totaled \$1.8 million. The total Michigan employment impact is 29 jobs. The labor income and economic output associated with this employment are \$2.2 million and \$6.6 million, respectively. The M2M program generates \$209,000 in tax revenues for the state and local governments in Michigan (Table 157).

**Table 157: Summary of M2M Program Impacts by Types of Impact, Michigan.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	212	469	980	5
Indirect	13	1,275	1,811	3,391	80
Induced	13	719	1,193	2,203	124
<b>Total</b>	<b>29</b>	<b>2,206</b>	<b>3,472</b>	<b>6,575</b>	<b>209</b>
<i>Multiplier</i>	<i>12.6</i>	<i>10.4</i>	<i>7.4</i>	<i>6.7</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Michigan economy. Eighty-four (84) percent of the employment impacts and seventy-



nine (79) percent of the output impacts are due to NASA procurement sourced within the state.

**Table 158: M2M Program Employment Impacts by Sources of Impact, Michigan.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	49.7	0	0.0	2	8.0	100.0	0.0
Indirect*	0	0.0	13	54.9	13	46.1	0.0	100.0
Induced	2	50.3	11	45.1	13	46.0	17.5	82.5
<b>Total</b>	<b>5</b>	<b>100</b>	<b>24</b>	<b>100</b>	<b>29</b>	<b>100</b>	<b>16.0</b>	<b>84.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 159: M2M Program Output Impacts by Sources of Impact, Michigan.**

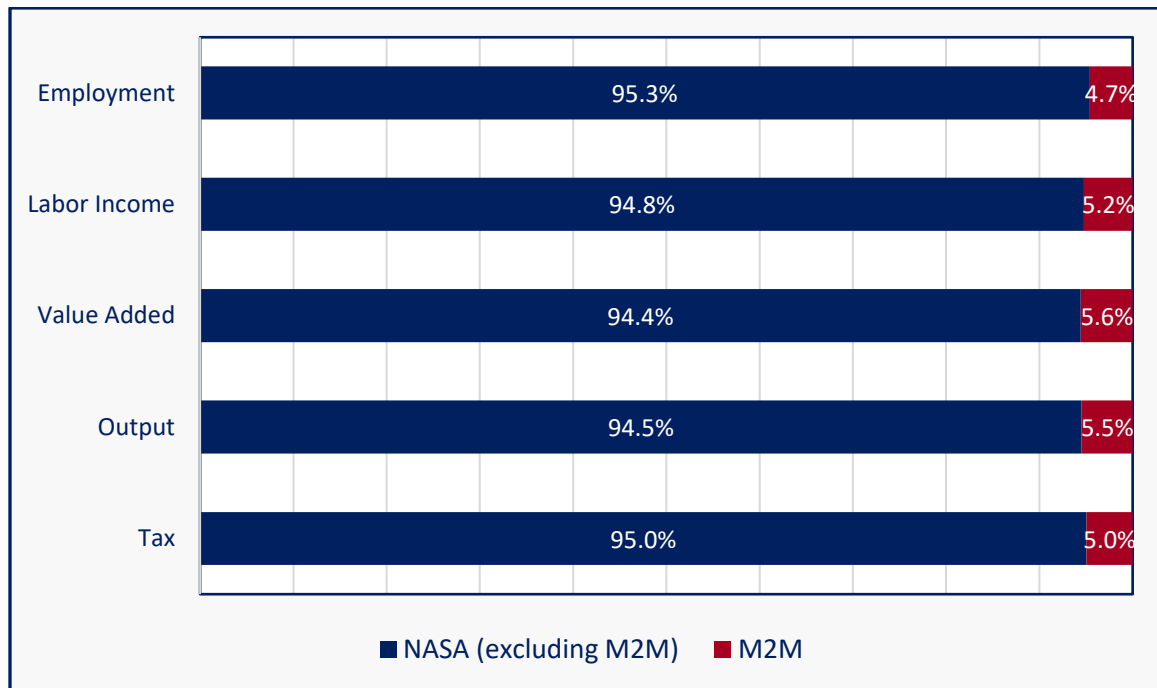
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	980	71.7	0	0.0	980	14.9	100.0	0.0
Indirect*	0	0.0	3,391	65.1	3,391	51.6	0.0	100.0
Induced	386	28.3	1,817	34.9	2,203	33.5	17.5	82.5
<b>Total</b>	<b>1,366</b>	<b>100</b>	<b>5,208</b>	<b>100</b>	<b>6,575</b>	<b>100</b>	<b>20.8</b>	<b>79.2</b>

### 6.24.3. The M2M Program's Share of NASA Impacts

Around 5% of overall NASA agency impacts in the state are attributable to the M2M program (Table 160 and Figure 71). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 160: The M2M Program Portion of Overall NASA Impacts, Michigan.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	610	42,087	62,369	119,681	4,218
M2M Portion	29	2,206	3,472	6,575	209
M2M Share (%)	4.7%	5.2%	5.6%	5.5%	5.0%

**Figure 71: The M2M Program Portion of Overall NASA Impacts, Michigan.**

## 6.25. Economic Impacts on the State of Minnesota

### 6.25.1. NASA Impacts

In 2019, 11 NASA civil service employees (5 FTEs) residing in Minnesota earned \$491,000 in labor income. NASA contracts sourced in Minnesota in the same year totaled \$14.1 million. The total economic impact resulting from these activities is 215 jobs, \$15.6 million in labor income, and \$45 million in economic output. These economic activities generate nearly \$1.8 million in tax revenues for the state and local governments in Minnesota (Table 161).

**Table 161: Summary of NASA Impacts by Types of Impact, Minnesota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	491	1,039	2,172	15
Indirect	113	9,593	13,864	25,837	750
Induced	98	5,537	9,108	16,967	1,029
<b>Total</b>	<b>215</b>	<b>15,620</b>	<b>24,011</b>	<b>44,976</b>	<b>1,794</b>
<i>Multiplier</i>	<i>42.8</i>	<i>31.8</i>	<i>23.1</i>	<i>20.7</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Minnesota economy. Table 162 examines the sources of the employment figures in the second column of Table 161. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 95% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 5%.

**Table 162: NASA Employment Impacts by Sources of Impact, Minnesota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	5	48.3	0	0.0	5	2.3	100.0	0.0
Indirect*	0	0.0	113	55.0	113	52.3	0.0	100.0
Induced	5	51.7	92	45.0	98	45.4	5.5	94.5
<b>Total</b>	<b>10</b>	<b>100</b>	<b>205</b>	<b>100</b>	<b>215</b>	<b>100</b>	<b>4.8</b>	<b>95.2</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 163 examines the sources of the output figures in the fifth column of Table 161. Procurement spending is responsible for more than 93% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 7%.

**Table 163: NASA Output Impacts by Sources of Impact, Minnesota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,172	69.8	0	0.0	2,172	4.8	100.0	0.0
Indirect*	0	0.0	25,837	61.7	25,837	57.4	0.0	100.0
Induced	938	30.2	16,029	38.3	16,967	37.7	5.5	94.5
<b>Total</b>	<b>3,110</b>	<b>100</b>	<b>41,866</b>	<b>100</b>	<b>44,976</b>	<b>100</b>	<b>6.9</b>	<b>93.1</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

### 6.25.2. M2M Program Impacts

In 2019, Minnesota had one M2M-related civil service employee (1 FTE) with a corresponding labor income of \$49,000. M2M program contracts sourced in the state in the same year totaled \$545,000. The total Minnesota employment impact is seven jobs. The labor income and economic output associated with this employment are \$677,000 and \$2.3 million, respectively. The M2M program generates approximately \$86,000 in tax revenues for the state and local governments in Minnesota (Table 164).

**Table 164: Summary of M2M Program Impacts by Types of Impact, Minnesota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	49	104	217	2
Indirect	3	439	736	1,534	50
Induced	3	189	307	558	34
<b>Total</b>	<b>7</b>	<b>677</b>	<b>1,147</b>	<b>2,309</b>	<b>86</b>
<i>Multiplier</i>	<i>13.8</i>	<i>13.7</i>	<i>11.1</i>	<i>10.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Minnesota economy. More than 85 percent of the employment impacts and more than 86 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 165: M2M Program Employment Impacts by Sources of Impact, Minnesota.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	48.4	0	0.0	1	7.2	100.0	0.0
Indirect*	0	0.0	3	56.4	3	48.0	0.0	100.0
Induced	<1	51.6	3	43.6	3	44.8	17.2	82.8
<b>Total</b>	<b>1</b>	<b>100</b>	<b>6</b>	<b>100</b>	<b>7</b>	<b>100</b>	<b>14.9</b>	<b>85.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 166: M2M Program Output Impacts by Sources of Impact, Minnesota.**

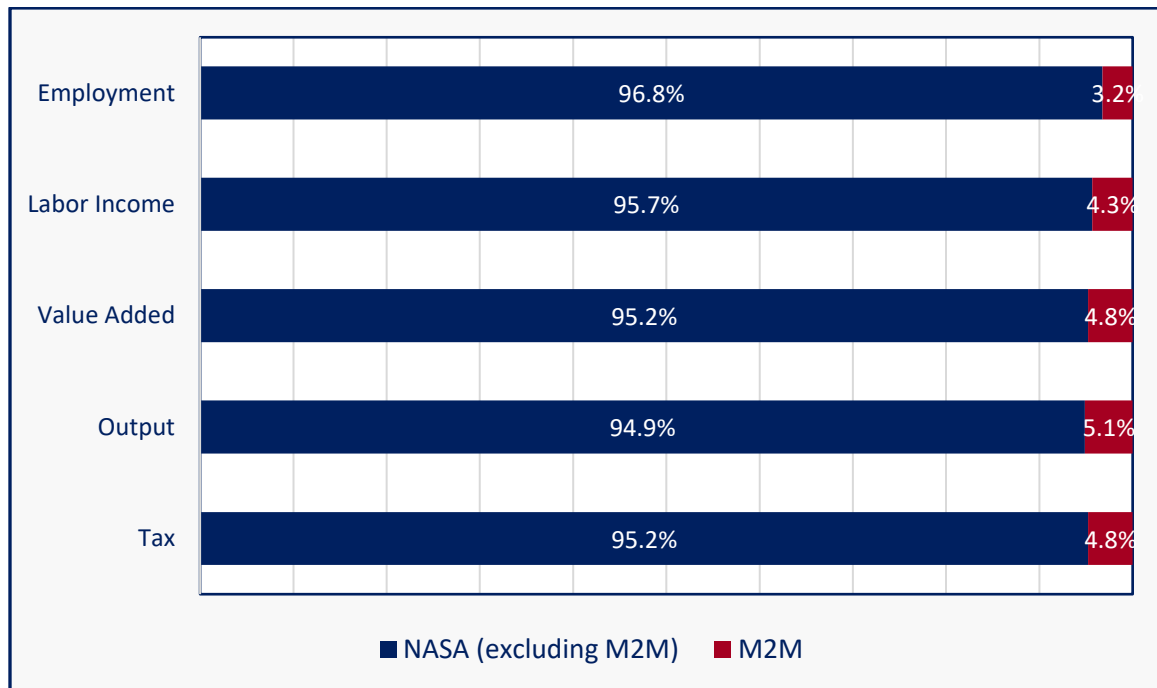
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	217	69.3	0	0.0	217	9.4	100.0	0.0
Indirect*	0	0.0	1,534	76.9	1,534	66.5	0.0	100.0
Induced	96	30.7	462	23.1	558	24.2	17.2	82.8
<b>Total</b>	<b>313</b>	<b>100</b>	<b>1,996</b>	<b>100</b>	<b>2,309</b>	<b>100</b>	<b>13.5</b>	<b>86.5</b>

### 6.25.3. The M2M Program's Share of NASA Impacts

Around 4% of overall NASA agency impacts in the state are attributable to the M2M program (Table 167 and Figure 72). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 167: The M2M Program Portion of Overall NASA Impacts, Minnesota.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	215	15,620	24,011	44,976	1,794
M2M Portion	7	677	1,147	2,309	86
M2M Share (%)	3.2%	4.3%	4.8%	5.1%	4.8%

**Figure 72: The M2M Program Portion of Overall NASA Impacts, Minnesota.**

## 6.26. Economic Impacts on the State of Mississippi

### 6.26.1. NASA Impacts

In 2019, 267 NASA civil service employees (248 FTEs) residing in Mississippi earned \$37.2 million in labor income. NASA contracts sourced in Mississippi in the same year totaled \$203.3 million. The total economic impact resulting from these activities is 3,633 jobs, \$190 million in labor income, and \$570.5 million in economic output. These economic activities generate \$24 million in tax revenues for the state and local governments in Mississippi (Table 168).

The employment multiplier is 14.7, meaning that for every NASA job located in Mississippi, an additional 13.7 jobs are supported in the state economy. The output multiplier of 5.3 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$4.3 million worth of output is sustained throughout the state economy.

**Table 168: Summary of NASA Impacts by Types of Impact, Mississippi.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	248	37,204	51,199	107,054	785
Indirect	2,243	108,892	148,922	296,931	12,537
Induced	1,143	43,990	84,307	166,480	10,733
<b>Total</b>	<b>3,633</b>	<b>190,086</b>	<b>284,427</b>	<b>570,466</b>	<b>24,054</b>
<i>Multiplier</i>	<i>14.7</i>	<i>5.1</i>	<i>5.6</i>	<i>5.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Mississippi economy. Table 169 examines the sources of the employment figures in the second column of Table 168. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 85% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 15%.

**Table 169: NASA Employment Impacts by Sources of Impact, Mississippi.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	248	44.2	0	0.0	248	6.8	100.0	0.0
Indirect*	0	0.0	2,243	73.0	2,243	61.7	0.0	100.0
Induced	313	55.8	830	27.0	1,143	31.5	27.4	72.6
<b>Total</b>	<b>561</b>	<b>100</b>	<b>3,072</b>	<b>100</b>	<b>3,633</b>	<b>100</b>	<b>15.4</b>	<b>84.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 170 examines the sources of the output figures in the fifth column of Table 168. Procurement spending is responsible for more than 73% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 27%.

**Table 170: NASA Output Impacts by Sources of Impact, Mississippi.**

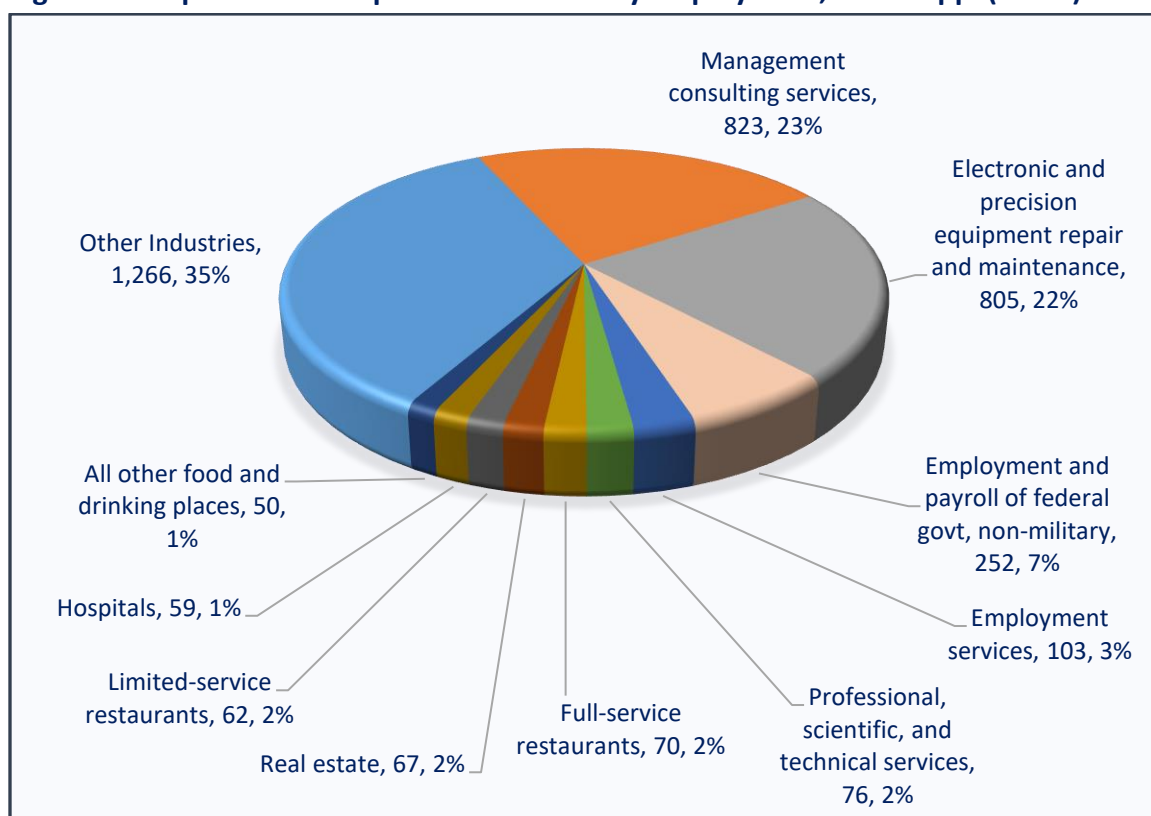
Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	107,054	70.1	0	0.0	107,054	18.8	100.0	0.0
Indirect*	0	0.0	296,931	71.1	296,931	52.1	0.0	100.0
Induced	45,657	29.9	120,823	28.9	166,480	29.2	27.4	72.6
<b>Total</b>	<b>152,711</b>	<b>100</b>	<b>417,754</b>	<b>100</b>	<b>570,466</b>	<b>100</b>	<b>26.8</b>	<b>73.2</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**3,633 jobs in the Mississippi economy were supported by NASA activities in Fiscal Year 2019.** Of these, 248 (7%) were directly located at NASA centers. As a result of the procurement of goods and services in the Mississippi economy, 2,243 additional jobs (62%) were created. The remaining employment—1,143 jobs (31%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

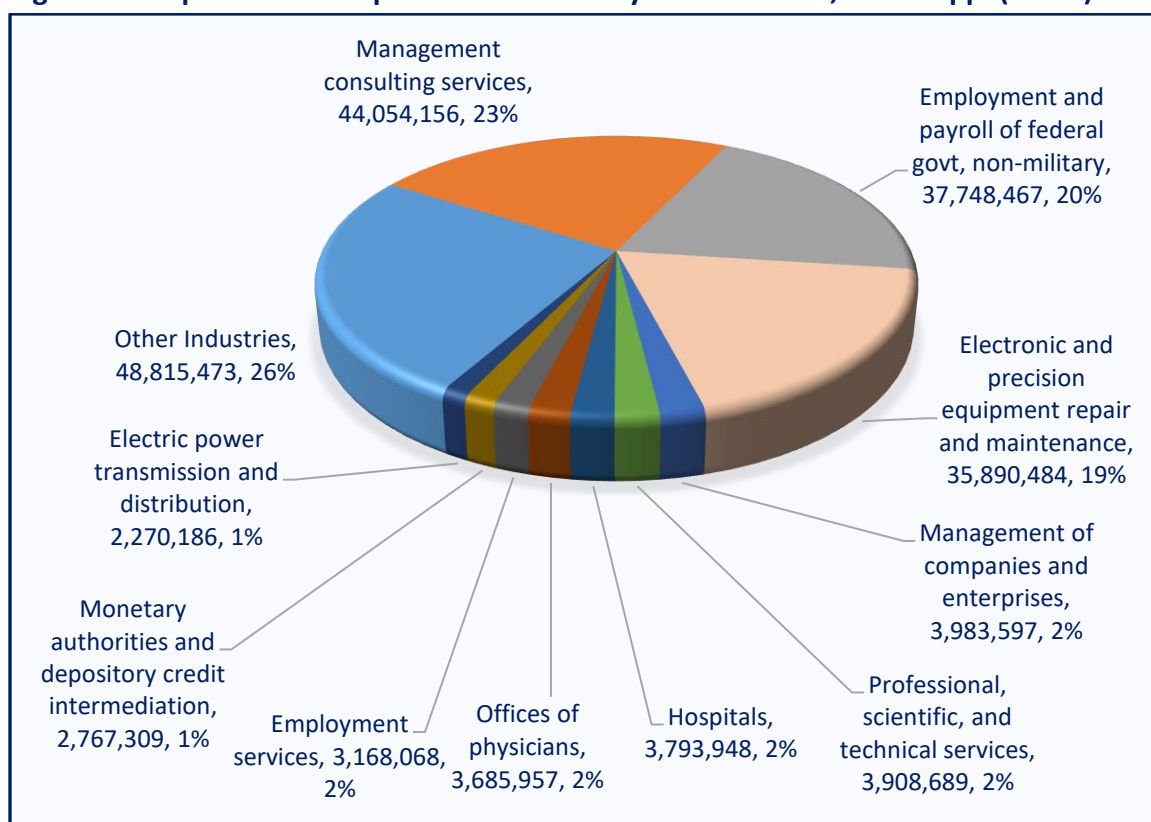
Figure 73 depicts the ten most impacted industries by employment. Management consulting services and electronic and precision equipment repair and maintenance are the most impacted industries, respectively. These two industries together account for 45% of the jobs created. The employment in these industries is driven largely by NASA procurement spending; these two industries accounted for approximately 89% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.



**Figure 73: Top Ten Most Impacted Industries by Employment, Mississippi (NASA).**

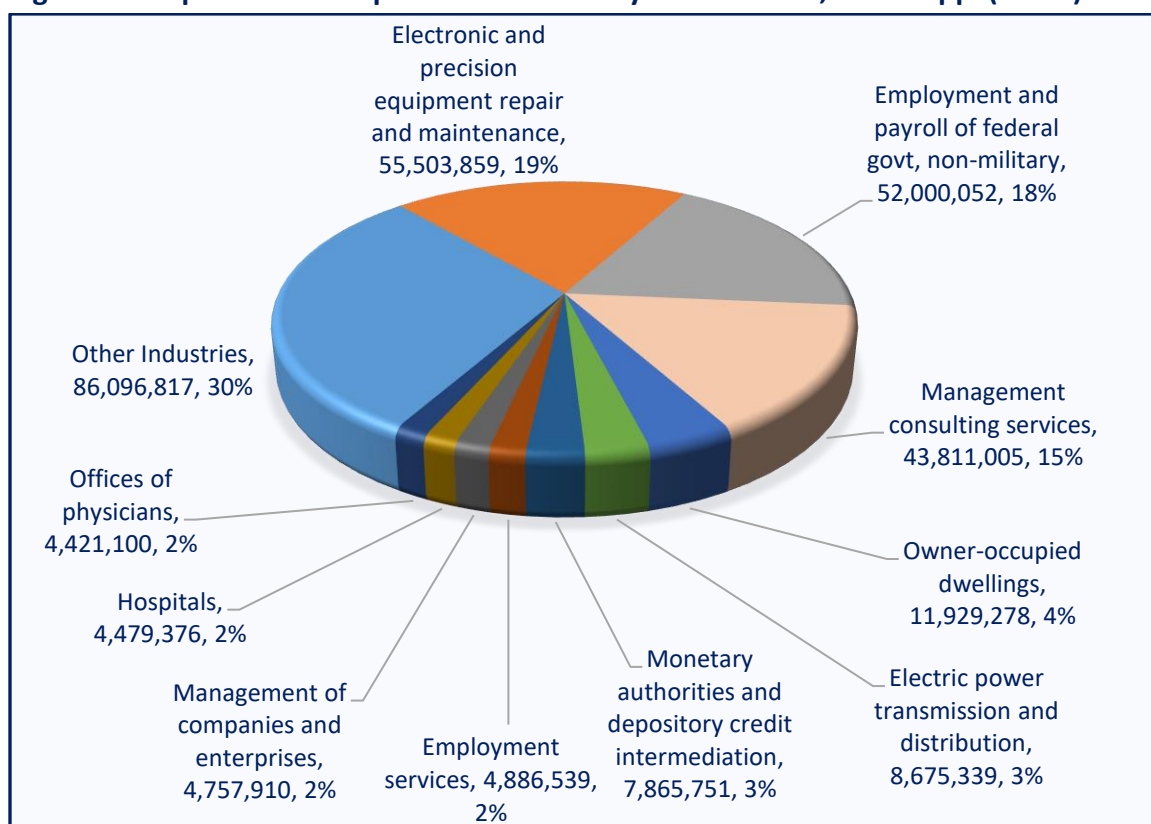
**The total income impact of NASA in Mississippi was \$190 million in Fiscal Year 2019.** Of this amount, \$37.2 million (23%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$108.9 million (61%). The remaining income (induced impact), estimated to be \$44 million (16%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 74 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, management consulting services and electronic and precision equipment repair and maintenance are the most impacted industries by income (along with the federal government sector). The three industries together account for 62% of the total labor income earned.

**Figure 74: Top Ten Most Impacted Industries by Labor Income, Mississippi (NASA).**

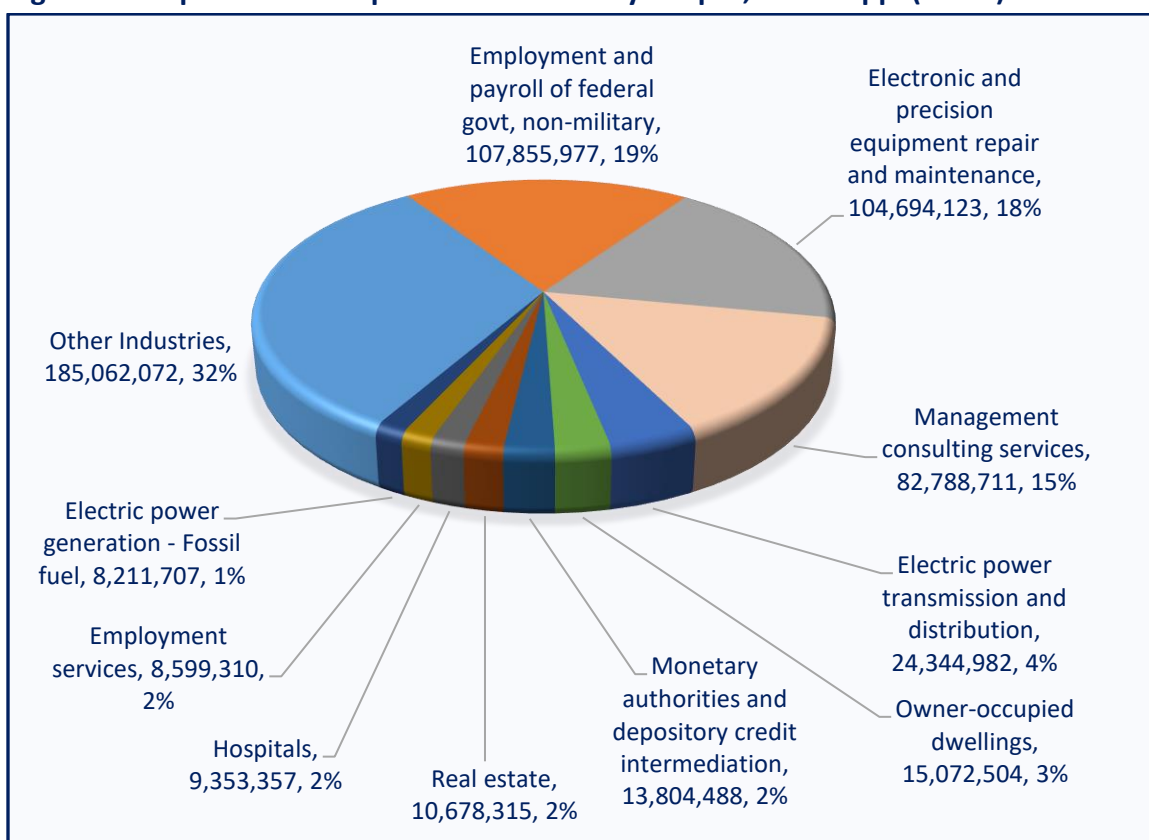
**The total value added impact of NASA in Mississippi was \$284.4 million in Fiscal Year 2019.** Of this amount, \$51.1 million (18%) was created by civil service employees and \$149 million (52%) was created indirectly by the \$203.3 million in procurement spending across all industry sectors in Mississippi. \$84.3 million (30%) was generated by increased consumption spending supported by increased earnings.

Figure 75 depicts the ten most heavily impacted industries in terms of value added. Electronic and precision equipment repair and maintenance and management consulting services are the most impacted industries (along with the federal government sector). The three industries together account for 52% of the total value added created. NASA activities accounted for an increase of \$55.5 million in value added in electronic and precision equipment repair and maintenance, and a \$43.8 million increase in value added in management consulting services. Fifty two (52) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 75: Top Ten Most Impacted Industries by Value Added, Mississippi (NASA).****The total output impact of NASA in Mississippi was \$570.5 million in Fiscal Year 2019.**

The direct impact of \$107 million constitutes the value of production by NASA employees, accounting for around 19% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$203.3 million resulted in an additional increase in output (gross sales) of \$93.7 million across all industry sectors (adding up to the indirect total of \$297 million in Table 168). More than \$166.4 million (29%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$104.7 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in electronic and precision equipment repair and maintenance, and a \$82.7 million increase in sales in management consulting services (Figure 76). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 89% of NASA procurement spending in the state in Fiscal Year 2019.

**Figure 76: Top Ten Most Impacted Industries by Output, Mississippi (NASA).**

### 6.26.2. M2M Program Impacts

In 2019, Mississippi had 73 M2M-related civil service employees (40 FTEs) with a corresponding labor income of \$6 million. M2M program contracts sourced in the state in the same year totaled more than \$26.2 million. The total Mississippi employment impact is 493 jobs. The labor income and economic output associated with this employment are \$28 million and \$77.1 million, respectively. The M2M program generates \$3.3 million in tax revenues for the state and local governments in Mississippi (Table 171).

**Table 171: Summary of M2M Program Impacts by Types of Impact, Mississippi.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	40	6,040	8,251	17,252	127
Indirect	291	15,415	19,535	35,600	1,598
Induced	162	6,576	12,625	24,223	1,561
<b>Total</b>	<b>493</b>	<b>28,031</b>	<b>40,411</b>	<b>77,076</b>	<b>3,287</b>
<i>Multiplier</i>	12.3	4.6	4.9	4.5	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-

employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Mississippi economy. Approximately 82 percent of the employment impacts and 68 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 172: M2M Program Employment Impacts by Sources of Impact, Mississippi.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	40	44.6	0	0.0	40	8.1	100.0	0.0
Indirect*	0	0.0	291	72.2	291	59.1	0.0	100.0
Induced	50	55.4	112	27.8	162	32.8	30.7	69.3
<b>Total</b>	<b>89</b>	<b>100</b>	<b>403</b>	<b>100</b>	<b>493</b>	<b>100</b>	<b>18.2</b>	<b>81.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 173: M2M Program Output Impacts by Sources of Impact, Mississippi.**

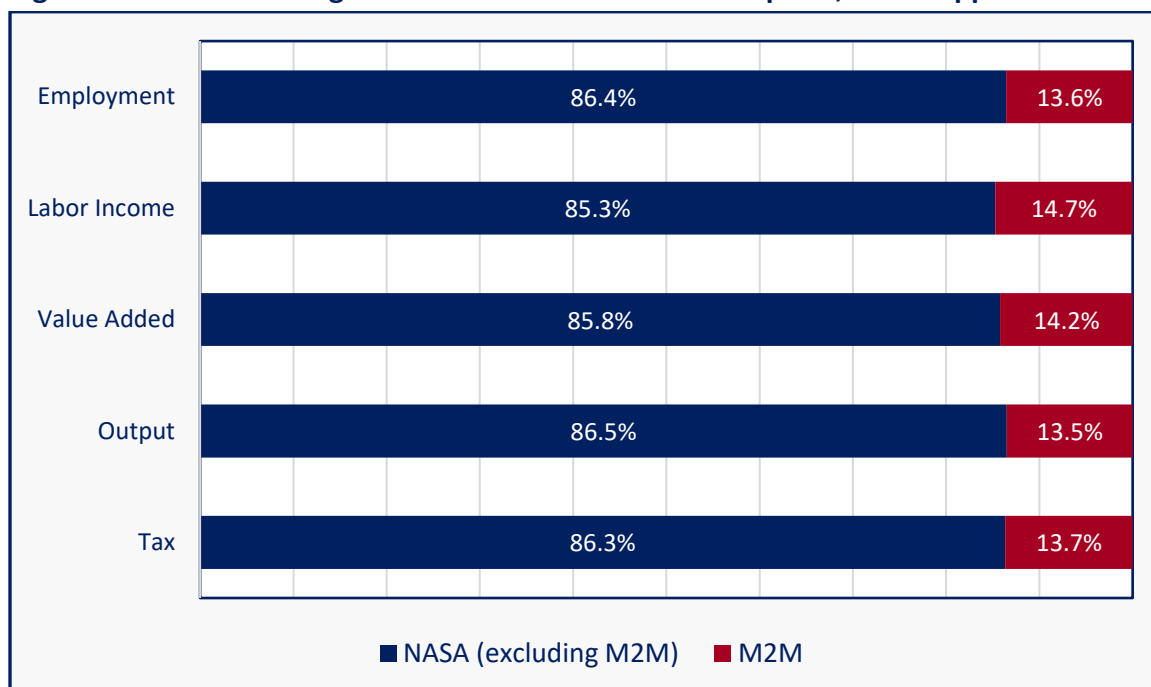
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	17,252	69.9	0	0.0	17,252	22.4	100.0	0.0
Indirect*	0	0.0	35,600	68.0	35,600	46.2	0.0	100.0
Induced	7,437	30.1	16,787	32.0	24,223	31.4	30.7	69.3
<b>Total</b>	<b>24,689</b>	<b>100</b>	<b>52,387</b>	<b>100</b>	<b>77,076</b>	<b>100</b>	<b>32.0</b>	<b>68.0</b>

### 6.26.3. The M2M Program's Share of NASA Impacts

Around 14% of overall NASA agency impacts in the state are attributable to the M2M program (Table 174 and Figure 77). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 174: The M2M Program Portion of Overall NASA Impacts, Mississippi.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	3,633	190,086	284,427	570,466	24,054
M2M Portion	493	28,031	40,411	77,076	3,287
M2M Share (%)	13.6%	14.7%	14.2%	13.5%	13.7%

**Figure 77: The M2M Program Portion of Overall NASA Impacts, Mississippi.**

## 6.27. Economic Impacts on the State of Missouri

### 6.27.1. NASA Impacts

In 2019, 17 NASA civil service employees (7 FTEs) residing in Missouri earned \$815,000 in labor income. NASA contracts sourced in Missouri in the same year totaled \$41.8 million. The total economic impact resulting from these activities is 734 jobs, \$46.6 million in labor income, and \$127 million in economic output. These economic activities generate \$3.8 million in tax revenues for the state and local governments in Missouri (Table 175).

**Table 175: Summary of NASA Impacts by Types of Impact, Missouri.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	815	1,538	3,216	20
Indirect	425	30,900	39,305	76,272	1,403
Induced	301	14,858	25,325	47,513	2,330
<b>Total</b>	<b>734</b>	<b>46,573</b>	<b>66,169</b>	<b>127,001</b>	<b>3,752</b>
<i>Multiplier</i>	<i>98.6</i>	<i>57.2</i>	<i>43.0</i>	<i>39.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Missouri economy. Table 176 examines the sources of the employment figures in the second column of Table 175. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 98% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 2%.

**Table 176: NASA Employment Impacts by Sources of Impact, Missouri.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	7	45.7	0	0.0	7	1.0	100.0	0.0
Indirect*	0	0.0	425	59.2	425	57.9	0.0	100.0
Induced	9	54.3	293	40.8	301	41.1	2.9	97.1
<b>Total</b>	<b>16</b>	<b>100</b>	<b>718</b>	<b>100</b>	<b>734</b>	<b>100</b>	<b>2.2</b>	<b>97.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 177 examines the sources of the output figures in the fifth column of Table 175. Procurement spending is responsible for more than 96% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 4%.

**Table 177: NASA Output Impacts by Sources of Impact, Missouri.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	3,216	69.8	0	0.0	3,216	2.5	100.0	0.0
Indirect*	0	0.0	76,272	62.3	76,272	60.1	0.0	100.0
Induced	1,394	30.2	46,119	37.7	47,513	37.4	2.9	97.1
<b>Total</b>	<b>4,610</b>	<b>100</b>	<b>122,391</b>	<b>100</b>	<b>127,001</b>	<b>100</b>	<b>3.6</b>	<b>96.4</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.27.2. M2M Program Impacts

In 2019, Missouri had three M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$201,000. M2M program contracts sourced in the state in the same year totaled \$9.1 million. The total Missouri employment impact is 168 jobs. The labor income and economic output associated with this employment are \$12 million and \$27.7 million, respectively. The M2M program generates \$959,000 in tax revenues for the state and local governments in Missouri (Table 178).

**Table 178: Summary of M2M Program Impacts by Types of Impact, Missouri.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	201	326	682	5
Indirect	92	7,965	9,198	15,005	365
Induced	74	3,912	6,612	12,018	589
<b>Total</b>	<b>168</b>	<b>12,078</b>	<b>16,136</b>	<b>27,705</b>	<b>959</b>
<i>Multiplier</i>	<i>106.3</i>	<i>60.2</i>	<i>49.5</i>	<i>40.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.



The following two tables examine the contribution of different NASA activities to the Missouri economy. Approximately 98 percent of the employment impacts and 96 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 179: M2M Program Employment Impacts by Sources of Impact, Missouri.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	42.5	0	0.0	2	0.9	100.0	0.0
Indirect*	0	0.0	92	56.2	92	55.0	0.0	100.0
Induced	2	57.5	72	43.8	74	44.1	2.9	97.1
<b>Total</b>	<b>4</b>	<b>100</b>	<b>164</b>	<b>100</b>	<b>168</b>	<b>100</b>	<b>2.2</b>	<b>97.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 180: M2M Program Output Impacts by Sources of Impact, Missouri.**

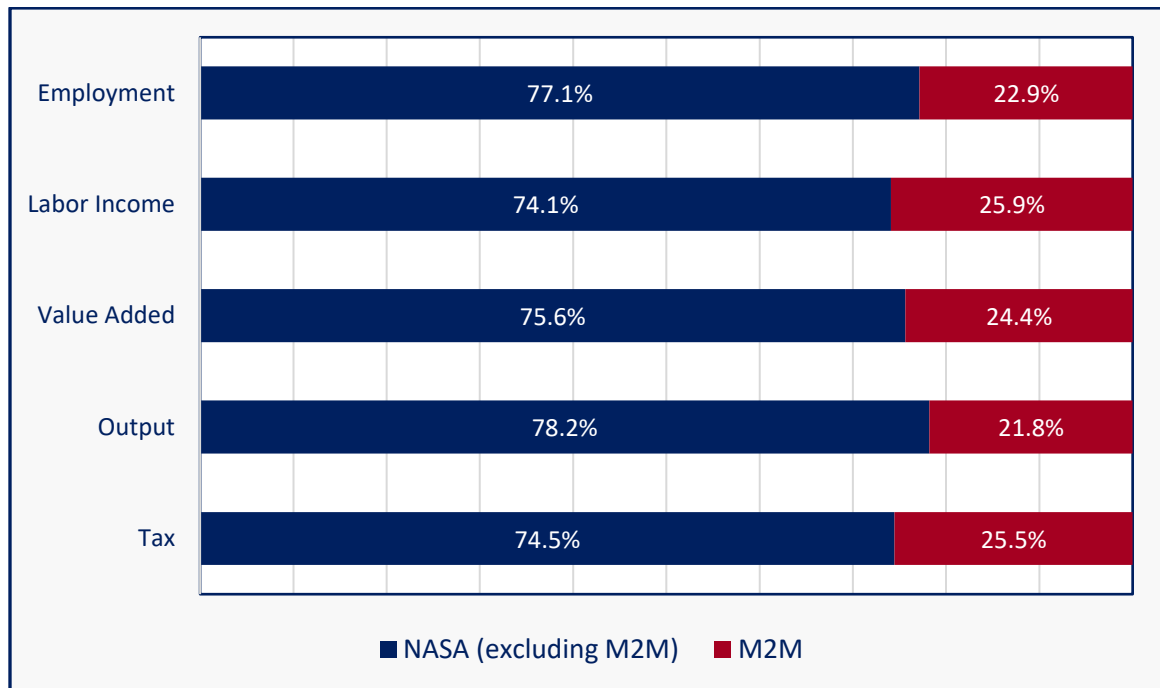
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	682	66.3	0	0.0	682	2.5	100.0	0.0
Indirect*	0	0.0	15,005	56.3	15,005	54.2	0.0	100.0
Induced	347	33.7	11,670	43.7	12,018	43.4	2.9	97.1
<b>Total</b>	<b>1,029</b>	<b>100</b>	<b>26,675</b>	<b>100</b>	<b>27,705</b>	<b>100</b>	<b>3.7</b>	<b>96.3</b>

### 6.27.3. The M2M Program's Share of NASA Impacts

Around 24% of overall NASA agency impacts in the state are attributable to the M2M program (Table 181 and Figure 78). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 181: The M2M Program Portion of Overall NASA Impacts, Missouri.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	734	46,573	66,169	127,001	3,752
M2M Portion	168	12,078	16,136	27,705	959
M2M Share (%)	22.9%	25.9%	24.4%	21.8%	25.5%

**Figure 78: The M2M Program Portion of Overall NASA Impacts, Missouri.**

## 6.28. Economic Impacts on the State of Montana

### 6.28.1. NASA Impacts

In 2019, 2 NASA civil service employees (less than 1 FTE) residing in Montana earned approximately \$10,000 in labor income. NASA contracts sourced in Montana in the same year totaled \$8.5 million. The total economic impact resulting from these activities is 118 jobs, \$6.3 million in labor income, and \$19.5 million in economic output. These economic activities generate \$528,000 in tax revenues for the state and local governments in Montana (Table 182).

**Table 182: Summary of NASA Impacts by Types of Impact, Montana.**<sup>25</sup>

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	10	0	0	0
Indirect	76	4,538	6,214	13,551	272
Induced	42	1,799	2,960	5,922	255
<b>Total</b>	<b>118</b>	<b>6,347</b>	<b>9,174</b>	<b>19,473</b>	<b>528</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>606.9</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

The following two tables examine the contribution of different NASA activities to the Montana economy. Table 183 examines the sources of the employment figures in the second column of Table 182. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly all of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is less than 1%.

**Table 183: NASA Employment Impacts by Sources of Impact, Montana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	0	0.0	0	0.0	0	0.0	0.0	0.0
Indirect*	0	0.0	76	64.4	76	64.4	0.0	100.0
Induced	<1	100.0	42	35.6	42	35.6	0.2	99.8
<b>Total</b>	<b>&lt;1</b>	<b>100</b>	<b>118</b>	<b>100</b>	<b>118</b>	<b>100</b>	<b>0.1</b>	<b>99.9</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 184 examines the sources of the output figures in the fifth column of Table 182. Procurement spending is responsible for nearly all of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is less than 1%.

<sup>25</sup> Because there is no FTE reported for Montana, direct value added and outputs are not estimated.

**Table 184: NASA Output Impacts by Sources of Impact, Montana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	0	0.0	0	0.0	0	0.0	0.0	0.0
Indirect*	0	0.0	13,551	69.6	13,551	69.6	0.0	100.0
Induced	14	100.0	5,907	30.4	5,922	30.4	0.2	99.8
<b>Total</b>	<b>14</b>	<b>100</b>	<b>19,459</b>	<b>100</b>	<b>19,473</b>	<b>100</b>	<b>0.1</b>	<b>99.9</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.28.2. M2M Program Impacts

There were no M2M-specific NASA employees in Montana in FY 2019, but \$83,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is one job, \$63,000 in labor income, and \$195,000 worth of output (Table 185).

**Table 185: Summary of M2M Program Impacts by Types of Impact, Montana.**

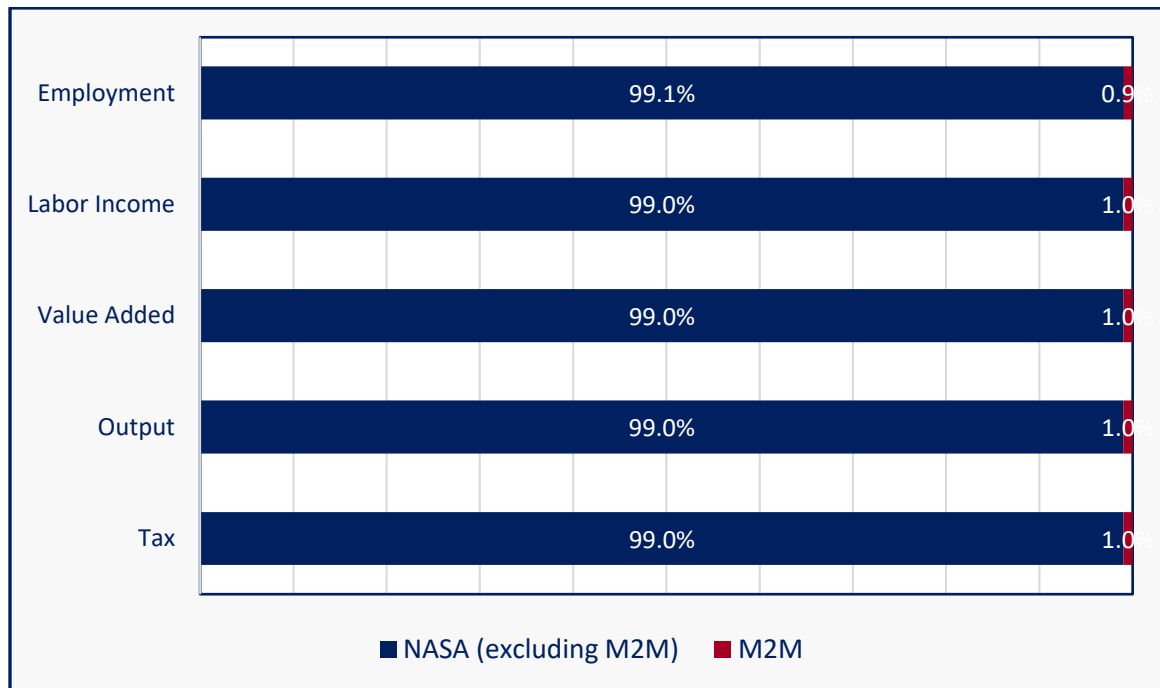
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	1	45	61	140	3
Induced	<1	18	29	55	2
<b>Total</b>	<b>1</b>	<b>63</b>	<b>90</b>	<b>195</b>	<b>5</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.28.3. The M2M Program's Share of NASA Impacts

Around 1% of overall NASA agency impacts in the state are attributable to the M2M program (Table 186 and Figure 79).

**Table 186: The M2M Program Portion of Overall NASA Impacts, Montana.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	118	6,347	9,174	19,473	528
M2M Portion	1	63	90	195	5
M2M Share (%)	0.9%	1.0%	1.0%	1.0%	1.0%

**Figure 79: The M2M Program Portion of Overall NASA Impacts, Montana.**

## 6.29. Economic Impacts on the State of Nebraska

### 6.29.1. NASA Impacts

In 2019, 2 NASA civil service employees (1 FTE) residing in Nebraska earned nearly \$53,000 in labor income. NASA contracts sourced in Nebraska in the same year totaled approximately \$4.3 million. The total economic impact resulting from these activities is 47 jobs, \$3.3 million in labor income, and \$10 million in economic output. These economic activities generate nearly \$303,000 in tax revenues for the state and local governments in Nebraska (Table 187).

**Table 187: Summary of NASA Impacts by Types of Impact, Nebraska.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	53	211	442	1
Indirect	27	2,294	3,538	6,434	146
Induced	19	925	1,665	3,108	155
<b>Total</b>	<b>47</b>	<b>3,272</b>	<b>5,414</b>	<b>9,985</b>	<b>303</b>
<i>Multiplier</i>	<i>46.1</i>	<i>62.1</i>	<i>25.6</i>	<i>22.6</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Nebraska economy. Table 188 examines the sources of the employment figures in the second column of Table 187. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 97% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 3%.

**Table 188: NASA Employment Impacts by Sources of Impact, Nebraska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	68.2	0	0.0	1	2.2	100.0	0.0
Indirect*	0	0.0	27	59.0	27	57.2	0.0	100.0
Induced	<1	31.8	19	41.0	19	40.7	2.5	97.5
<b>Total</b>	<b>2</b>	<b>100</b>	<b>46</b>	<b>100</b>	<b>47</b>	<b>100</b>	<b>3.2</b>	<b>96.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 189 examines the sources of the output figures in the fifth column of Table 187. Procurement spending is responsible for nearly 95% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 5%.

**Table 189: NASA Output Impacts by Sources of Impact, Nebraska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	442	85.1	0	0.0	442	4.4	100.0	0.0
Indirect*	0	0.0	6,434	68.0	6,434	64.4	0.0	100.0
Induced	77	14.9	3,031	32.0	3,108	31.1	2.5	97.5
<b>Total</b>	<b>520</b>	<b>100</b>	<b>9,465</b>	<b>100</b>	<b>9,985</b>	<b>100</b>	<b>5.2</b>	<b>94.8</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.29.2. M2M Program Impacts

There were no M2M-specific NASA employees in Nebraska in FY 2019, but \$350,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is three jobs, \$236,000 in labor income, and \$765,000 worth of output (Table 190).

**Table 190: Summary of M2M Program Impacts by Types of Impact, Nebraska.**

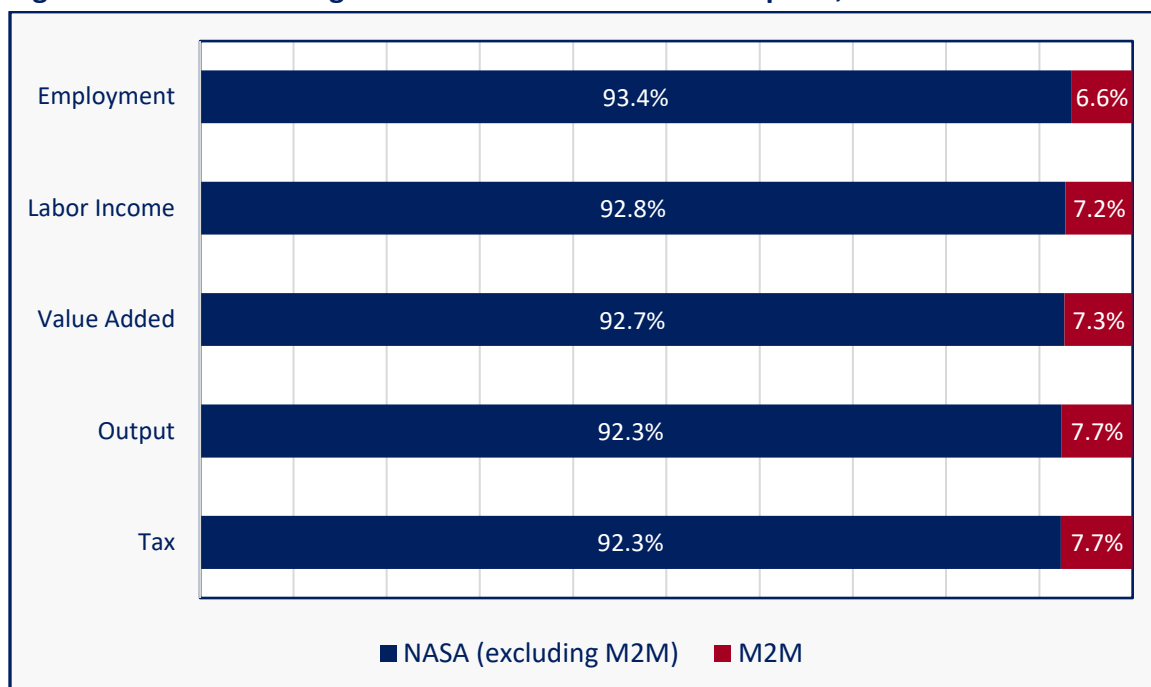
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	2	173	283	560	13
Induced	1	63	113	205	10
<b>Total</b>	<b>3</b>	<b>236</b>	<b>396</b>	<b>765</b>	<b>23</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.29.3. The M2M Program's Share of NASA Impacts

Around 7% of overall NASA agency impacts in the state are attributable to the M2M program (Table 191 and Figure 80). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 191: The M2M Program Portion of Overall NASA Impacts, Nebraska.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	47	3,272	5,414	9,985	303
M2M Portion	3	236	396	765	23
M2M Share (%)	6.6%	7.2%	7.3%	7.7%	7.7%

**Figure 80: The M2M Program Portion of Overall NASA Impacts, Nebraska.**



## 6.30. Economic Impacts on the State of Nevada

### 6.30.1. NASA Impacts

In 2019, 7 NASA civil service employees (3 FTEs) residing in Nevada earned nearly \$405,000 in labor income. NASA contracts sourced in Nevada in the same year totaled \$23.2 million. The total economic impact resulting from these activities is 301 jobs, \$19.7 million in labor income, and \$57.8 million in economic output. These economic activities generate nearly \$1.8 million in tax revenues for the state and local governments in Nevada (Table 192).

**Table 192: Summary of NASA Impacts by Types of Impact, Nevada.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	405	579	1,210	2
Indirect	190	13,987	20,436	38,876	665
Induced	108	5,318	10,337	17,711	1,128
<b>Total</b>	<b>301</b>	<b>19,710</b>	<b>31,352</b>	<b>57,796</b>	<b>1,795</b>
<i>Multiplier</i>	<i>107.4</i>	<i>48.6</i>	<i>54.2</i>	<i>47.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Nevada economy. Table 193 examines the sources of the employment figures in the second column of Table 192. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-eight (98) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 2%.

**Table 193: NASA Employment Impacts by Sources of Impact, Nevada.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3	45.9	0	0.0	3	0.9	100.0	0.0
Indirect*	0	0.0	190	64.5	190	63.2	0.0	100.0
Induced	3	54.1	104	35.5	108	35.8	3.1	96.9
<b>Total</b>	<b>6</b>	<b>100</b>	<b>294</b>	<b>100</b>	<b>301</b>	<b>100</b>	<b>2.0</b>	<b>98.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 194 examines the sources of the output figures in the fifth column of Table 193. Procurement spending is responsible for 97% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 3%.

**Table 194: NASA Output Impacts by Sources of Impact, Nevada.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,210	69.0	0	0.0	1,210	2.1	100.0	0.0
Indirect*	0	0.0	38,876	69.4	38,876	67.3	0.0	100.0
Induced	543	31.0	17,167	30.6	17,711	30.6	3.1	96.9
<b>Total</b>	<b>1,753</b>	<b>100</b>	<b>56,043</b>	<b>100</b>	<b>57,796</b>	<b>100</b>	<b>3.0</b>	<b>97.0</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.30.2. M2M Program Impacts

There were no M2M-specific NASA employees in Nevada in FY 2019, but \$13.3 million in M2M-related NASA contracts were sourced in the state.<sup>26</sup> The total economic impact attributable to this procurement activity is 156 jobs, \$11.3 million in labor income, and \$32 million worth of output (Table 195). These economic activities generate \$1 million in tax revenues for the state and local governments in Nevada.

**Table 195: Summary of M2M Program Impacts by Types of Impact, Nevada.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	98	8,187	12,165	22,219	379
Induced	58	3,065	5,944	9,853	627
<b>Total</b>	<b>156</b>	<b>11,252</b>	<b>18,109</b>	<b>32,072</b>	<b>1,006</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.30.3. The M2M Program's Share of NASA Impacts

Around 55% of overall NASA agency impacts in the state are attributable to the M2M program (Table 196 and Figure 81). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending

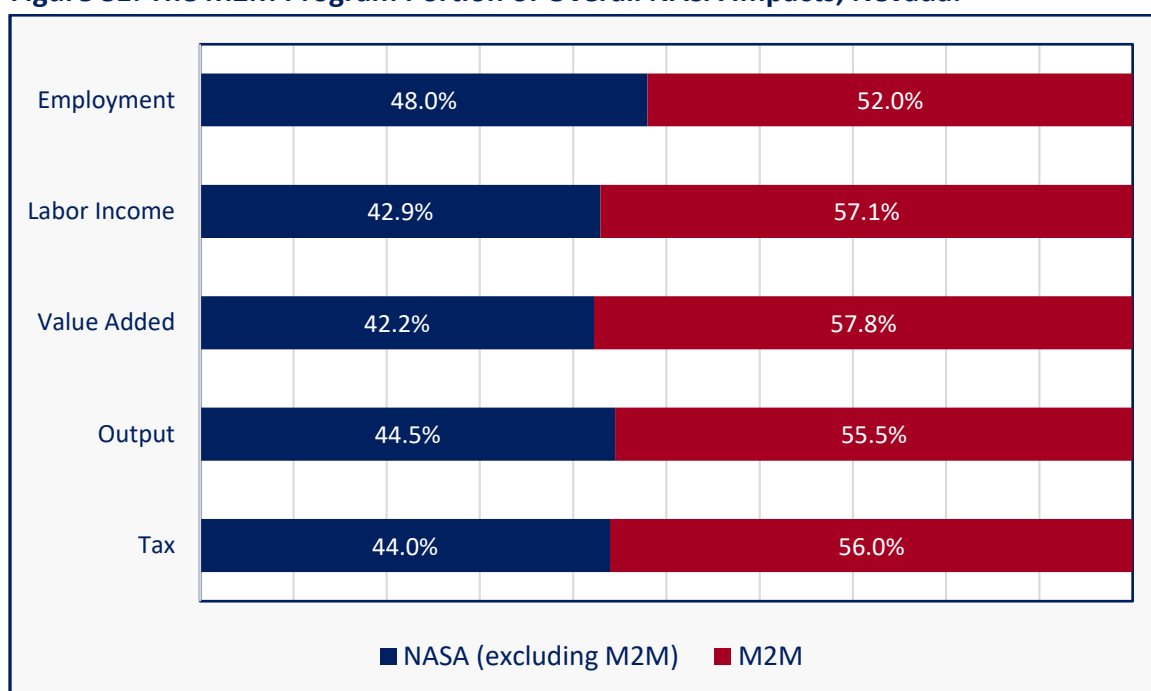
<sup>26</sup> Negative labor income of -\$676 is reported for Nevada in FY 2019. We did not calculate multipliers or tax impacts associated with this figure.

in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 196: The M2M Program Portion of Overall NASA Impacts, Nevada.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	301	19,710	31,352	57,796	1,795
M2M Portion	156	11,252	18,109	32,072	1,006
M2M Share (%)	52.0%	57.1%	57.8%	55.5%	56.0%

**Figure 81: The M2M Program Portion of Overall NASA Impacts, Nevada.**



## 6.31. Economic Impacts on the State of New Hampshire

### 6.31.1. NASA Impacts

In 2019, 4 NASA civil service employees (3 FTEs) residing in New Hampshire earned \$352,000 in labor income. NASA contracts sourced in New Hampshire in the same year totaled \$23 million. The total economic impact resulting from these activities is 289 jobs, \$21.6 million in labor income, and \$58.4 million in economic output. These economic activities generate \$2.1 million in tax revenues for the state and local governments in New Hampshire (Table 197).

**Table 197: Summary of NASA Impacts by Types of Impact, New Hampshire.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	352	617	1,291	1
Indirect	165	14,399	21,408	38,006	1,092
Induced	121	6,821	11,460	19,110	997
<b>Total</b>	<b>289</b>	<b>21,572</b>	<b>33,485</b>	<b>58,407</b>	<b>2,090</b>
<i>Multiplier</i>	96.6	61.3	54.2	45.2	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the New Hampshire economy. Table 198 examines the sources of the employment figures in the second column of Table 197. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 98% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 2%.

**Table 198: NASA Employment Impacts by Sources of Impact, New Hampshire.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3	48.1	0	0.0	3	1.0	100.0	0.0
Indirect*	0	0.0	165	58.4	165	57.2	0.0	100.0
Induced	3	51.9	117	41.6	121	41.8	2.7	97.3
<b>Total</b>	<b>6</b>	<b>100</b>	<b>282</b>	<b>100</b>	<b>289</b>	<b>100</b>	<b>2.2</b>	<b>97.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 199 examines the sources of the output figures in the fifth column of Table 197. Procurement spending is responsible for nearly 97% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 3%.

**Table 199: NASA Output Impacts by Sources of Impact, New Hampshire.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,291	71.7	0	0.0	1,291	2.2	100.0	0.0
Indirect*	0	0.0	38,006	67.1	38,006	65.1	0.0	100.0
Induced	511	28.3	18,600	32.9	19,110	32.7	2.7	97.3
<b>Total</b>	<b>1,801</b>	<b>100</b>	<b>56,606</b>	<b>100</b>	<b>58,407</b>	<b>100</b>	<b>3.1</b>	<b>96.9</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.31.2. M2M Program Impacts

There were no M2M-specific NASA employees in New Hampshire in FY 2019, but \$4.1 million in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is 51 jobs, \$4 million in labor income, and \$10.5 million worth of output (Table 200).

**Table 200: Summary of M2M Program Impacts by Types of Impact, New Hampshire.**

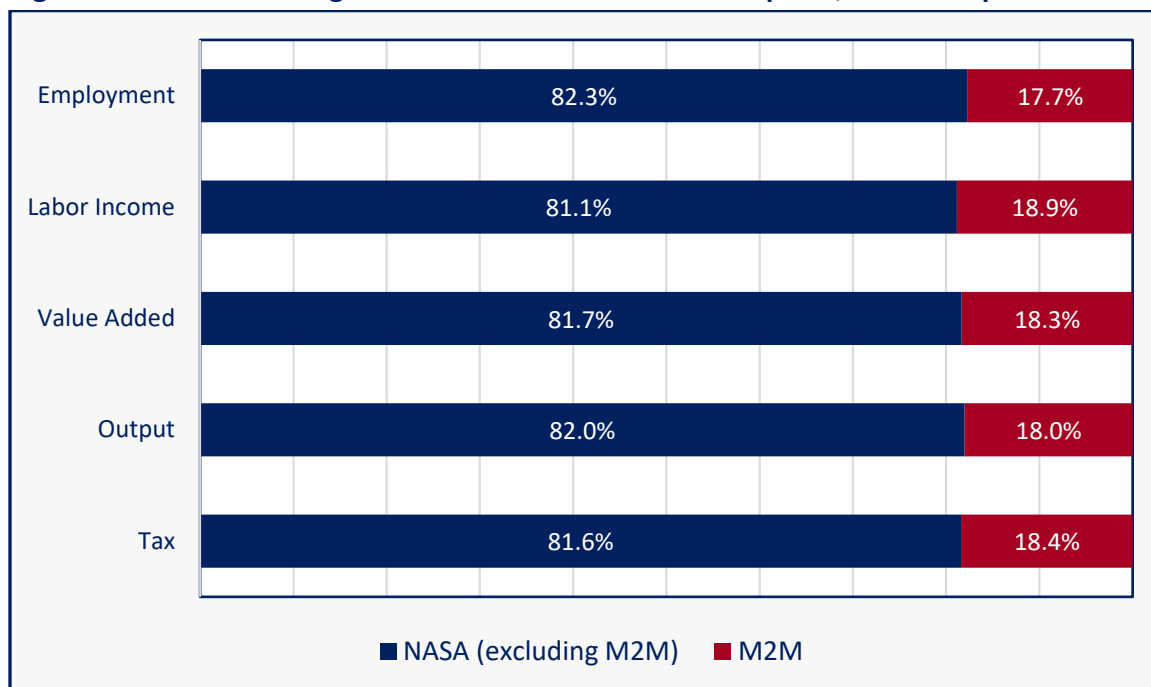
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	29	2,742	3,918	6,962	199
Induced	22	1,327	2,217	3,566	186
<b>Total</b>	<b>51</b>	<b>4,069</b>	<b>6,135</b>	<b>10,528</b>	<b>385</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.31.3. The M2M Program's Share of NASA Impacts

Around 18% of overall NASA agency impacts in the state are attributable to the M2M program (Table 201 and Figure 82). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 201: The M2M Program Portion of Overall NASA Impacts, New Hampshire.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	289	21,572	33,485	58,407	2,090
M2M Portion	51	4,069	6,135	10,528	385
M2M Share (%)	17.7%	18.9%	18.3%	18.0%	18.4%

**Figure 82: The M2M Program Portion of Overall NASA Impacts, New Hampshire.**

## 6.32. Economic Impacts on the State of New Jersey

### 6.32.1. NASA Impacts

In 2019, 28 NASA civil service employees (14 FTEs) residing in New Jersey earned \$1.8 million in labor income. NASA contracts sourced in New Jersey in the same year totaled \$30.1 million. The total economic impact resulting from these activities is 359 jobs, \$33.3 million in labor income, and \$87.9 million in economic output. These economic activities generate nearly \$4 million in tax revenues for the state and local governments in New Jersey (Table 202).

**Table 202: Summary of NASA Impacts by Types of Impact, New Jersey.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	1,804	2,954	6,177	51
Indirect	182	20,730	29,410	52,135	1,868
Induced	162	10,730	17,705	29,634	1,999
<b>Total</b>	<b>359</b>	<b>33,264</b>	<b>50,069</b>	<b>87,946</b>	<b>3,918</b>
<i>Multiplier</i>	<i>25.1</i>	<i>18.4</i>	<i>16.9</i>	<i>14.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the New Jersey economy. Table 203 examines the sources of the employment figures in the second column of Table 202. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 92% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 8%.

**Table 203: NASA Employment Impacts by Sources of Impact, New Jersey.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	14	48.4	0	0.0	14	4.0	100.0	0.0
Indirect*	0	0.0	182	55.3	182	50.7	0.0	100.0
Induced	15	51.6	147	44.7	162	45.3	9.4	90.6
<b>Total</b>	<b>30</b>	<b>100</b>	<b>329</b>	<b>100</b>	<b>359</b>	<b>100</b>	<b>8.2</b>	<b>91.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 204 examines the sources of the output figures in the fifth column of Table 203. Procurement spending is responsible for nearly 90% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 10%.

**Table 204: NASA Output Impacts by Sources of Impact, New Jersey.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	6,177	69.0	0	0.0	6,177	7.0	100.0	0.0
Indirect*	0	0.0	52,135	66.0	52,135	59.3	0.0	100.0
Induced	2,777	31.0	26,857	34.0	29,634	33.7	9.4	90.6
<b>Total</b>	<b>8,954</b>	<b>100</b>	<b>78,992</b>	<b>100</b>	<b>87,946</b>	<b>100</b>	<b>10.2</b>	<b>89.8</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.32.2. M2M Program Impacts

In 2019, New Jersey had six M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$186,000. M2M program contracts sourced in the state in the same year totaled \$3.3 million. The total New Jersey employment impact is 22 jobs. The labor income and economic output associated with this employment are \$2.3 million and \$8.7 million, respectively. The M2M program generates \$341,000 in tax revenues for the state and local governments in New Jersey (Table 205).

**Table 205: Summary of M2M Program Impacts by Types of Impact, New Jersey.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	186	505	1,055	5
Indirect	10	1,402	3,054	5,754	209
Induced	10	716	1,144	1,884	127
<b>Total</b>	<b>22</b>	<b>2,304</b>	<b>4,703</b>	<b>8,694</b>	<b>341</b>
<i>Multiplier</i>	<i>9.1</i>	<i>12.4</i>	<i>9.3</i>	<i>8.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.



The following two tables examine the contribution of different NASA activities to the New Jersey economy. Eighty-two (82) percent of the employment impacts and eighty-four (84) percent of the output impacts are due to NASA procurement sourced within the state.

**Table 206: M2M Program Employment Impacts by Sources of Impact, New Jersey.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	60.7	0	0.0	2	10.9	100.0	0.0
Indirect*	0	0.0	10	54.0	10	44.3	0.0	100.0
Induced	2	39.3	8	46.0	10	44.8	15.8	84.2
<b>Total</b>	<b>4</b>	<b>100</b>	<b>18</b>	<b>100</b>	<b>22</b>	<b>100</b>	<b>18.0</b>	<b>82.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 207: M2M Program Output Impacts by Sources of Impact, New Jersey.**

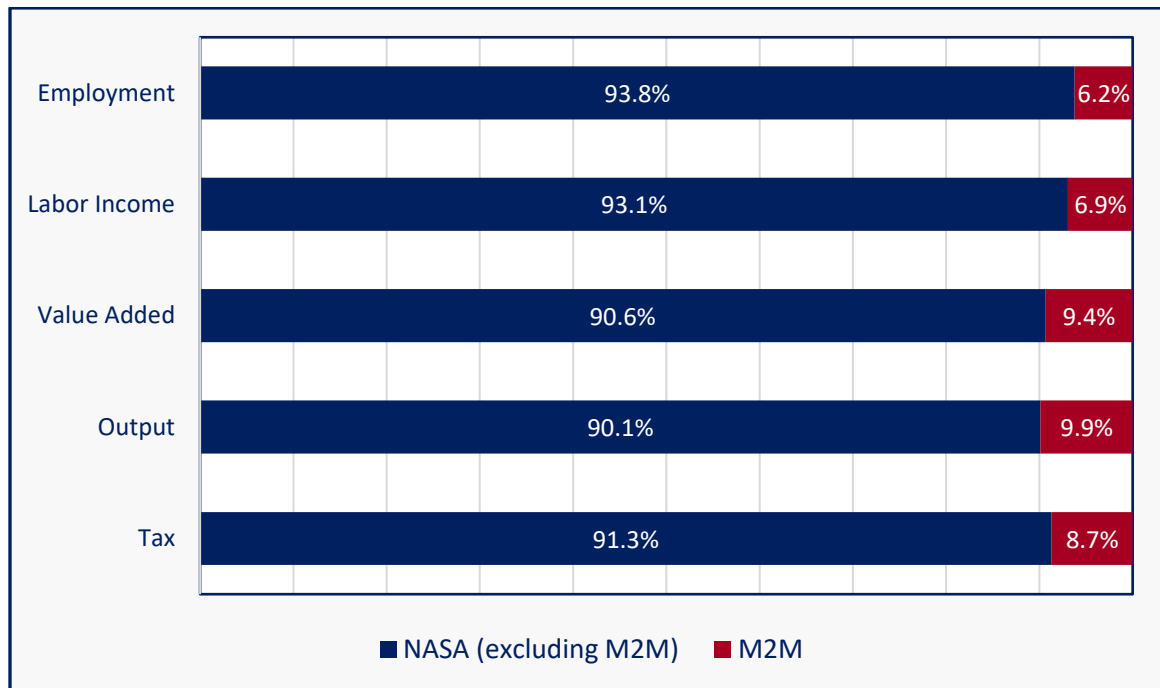
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,055	78.0	0	0.0	1,055	12.1	100.0	0.0
Indirect*	0	0.0	5,754	78.4	5,754	66.2	0.0	100.0
Induced	298	22.0	1,587	21.6	1,884	21.7	15.8	84.2
<b>Total</b>	<b>1,353</b>	<b>100</b>	<b>7,341</b>	<b>100</b>	<b>8,694</b>	<b>100</b>	<b>15.6</b>	<b>84.4</b>

### 6.32.3. The M2M Program's Share of NASA Impacts

Around 8% of overall NASA agency impacts in the state are attributable to the M2M program (Table 208 and Figure 83). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 208: The M2M Program Portion of Overall NASA Impacts, New Jersey.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	359	33,264	50,069	87,946	3,918
M2M Portion	22	2,304	4,703	8,694	341
M2M Share (%)	6.2%	6.9%	9.4%	9.9%	8.7%

**Figure 83: The M2M Program Portion of Overall NASA Impacts, New Jersey.**

### 6.33. Economic Impacts on the State of New Mexico

#### 6.33.1. NASA Impacts

In 2019, 87 NASA civil service employees (78 FTEs) residing in New Mexico earned \$12.2 million in labor income. NASA contracts sourced in New Mexico in the same year totaled more than \$82.1 million. The total economic impact resulting from these activities is 1,319 jobs, \$68.7 million in labor income, and \$231.4 million in economic output. These economic activities generate \$6.2 million in tax revenues for the state and local governments in New Mexico (Table 209).

**Table 209: Summary of NASA Impacts by Types of Impact, New Mexico.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	78	12,202	16,033	33,525	202
Indirect	840	39,755	50,381	139,221	2,613
Induced	401	16,776	31,428	58,668	3,354
<b>Total</b>	<b>1,319</b>	<b>68,733</b>	<b>97,843</b>	<b>231,414</b>	<b>6,169</b>
<i>Multiplier</i>	<i>17.0</i>	<i>5.6</i>	<i>6.1</i>	<i>6.9</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the New Mexico economy. Table 210 examines the sources of the employment figures in the second column of Table 209. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 86% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 14%.

**Table 210: NASA Employment Impacts by Sources of Impact, New Mexico.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	78	42.3	0	0.0	78	5.9	100.0	0.0
Indirect*	0	0.0	840	74.0	840	63.7	0.0	100.0
Induced	106	57.7	296	26.0	401	30.4	26.4	73.6
<b>Total</b>	<b>183</b>	<b>100</b>	<b>1,135</b>	<b>100</b>	<b>1,319</b>	<b>100</b>	<b>13.9</b>	<b>86.1</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 211 examines the sources of the output figures in the fifth column of Table 209. Procurement spending is responsible for nearly 79% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 21%.

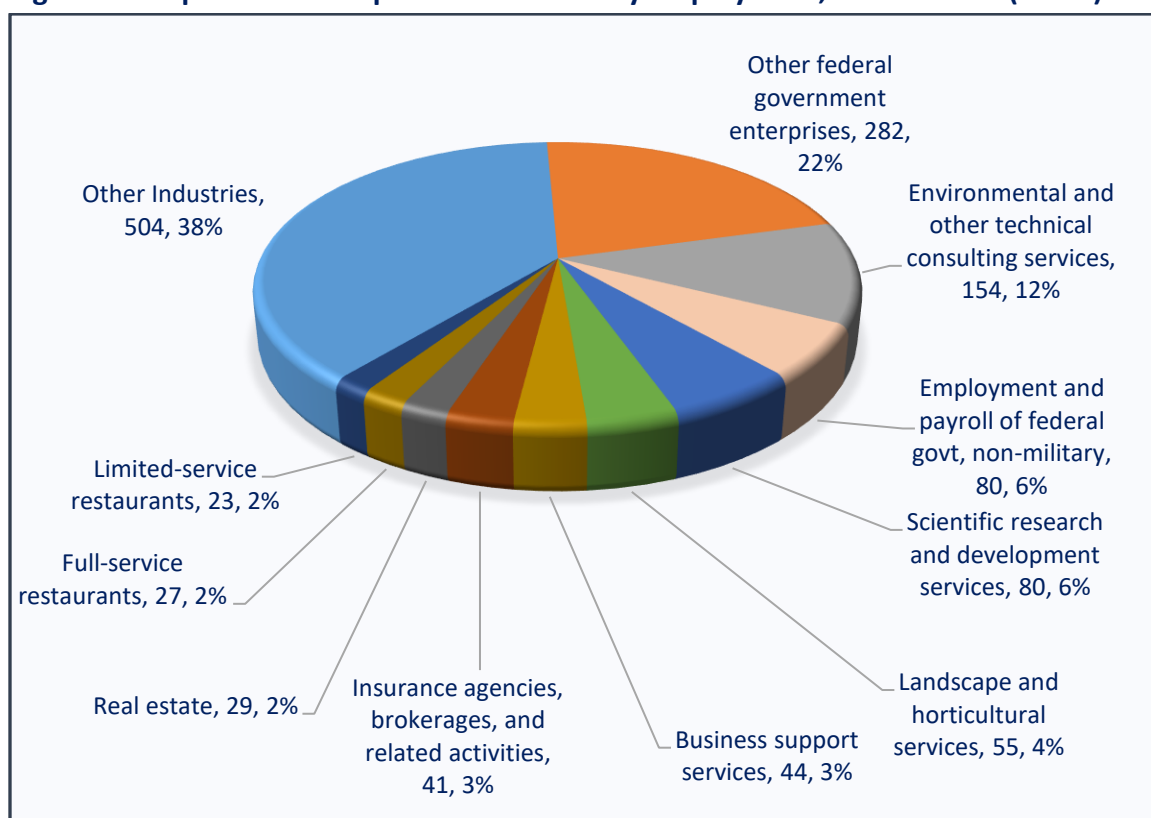
**Table 211: NASA Output Impacts by Sources of Impact, New Mexico.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	33,525	68.4	0	0.0	33,525	14.5	100.0	0.0
Indirect*	0	0.0	139,221	76.3	139,221	60.2	0.0	100.0
Induced	15,481	31.6	43,187	23.7	58,668	25.4	26.4	73.6
<b>Total</b>	<b>49,005</b>	<b>100</b>	<b>182,409</b>	<b>100</b>	<b>231,414</b>	<b>100</b>	<b>21.2</b>	<b>78.8</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

**1,319 jobs in the New Mexico economy were supported by NASA activities in Fiscal Year 2019.** Of these, 78 (6%) were directly located at NASA centers. As a result of the procurement of goods and services in the New Mexico economy, 840 additional jobs (64%) were created. The remaining employment—401 jobs (30%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

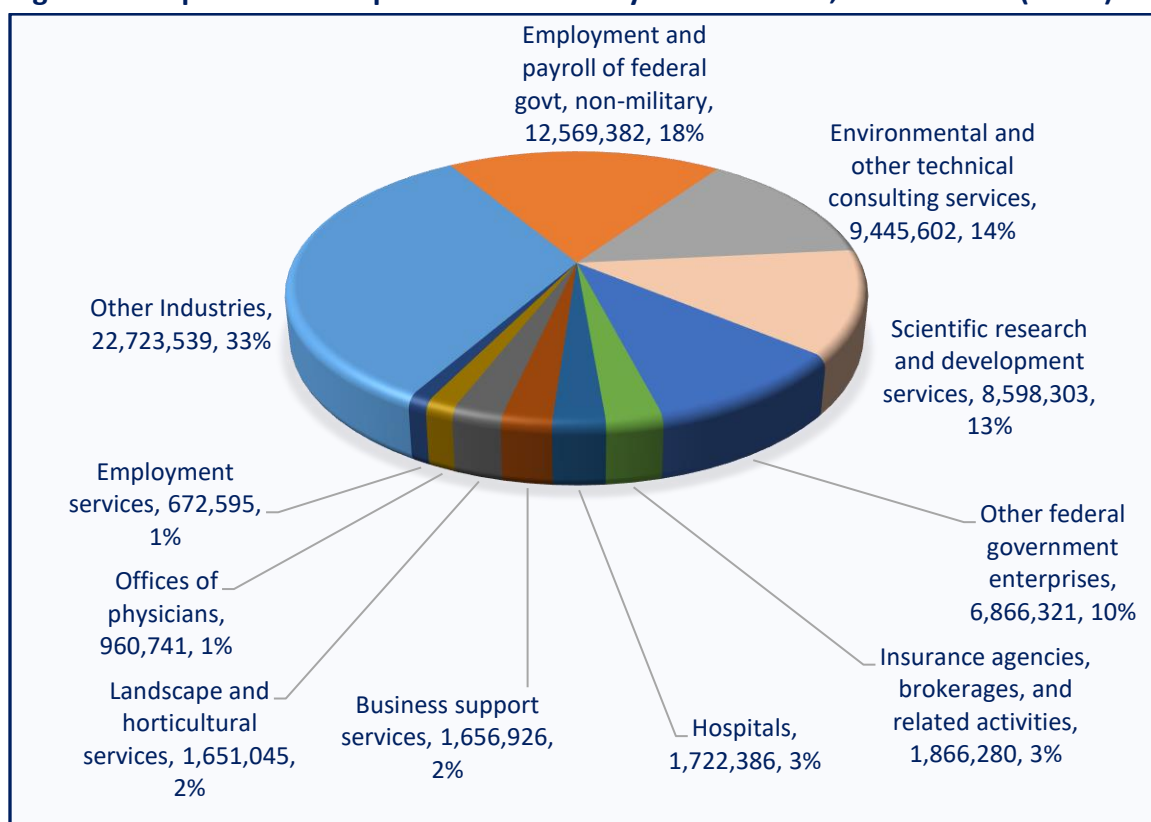
Figure 84 depicts the ten most impacted industries by employment. Environmental and other technical consulting and scientific research and development services are the most impacted industries, respectively (along with the federal government sectors). These four industries together account for 46% of the jobs created.

**Figure 84: Top Ten Most Impacted Industries by Employment, New Mexico (NASA).**

**The total income impact of NASA in New Mexico was \$68.7 million in Fiscal Year 2019.**

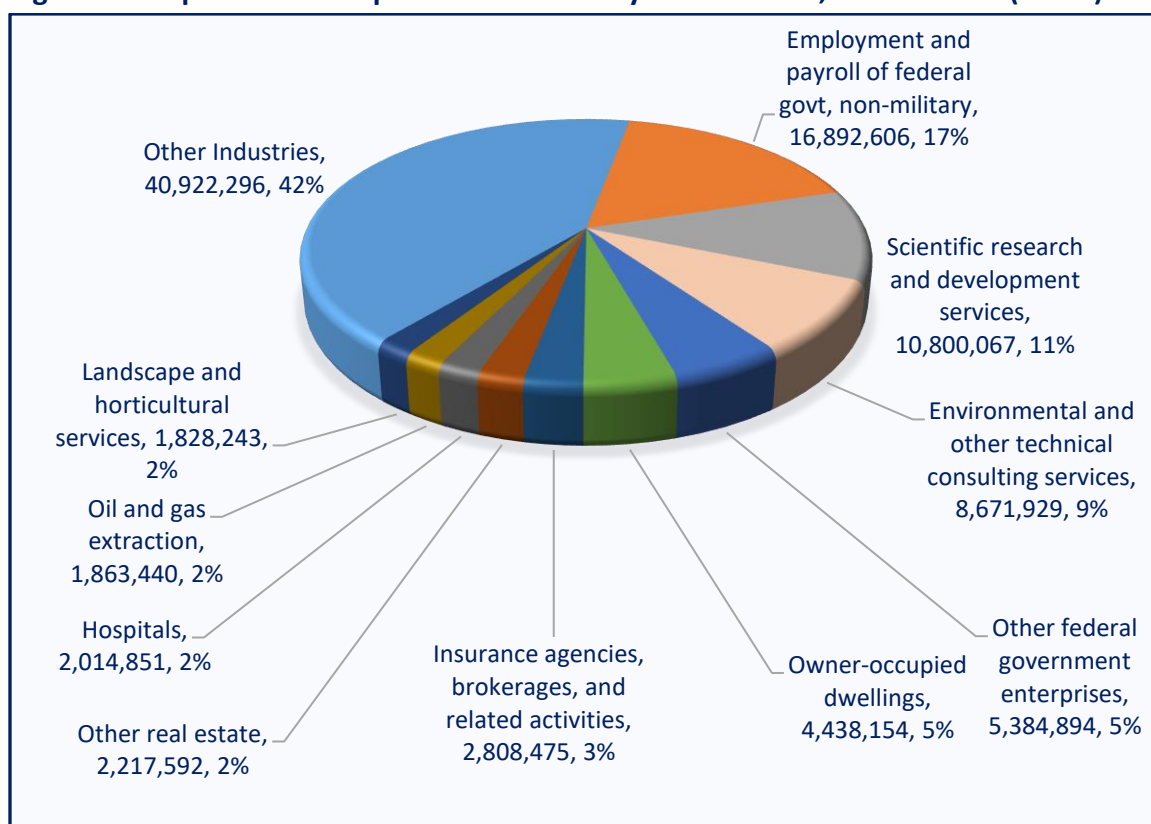
Of this amount, more than \$12.2 million (18%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$39.7 million (58%). The remaining income (induced impact), estimated to be \$16.8 million (24%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 85 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, Environmental and other technical consulting and scientific research and development services are the most impacted industries, respectively (along with the federal government sectors). The four industries together account for 55% of the total labor income earned.

**Figure 85: Top Ten Most Impacted Industries by Labor Income, New Mexico (NASA).**

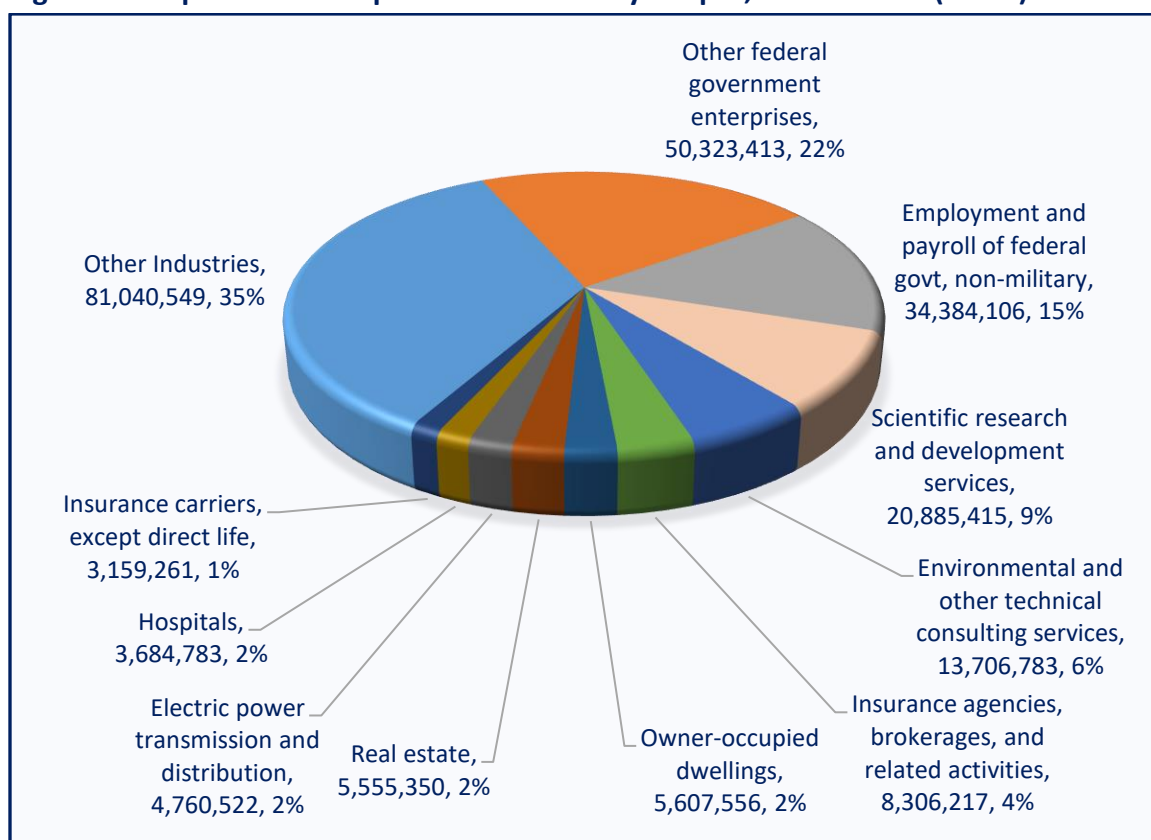
**The total value added impact of NASA in New Mexico was \$97.8 million in Fiscal Year 2019.** Of this amount, \$16 million (16%) was created by civil service employees and \$50.4 million (52%) was created indirectly by the \$82.1 million in procurement spending across all industry sectors in New Mexico. \$31.4 million (32%) was generated by increased consumption spending supported by increased earnings.

Figure 86 depicts the ten most heavily impacted industries in terms of value added. Environmental and other technical consulting and scientific research and development services are the most impacted industries, respectively (along with the federal government sectors). The four industries together account for 42% of the total value added created. NASA activities accounted for an increase of more than \$10.8 million in value added in scientific research and development services, and \$8.7 million increase in value added in environmental and other technical consulting services.

**Figure 86: Top Ten Most Impacted Industries by Value Added, New Mexico (NASA).****The total output impact of NASA in New Mexico was \$231.4 million in Fiscal Year 2019.**

The direct impact of \$33.5 million constitutes the value of production by NASA employees, accounting for around 15% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$82.1 million resulted in an additional increase in output (gross sales) of \$57.1 million across all industry sectors (adding up to the indirect total of \$139.2 million in Table 209). Nearly \$58.7 million (25%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$20.9 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services and \$13.7 million increase in sales in environmental and other technical consulting services (Figure 87).

**Figure 87: Top Ten Most Impacted Industries by Output, New Mexico (NASA).**

### 6.33.2. M2M Program Impacts

In 2019, New Mexico had 22 M2M-related civil service employees (7 FTEs) with a corresponding labor income of \$1 million. M2M program contracts sourced in the state in the same year totaled more than \$21.8 million. The total New Mexico employment impact is 258 jobs. The labor income and economic output associated with this employment are \$12.7 million and \$49.4 million, respectively. The M2M program generates \$1.3 million in tax revenues for the state and local governments in New Mexico (Table 212).

**Table 212: Summary of M2M Program Impacts by Types of Impact, New Mexico.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	1,004	1,451	3,033	17
Indirect	184	8,757	11,559	36,379	666
Induced	67	2,988	5,541	10,037	574
<b>Total</b>	<b>258</b>	<b>12,749</b>	<b>18,551</b>	<b>49,449</b>	<b>1,256</b>
<i>Multiplier</i>	36.7	12.7	12.8	16.3	<i>n.a.</i>



**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the New Mexico economy. Ninety-four (94) percent of the employment impacts and more than 91 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 213: M2M Program Employment Impacts by Sources of Impact, New Mexico.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	7	45.0	0	0.0	7	2.7	100.0	0.0
Indirect*	0	0.0	184	75.9	184	71.3	0.0	100.0
Induced	9	55.0	59	24.1	67	26.0	12.8	87.2
<b>Total</b>	<b>16</b>	<b>100</b>	<b>242</b>	<b>100</b>	<b>258</b>	<b>100</b>	<b>6.0</b>	<b>94.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 214: M2M Program Output Impacts by Sources of Impact, New Mexico.**

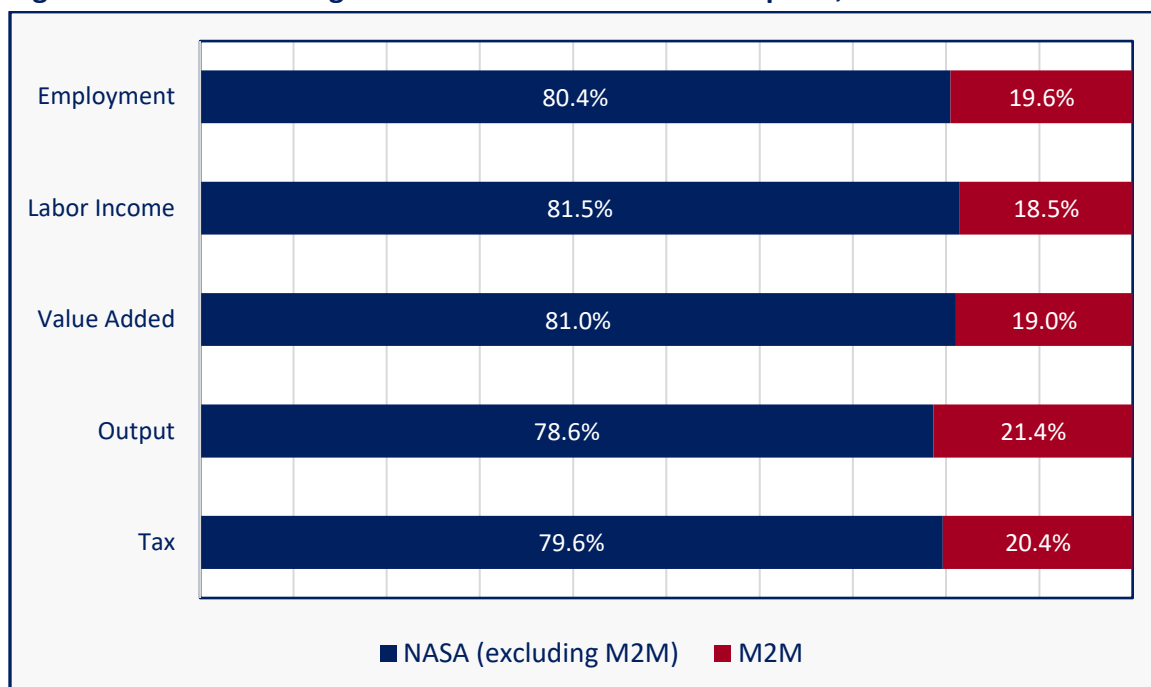
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	3,033	70.3	0	0.0	3,033	6.1	100.0	0.0
Indirect*	0	0.0	36,379	80.6	36,379	73.6	0.0	100.0
Induced	1,282	29.7	8,754	19.4	10,037	20.3	12.8	87.2
<b>Total</b>	<b>4,316</b>	<b>100</b>	<b>45,133</b>	<b>100</b>	<b>49,449</b>	<b>100</b>	<b>8.7</b>	<b>91.3</b>

### 6.33.3. The M2M Program's Share of NASA Impacts

Around 20% of overall NASA agency impacts in the state are attributable to the M2M program (Table 215 and Figure 88). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 215: The M2M Program Portion of Overall NASA Impacts, New Mexico.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	1,319	68,733	97,843	231,414	6,169
M2M Portion	258	12,749	18,551	49,449	1,256
M2M Share (%)	19.6%	18.5%	19.0%	21.4%	20.4%

**Figure 88: The M2M Program Portion of Overall NASA Impacts, New Mexico.**

## 6.34. Economic Impacts on the State of New York

### 6.34.1. NASA Impacts

In 2019, 65 NASA civil service employees (44 FTEs) residing in New York earned nearly \$6.9 million in labor income. NASA contracts sourced in New York in the same year totaled \$152 million. The total economic impact resulting from these activities is 1,932 jobs, \$170.4 million in labor income, and \$439.7 million in economic output. These economic activities generate \$22.6 million in tax revenues for the state and local governments in New York (Table 216).

**Table 216: Summary of NASA Impacts by Types of Impact, New York.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	44	6,892	9,030	18,881	309
Indirect	1,112	108,935	153,285	274,517	11,007
Induced	776	54,603	93,432	146,270	11,307
<b>Total</b>	<b>1,932</b>	<b>170,430</b>	<b>255,746</b>	<b>439,668</b>	<b>22,623</b>
<i>Multiplier</i>	<i>44.2</i>	<i>24.7</i>	<i>28.3</i>	<i>23.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the New York economy. Table 217 examines the sources of the employment figures in the second column of Table 216. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 95% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 5%.

**Table 217: NASA Employment Impacts by Sources of Impact, New York.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	44	46.0	0	0.0	44	2.3	100.0	0.0
Indirect*	0	0.0	1,112	60.5	1,112	57.6	0.0	100.0
Induced	51	54.0	725	39.5	776	40.2	6.6	93.4
<b>Total</b>	<b>95</b>	<b>100</b>	<b>1,837</b>	<b>100</b>	<b>1,932</b>	<b>100</b>	<b>4.9</b>	<b>95.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 218 examines the sources of the output figures in the fifth column of Table 216. Procurement spending is responsible for more than 93% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 7%.

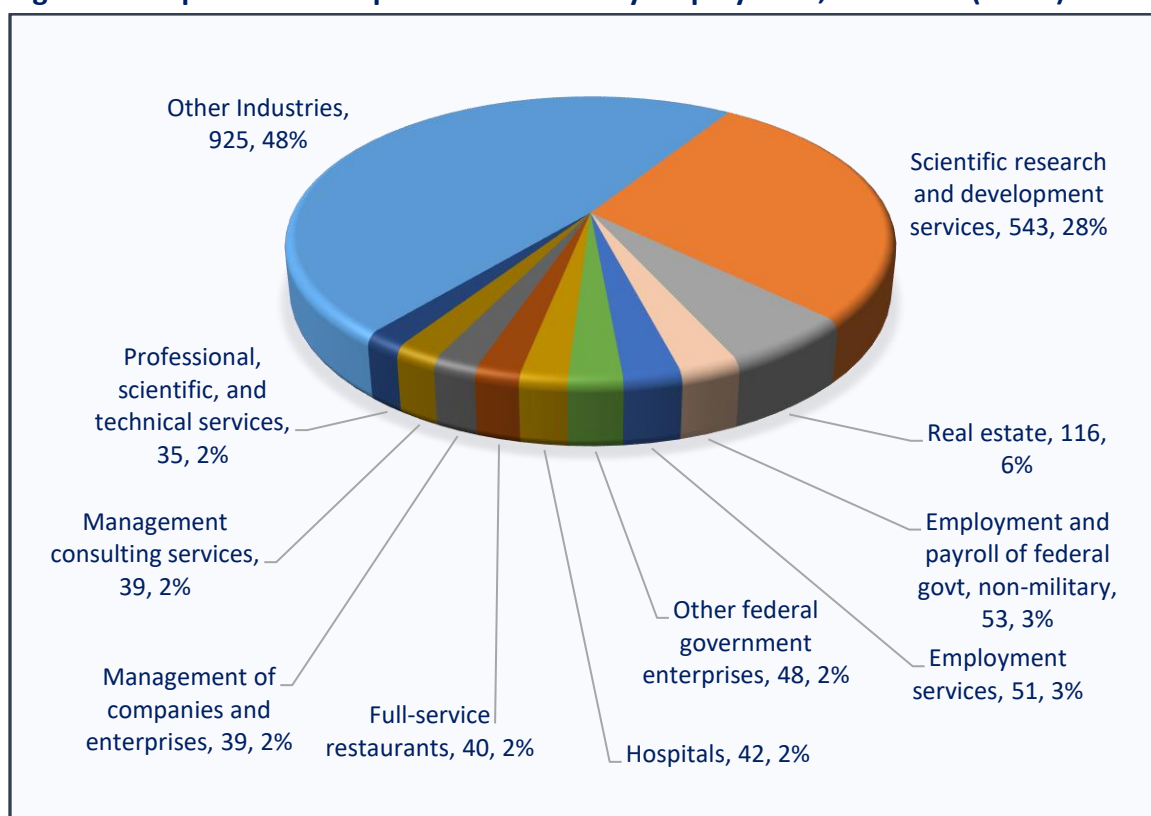
**Table 218: NASA Output Impacts by Sources of Impact, New York.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	18,881	66.1	0	0.0	18,881	4.3	100.0	0.0
Indirect*	0	0.0	274,517	66.8	274,517	62.4	0.0	100.0
Induced	9,679	33.9	136,591	33.2	146,270	33.3	6.6	93.4
<b>Total</b>	<b>28,560</b>	<b>100</b>	<b>411,108</b>	<b>100</b>	<b>439,668</b>	<b>100</b>	<b>6.5</b>	<b>93.5</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

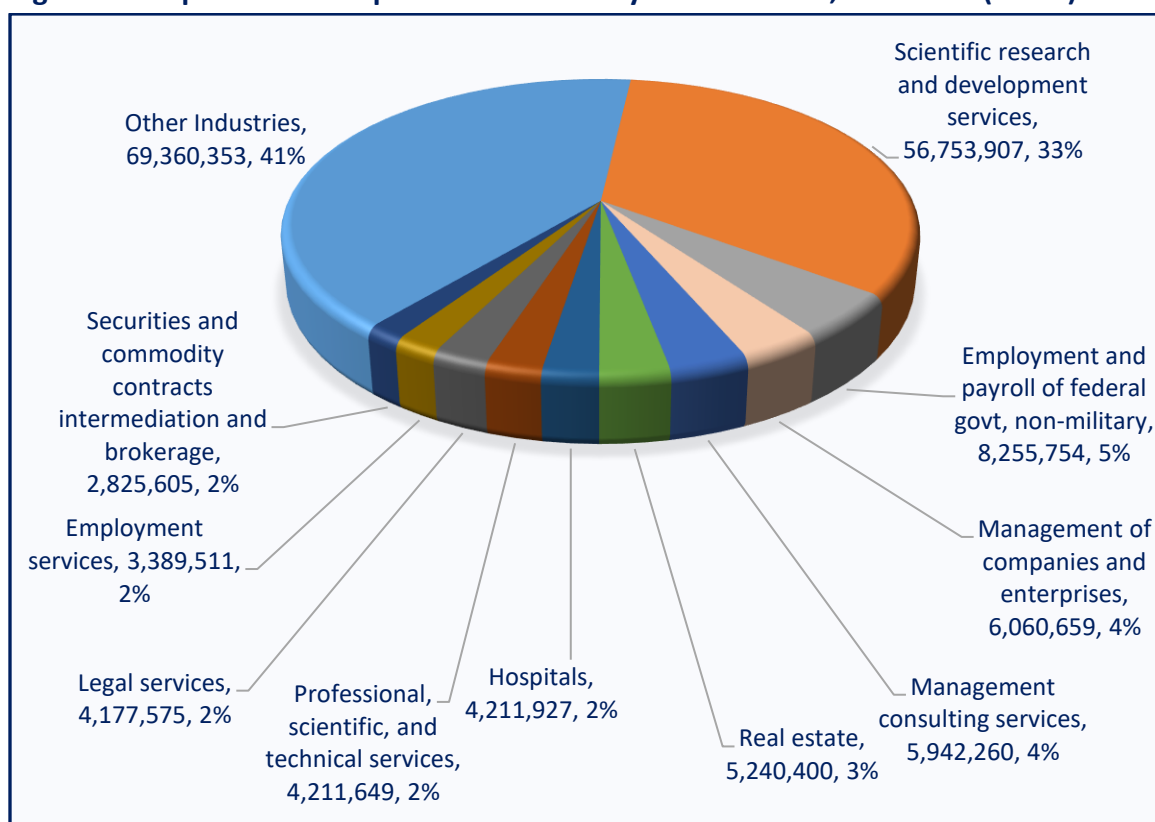
**1,932 jobs in the New York economy were supported by NASA activities in Fiscal Year 2019.** Of these, 44 (2%) were directly located at NASA centers. As a result of the procurement of goods and services in the New York economy, 1,112 additional jobs (58%) were created. The remaining employment—776 jobs (40%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 89 depicts the ten most impacted industries by employment. Scientific research and development services is the most impacted industry, accounting for 28% of the jobs created. The employment in this industry is driven largely by NASA procurement spending; scientific research and development services accounted for approximately 83% of NASA procurement spending in the state in Fiscal Year 2019. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 89: Top Ten Most Impacted Industries by Employment, New York (NASA).**

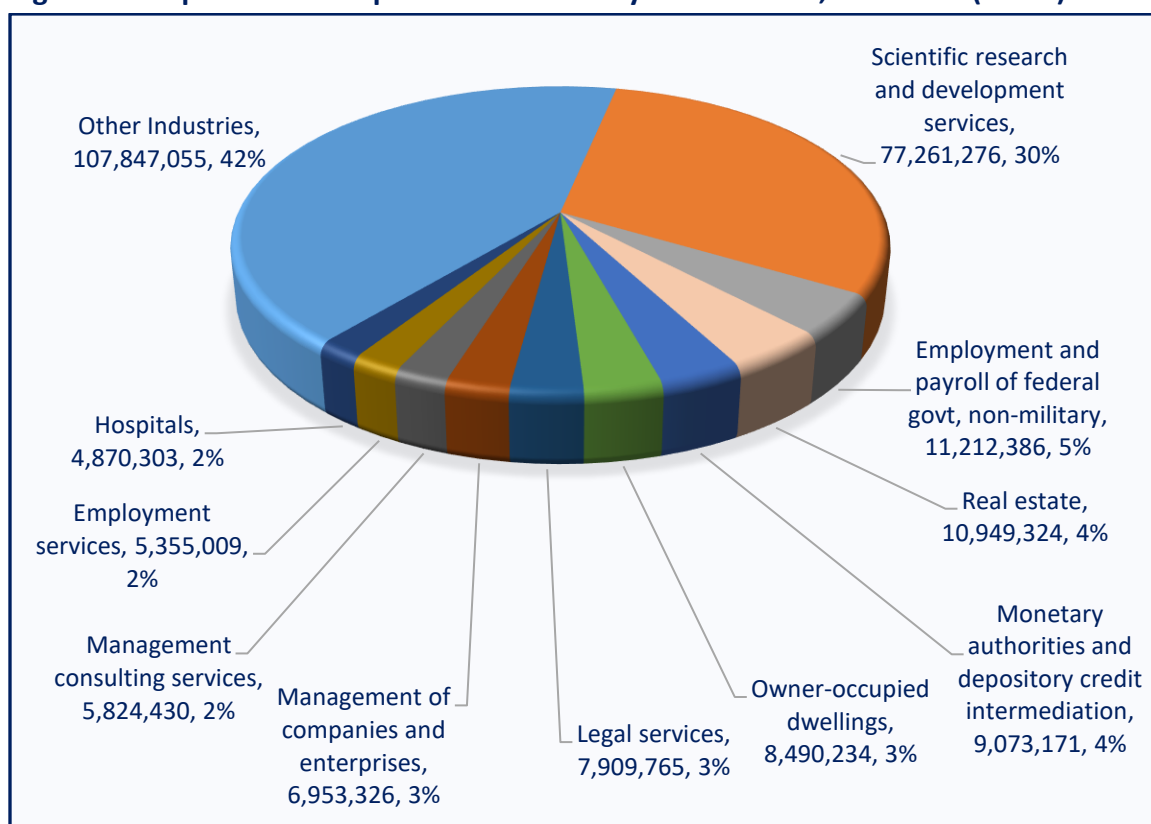
**The total income impact of NASA in New York was \$170.4 million in Fiscal Year 2019.** Of this amount, \$6.9 million (4%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$108.9 million (64%). The remaining income (induced impact), estimated to be \$54.6 million (32%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 90 depicts the ten most impacted industries by labor income. As a consequence of its share of total employment, scientific research and development services is the most impacted industry, account for 33% of the total labor income earned.

**Figure 90: Top Ten Most Impacted Industries by Labor Income, New York (NASA).**

**The total value added impact of NASA in New York was \$255.7 million in Fiscal Year 2019.** Of this amount, \$9 million (4%) was created by civil service employees and \$153.3 million (60%) was created indirectly by the \$152 million in procurement spending across all industry sectors in New York. \$93.4 million (36%) was generated by increased consumption spending supported by increased earnings.

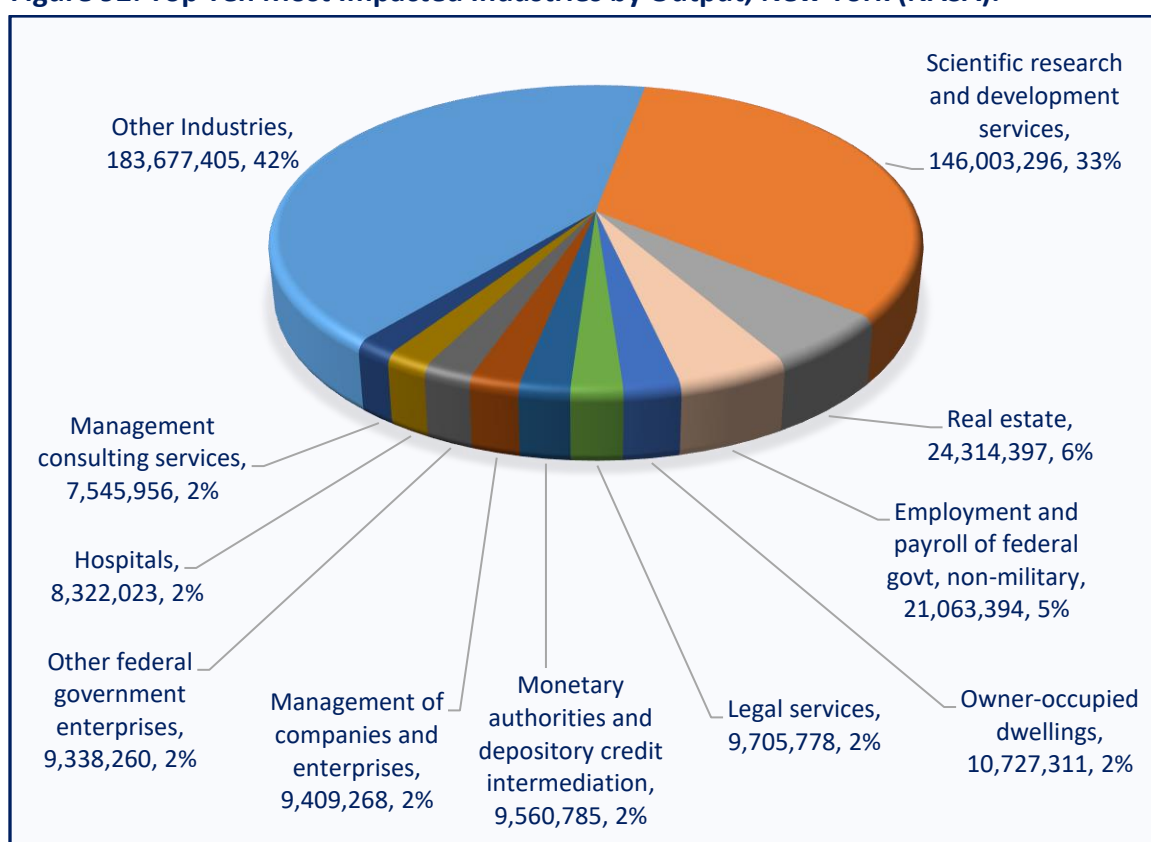
Figure 91 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services and federal government are the most impacted industries. The two industries together account for 35% of the total value added created. NASA activities accounted for an increase of \$77.2 million in value added in scientific research and development services. Eleven (11) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 91: Top Ten Most Impacted Industries by Value Added, New York (NASA).**

**The total output impact of NASA in New York was \$439.7 million in Fiscal Year 2019.**

The direct impact of nearly \$18.9 million constitutes the value of production by NASA employees, accounting for around 4% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$152 million resulted in an additional increase in output (gross sales) of \$122.5 million across all industry sectors (adding up to the indirect total of \$274.5 million in Table 216). Approximately \$146.2 million (33%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of \$146 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 92). Similar to employment, impacts in this industry are largely driven by NASA procurement spending; scientific research and development services accounted for approximately 83% of NASA procurement spending in the state in Fiscal Year 2019. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 92: Top Ten Most Impacted Industries by Output, New York (NASA).**

### 6.34.2. M2M Program Impacts

In 2019, New York had nine M2M-related civil service employees (4 FTEs) with a corresponding labor income of \$397,000. M2M program contracts sourced in the state in the same year totaled \$15.3 million. The total New York employment impact is 188 jobs. The labor income and economic output associated with this employment are \$18 million and \$45.4 million, respectively. The M2M program generates \$2.2 million in tax revenues for the state and local governments in New York (Table 219).

**Table 219: Summary of M2M Program Impacts by Types of Impact, New York.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	397	754	1,576	18
Indirect	112	12,016	15,073	29,485	1,029
Induced	73	5,606	9,454	14,376	1,111
<b>Total</b>	<b>188</b>	<b>18,019</b>	<b>25,281</b>	<b>45,437</b>	<b>2,158</b>
<i>Multiplier</i>	51.6	45.4	33.5	28.8	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-



employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the New York economy. More than 96 percent of the employment and 95 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 220: M2M Program Employment Impacts by Sources of Impact, New York.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	4	55.0	0	0.0	4	1.9	100.0	0.0
Indirect*	0	0.0	112	61.5	112	59.3	0.0	100.0
Induced	3	45.0	70	38.5	73	38.7	4.1	95.9
<b>Total</b>	<b>7</b>	<b>100</b>	<b>182</b>	<b>100</b>	<b>188</b>	<b>100</b>	<b>3.5</b>	<b>96.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 221: M2M Program Output Impacts by Sources of Impact, New York.**

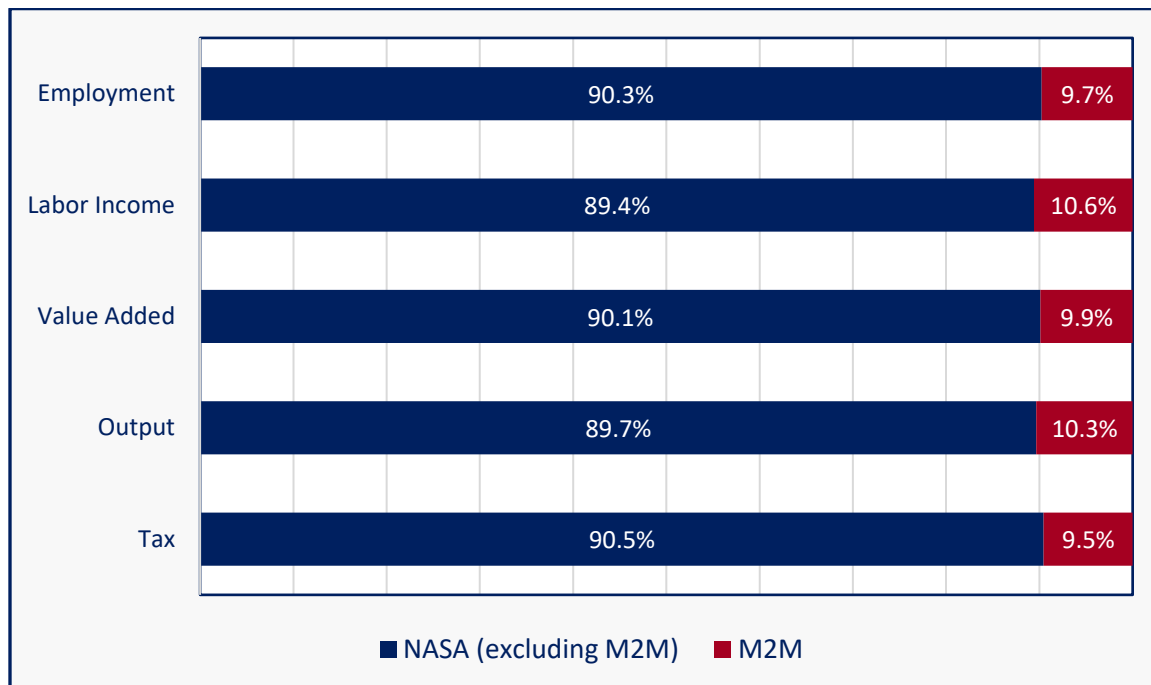
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,576	72.8	0	0.0	1,576	3.5	100.0	0.0
Indirect*	0	0.0	29,485	68.1	29,485	64.9	0.0	100.0
Induced	588	27.2	13,788	31.9	14,376	31.6	4.1	95.9
<b>Total</b>	<b>2,164</b>	<b>100</b>	<b>43,273</b>	<b>100</b>	<b>45,437</b>	<b>100</b>	<b>4.8</b>	<b>95.2</b>

### 6.34.3. The M2M Program's Share of NASA Impacts

Around 10% of overall NASA agency impacts in the state are attributable to the M2M program (Table 222 and Figure 93). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 222: The M2M Program Portion of Overall NASA Impacts, New York.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	1,932	170,430	255,746	439,668	22,623
M2M Portion	188	18,019	25,281	45,437	2,158
M2M Share (%)	9.7%	10.6%	9.9%	10.3%	9.5%

**Figure 93: The M2M Program Portion of Overall NASA Impacts, New York.**

## 6.35. Economic Impacts on the State of North Carolina

### 6.35.1. NASA Impacts

In 2019, 32 NASA civil service employees (20 FTEs) residing in North Carolina earned \$2.9 million in labor income. NASA contracts sourced in North Carolina in the same year totaled \$27 million. The total economic impact resulting from these activities is 408 jobs, \$27.9 million in labor income, and \$84 million in economic output. These economic activities generate \$2.8 million in tax revenues for the state and local governments in North Carolina (Table 223).

**Table 223: Summary of NASA Impacts by Types of Impact, North Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	20	2,851	4,207	8,797	79
Indirect	214	16,360	26,108	46,174	1,241
Induced	174	8,704	15,613	29,020	1,496
<b>Total</b>	<b>408</b>	<b>27,915</b>	<b>45,928</b>	<b>83,991</b>	<b>2,816</b>
<i>Multiplier</i>	<i>20.1</i>	<i>9.8</i>	<i>10.9</i>	<i>9.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the North Carolina economy. Table 224 examines the sources of the employment figures in the second column of Table 223. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Eighty-eight (88) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 12%.

**Table 224: NASA Employment Impacts by Sources of Impact, North Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	20	41.7	0	0.0	20	5.0	100.0	0.0
Indirect*	0	0.0	214	59.5	214	52.4	0.0	100.0
Induced	28	58.3	146	40.5	174	42.7	16.3	83.7
<b>Total</b>	<b>49</b>	<b>100</b>	<b>360</b>	<b>100</b>	<b>408</b>	<b>100</b>	<b>12.0</b>	<b>88.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 225 examines the sources of the output figures in the fifth column of Table 223. Procurement spending is responsible for nearly 84% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 16%.

**Table 225: NASA Output Impacts by Sources of Impact, North Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	8,797	65.0	0	0.0	8,797	10.5	100.0	0.0
Indirect*	0	0.0	46,174	65.5	46,174	55.0	0.0	100.0
Induced	4,741	35.0	24,279	34.5	29,020	34.6	16.3	83.7
<b>Total</b>	<b>13,538</b>	<b>100</b>	<b>70,453</b>	<b>100</b>	<b>83,991</b>	<b>100</b>	<b>16.1</b>	<b>83.9</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.35.2. M2M Program Impacts

In 2019, North Carolina had seven M2M-related civil service employees (3 FTEs) with a corresponding labor income of \$381,000. M2M program contracts sourced in the state in the same year totaled \$4 million. The total North Carolina employment impact is 53 jobs. The labor income and economic output associated with this employment are \$4.1 million and \$12.1 million, respectively. The M2M program generates approximately \$407,000 in tax revenues for the state and local governments in North Carolina (Table 226).

**Table 226: Summary of M2M Program Impacts by Types of Impact, North Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	381	537	1,123	11
Indirect	26	2,391	4,009	6,756	179
Induced	24	1,292	2,345	4,215	217
<b>Total</b>	<b>53</b>	<b>4,065</b>	<b>6,891</b>	<b>12,094</b>	<b>407</b>
<i>Multiplier</i>	<i>20.4</i>	<i>10.7</i>	<i>12.8</i>	<i>10.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the North Carolina economy. More than 88 percent of the employment impacts and 85 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 227: M2M Program Employment Impacts by Sources of Impact, North Carolina.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3	41.1	0	0.0	3	4.9	100.0	0.0
Indirect*	0	0.0	26	56.5	26	49.8	0.0	100.0
Induced	4	58.9	20	43.5	24	45.3	15.5	84.5
<b>Total</b>	<b>6</b>	<b>100</b>	<b>47</b>	<b>100</b>	<b>53</b>	<b>100</b>	<b>11.9</b>	<b>88.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 228: M2M Program Output Impacts by Sources of Impact, North Carolina.**

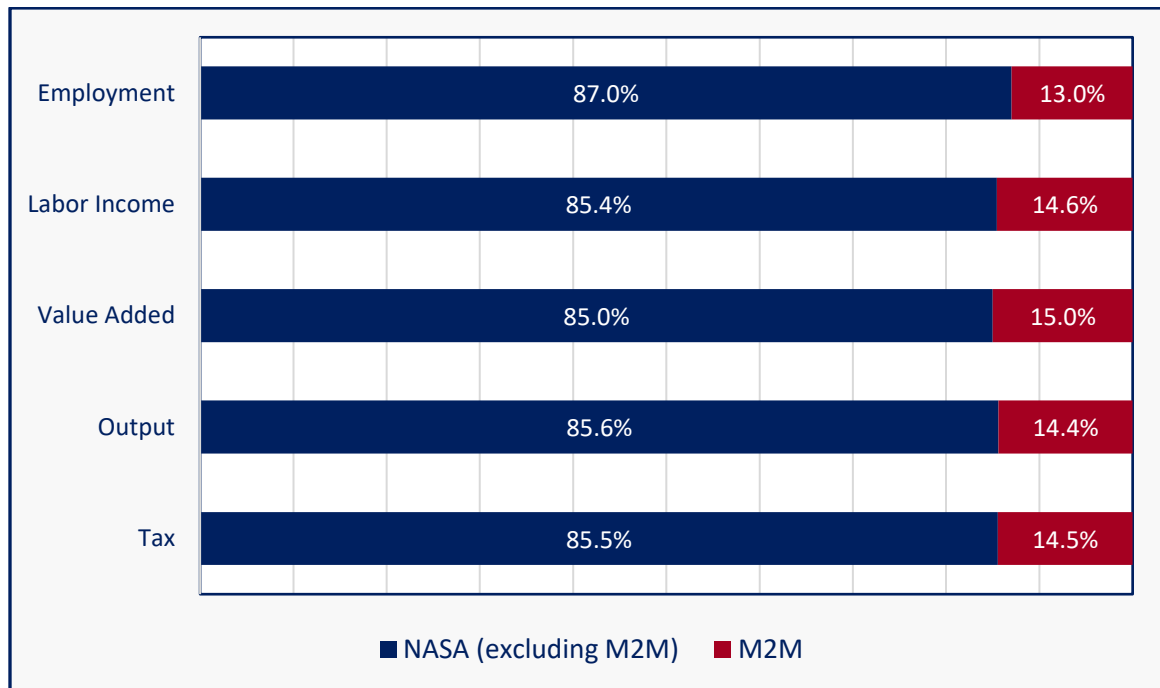
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,123	63.2	0	0.0	1,123	9.3	100.0	0.0
Indirect*	0	0.0	6,756	65.5	6,756	55.9	0.0	100.0
Induced	654	36.8	3,561	34.5	4,215	34.8	15.5	84.5
<b>Total</b>	<b>1,777</b>	<b>100</b>	<b>10,317</b>	<b>100</b>	<b>12,094</b>	<b>100</b>	<b>14.7</b>	<b>85.3</b>

### 6.35.3. The M2M Program's Share of NASA Impacts

Around 14% of overall NASA agency impacts in the state are attributable to the M2M program (Table 229 and Figure 94). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 229: The M2M Program Portion of Overall NASA Impacts, North Carolina.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	408	27,915	45,928	83,991	2,816
M2M Portion	53	4,065	6,891	12,094	407
M2M Share (%)	13.0%	14.6%	15.0%	14.4%	14.5%

**Figure 94: The M2M Program Portion of Overall NASA Impacts, North Carolina.**

## 6.36. Economic Impacts on the State of North Dakota<sup>27</sup>

### 6.36.1. NASA Impacts

In 2019, there were no NASA civil service employees residing in North Dakota. NASA contracts sourced in North Dakota in the same year totaled \$1.5 million. The total economic impact resulting from this procurement activity is 18 jobs, \$1.2 million in labor income, and \$3.2 million in economic output. These economic activities generate nearly \$78,000 in tax revenues for the state and local governments in North Dakota (Table 230).

**Table 230: Summary of NASA Impacts by Types of Impact, North Dakota.**

<b>Impact Type</b>	<b>Employment</b>	<b>Labor Income (\$ thousands)</b>	<b>Value Added (\$ thousands)</b>	<b>Output (\$ thousands)</b>	<b>Tax (\$ thousands)</b>
Direct	0	0	0	0	0
Indirect	11	888	1,208	2,074	34
Induced	7	327	549	1,096	45
<b>Total</b>	<b>18</b>	<b>1,214</b>	<b>1,758</b>	<b>3,170</b>	<b>78</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

<sup>27</sup> North Dakota is the only state with no M2M-related labor force or procurement activity.

## 6.37. Economic Impacts on the State of Ohio

### 6.37.1. NASA Impacts

In 2019, 1,647 NASA civil service employees (1,509 FTEs) residing in Ohio earned \$238.5 million in labor income. NASA contracts sourced in Ohio in the same year totaled nearly \$406.4 million. The total economic impact resulting from these activities is 11,139 jobs, \$805.3 million in labor income, and \$2.3 billion in economic output. These economic activities generate \$76.6 million in tax revenues for the state and local governments in Ohio (Table 231).

The employment multiplier is 7.4, meaning that for every NASA job located in Ohio, an additional 6.4 jobs are supported in the state economy. The output multiplier of 3.5 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$2.5 million worth of output is sustained throughout the state economy.

**Table 231: Summary of NASA Impacts by Types of Impact, Ohio.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,509	238,477	311,800	651,964	3,786
Indirect	4,110	288,360	375,087	717,569	20,808
Induced	5,520	278,498	501,555	930,796	52,043
<b>Total</b>	<b>11,139</b>	<b>805,335</b>	<b>1,188,443</b>	<b>2,300,329</b>	<b>76,637</b>
<i>Multiplier</i>	<i>7.4</i>	<i>3.4</i>	<i>3.8</i>	<i>3.5</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Ohio economy. Table 232 examines the sources of the employment figures in the second column of Table 231. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 62% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 38%.



**Table 232: NASA Employment Impacts by Sources of Impact, Ohio.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1,509	36.0	0	0.0	1,509	13.5	100.0	0.0
Indirect*	0	0.0	4,110	59.2	4,110	36.9	0.0	100.0
Induced	2,688	64.0	2,832	40.8	5,520	49.6	48.7	51.3
<b>Total</b>	<b>4,197</b>	<b>100</b>	<b>6,942</b>	<b>100</b>	<b>11,139</b>	<b>100</b>	<b>37.7</b>	<b>62.3</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 233 examines the sources of the output figures in the fifth column of Table 231. NASA labor force's share of overall NASA output impact is approximately 48% while procurement spending is responsible for nearly 52% of the increase in output in the state economy arising from NASA. The reason that NASA labor force's share of overall output impact is larger than its share in overall employment impact is that NASA employees produce more output per worker than the average employee that is part of the supply chain of NASA procurement.

**Table 233: NASA Output Impacts by Sources of Impact, Ohio.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	651,964	59.0	0	0.0	651,964	28.3	100.0	0.0
Indirect*	0	0.0	717,569	60.1	717,569	31.2	0.0	100.0
Induced	453,558	41.0	477,237	39.9	930,796	40.5	48.7	51.3
<b>Total</b>	<b>1,105,523</b>	<b>100</b>	<b>1,194,807</b>	<b>100</b>	<b>2,300,329</b>	<b>100</b>	<b>48.1</b>	<b>51.9</b>

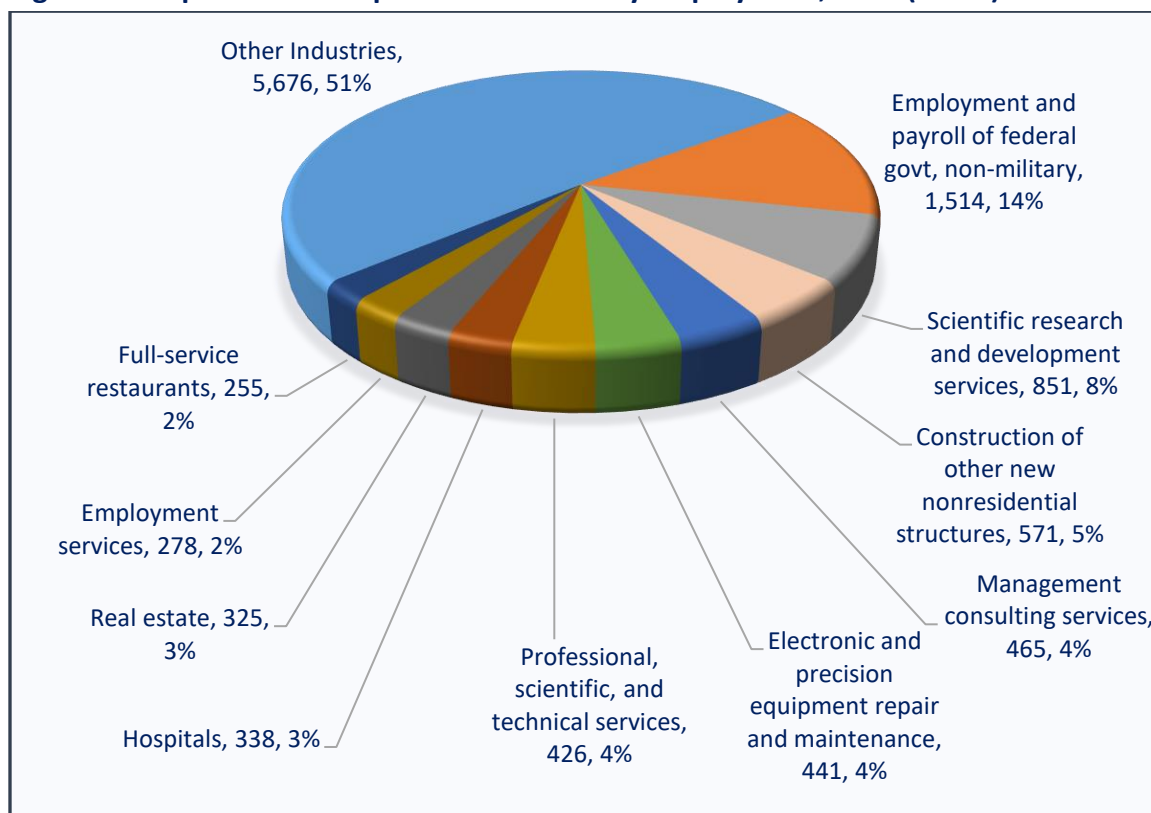
*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

**11,139 jobs in the Ohio economy were supported by NASA activities in Fiscal Year 2019.** Of these, 1,509 (13%) were directly located at NASA centers. As a result of the procurement of goods and services in the Ohio economy, 4,110 additional jobs (37%) were created. The remaining employment—5,520 jobs (50%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 95 depicts the ten most impacted industries by employment. Scientific research and development services, construction, and management consulting services are the most impacted industries, respectively (along with the federal government sector). These four industries together account for 31% of the jobs created. The employment in these industries is driven largely by NASA procurement spending; the three private industries

accounted for approximately 55% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.

**Figure 95: Top Ten Most Impacted Industries by Employment, Ohio (NASA).**

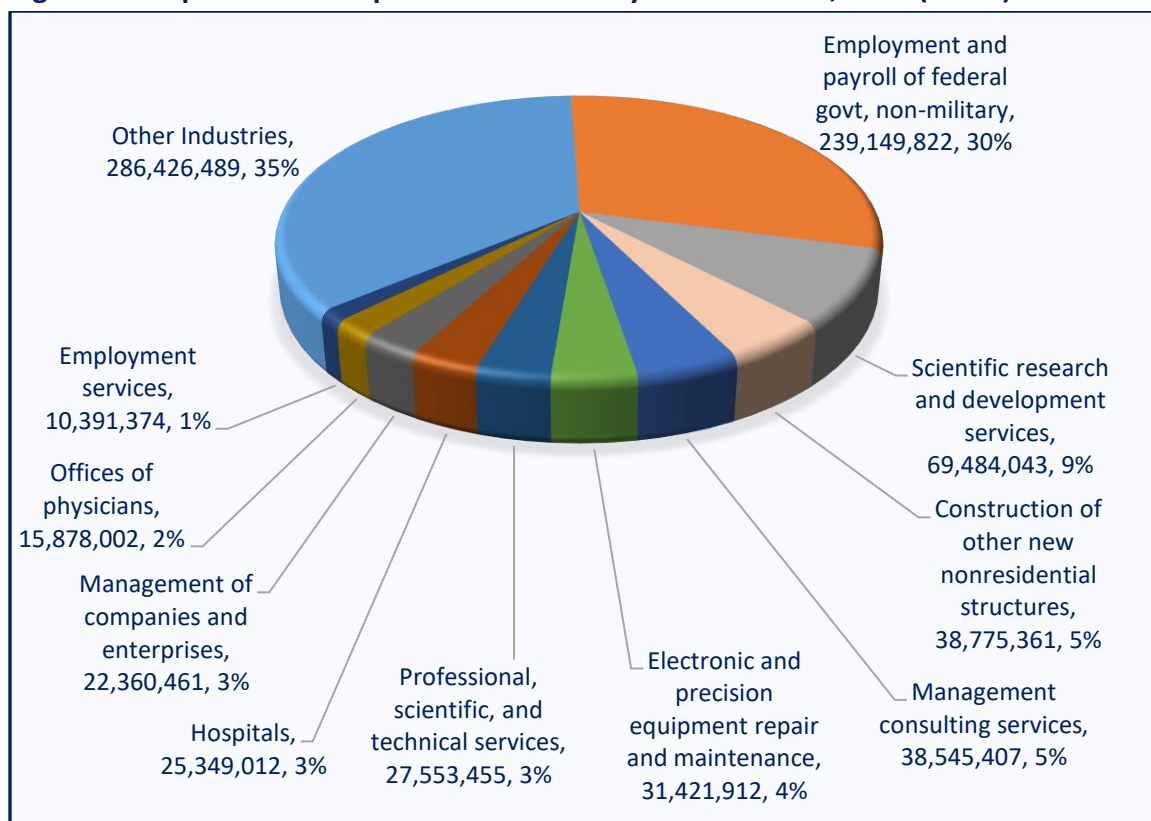


**The total income impact of NASA in Ohio was \$805.3 million in Fiscal Year 2019.** Of this amount, \$238.5 million (30%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$288.4 million (36%). The remaining income (induced impact), estimated to be \$278.5 million (34%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 96 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development services, construction, and management consulting services are the most impacted industries by income (along with the federal government sector). The four industries together account for 49% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee

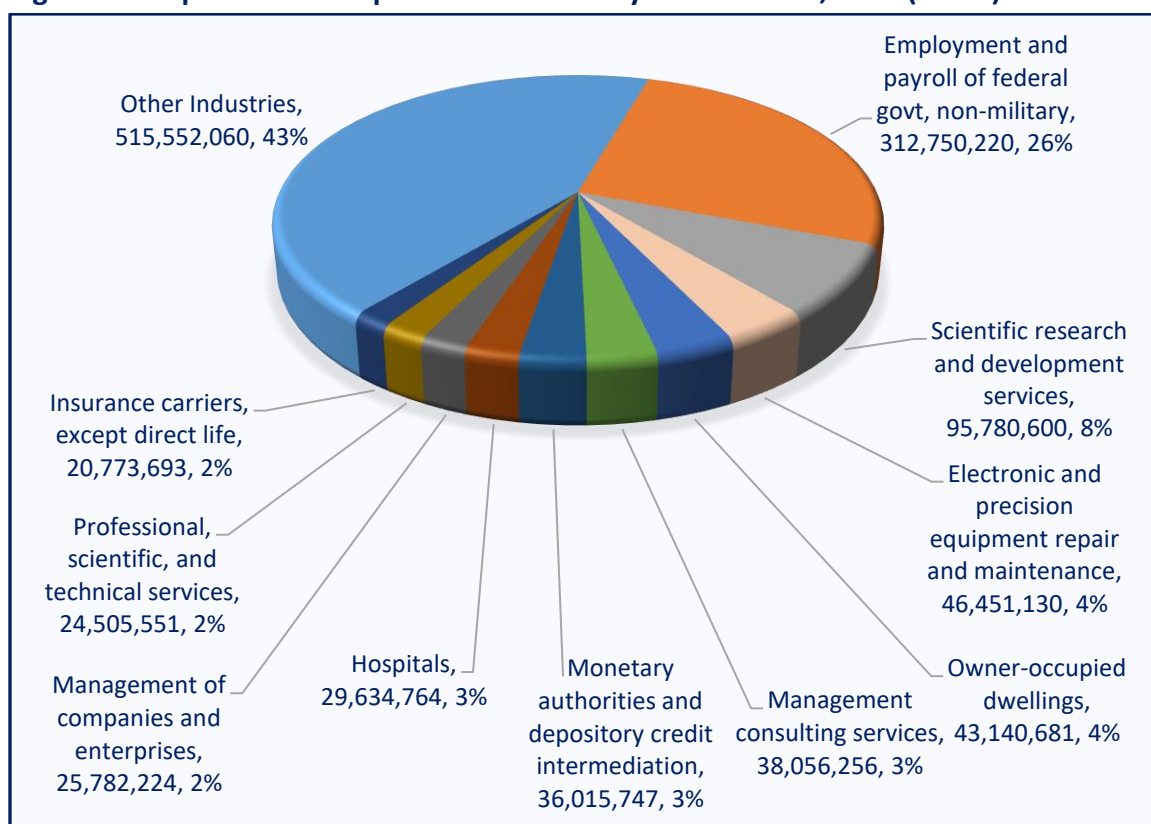
compensation in the scientific research and development services industry was \$83,673 (including benefits), compared to an average of \$57,150 across Ohio.

**Figure 96: Top Ten Most Impacted Industries by Labor Income, Ohio (NASA).**



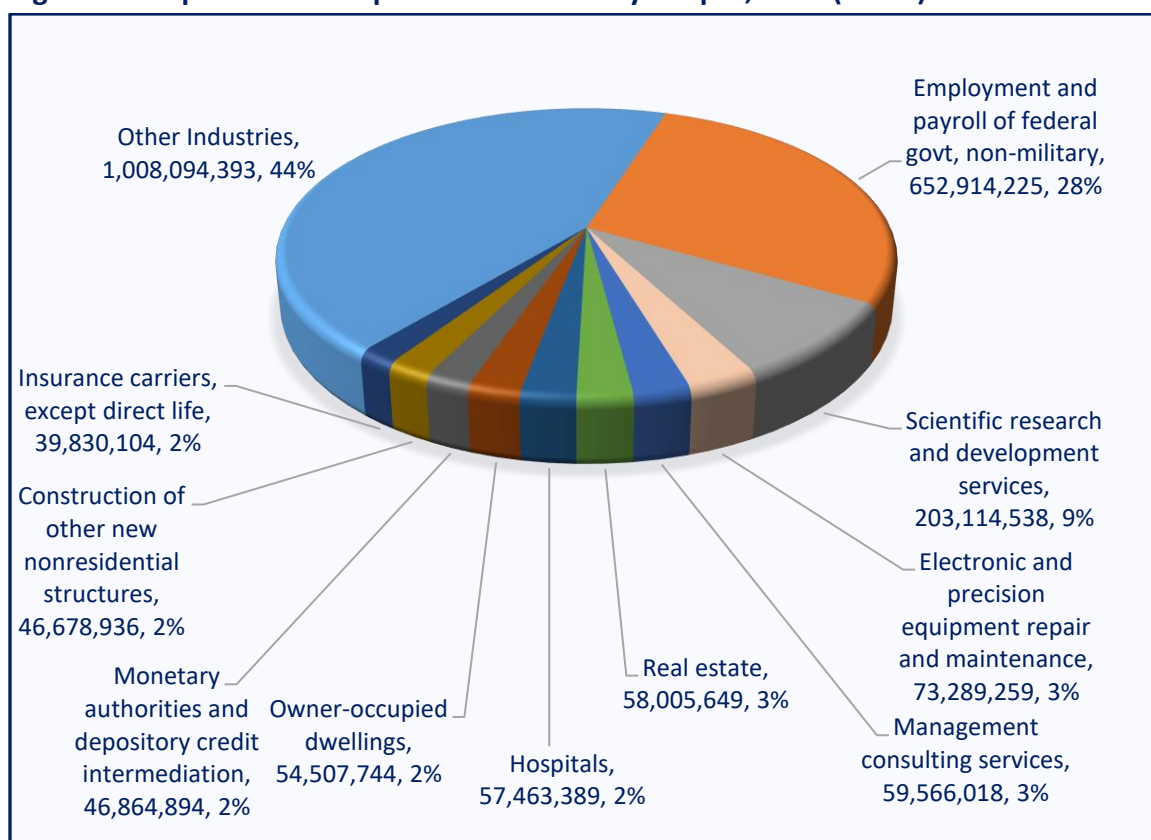
**The total value added impact of NASA in Ohio was \$1.2 billion in Fiscal Year 2019.** Of this amount, \$311.8 million (26%) was created by civil service employees and \$375.1 million (32%) was created indirectly by the \$406.4 million in procurement spending across all industry sectors in Ohio. \$501.6 million (42%) was generated by increased consumption spending supported by increased earnings.

Figure 97 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services and electronic and precision equipment repair and maintenance are the most impacted industries (along with the federal government sector). The three industries together account for 38% of the total value added created. NASA activities accounted for an increase of \$95.8 million in value added in scientific research and development services, and a \$46.5 million increase in value added in electronic and precision equipment repair and maintenance. Three hundred twelve (312) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 97: Top Ten Most Impacted Industries by Value Added, Ohio (NASA).**

**The total output impact of NASA in Ohio was \$2.3 billion in Fiscal Year 2019.** The direct impact of nearly \$652 million constitutes the value of production by NASA employees, accounting for around 28% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$406.4 million resulted in an additional increase in output (gross sales) of \$311.1 million across all industry sectors (adding up to the indirect total of \$717.6 million in Table 231). Approximately \$930.8 million (41%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of \$203.1 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services, a \$73.3 million increase in sales in electronic and precision equipment repair and maintenance, and \$59.6 million increase in sales in management consulting services (Figure 98). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 55% of NASA procurement spending in Fiscal Year 2019. Aside from professional, scientific, and technical services, the output impacts reported in other industries mainly result from increases in consumption spending (induced impacts).

**Figure 98: Top Ten Most Impacted Industries by Output, Ohio (NASA).**

### 6.37.2. M2M Program Impacts

In 2019, Ohio had 571 M2M-related civil service employees (282 FTEs) with a corresponding labor income of \$44.3 million. M2M program contracts sourced in the state in the same year totaled more than \$32.6 million. The total Ohio employment impact is 1,258 jobs. The labor income and economic output associated with this employment are \$104.4 million and \$302.2 million, respectively. The M2M program generates \$8.7 million in tax revenues for the state and local governments in Ohio (Table 234).

**Table 234: Summary of M2M Program Impacts by Types of Impact, Ohio.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	282	44,317	58,350	122,007	704
Indirect	272	22,121	30,724	57,727	1,167
Induced	703	37,932	67,650	122,492	6,852
<b>Total</b>	<b>1,258</b>	<b>104,369</b>	<b>156,724</b>	<b>302,226</b>	<b>8,723</b>
<i>Multiplier</i>	4.5	2.4	2.7	2.5	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Ohio economy. More than 38 percent of the employment impacts and 31 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 235: M2M Program Employment Impacts by Sources of Impact, Ohio.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	282	36.4	0	0.0	282	22.5	100.0	0.0
Indirect*	0	0.0	272	56.5	272	21.6	0.0	100.0
Induced	493	63.6	210	43.5	703	55.9	70.2	29.8
<b>Total</b>	<b>776</b>	<b>100</b>	<b>482</b>	<b>100</b>	<b>1,258</b>	<b>100</b>	<b>61.7</b>	<b>38.3</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 236: M2M Program Output Impacts by Sources of Impact, Ohio.**

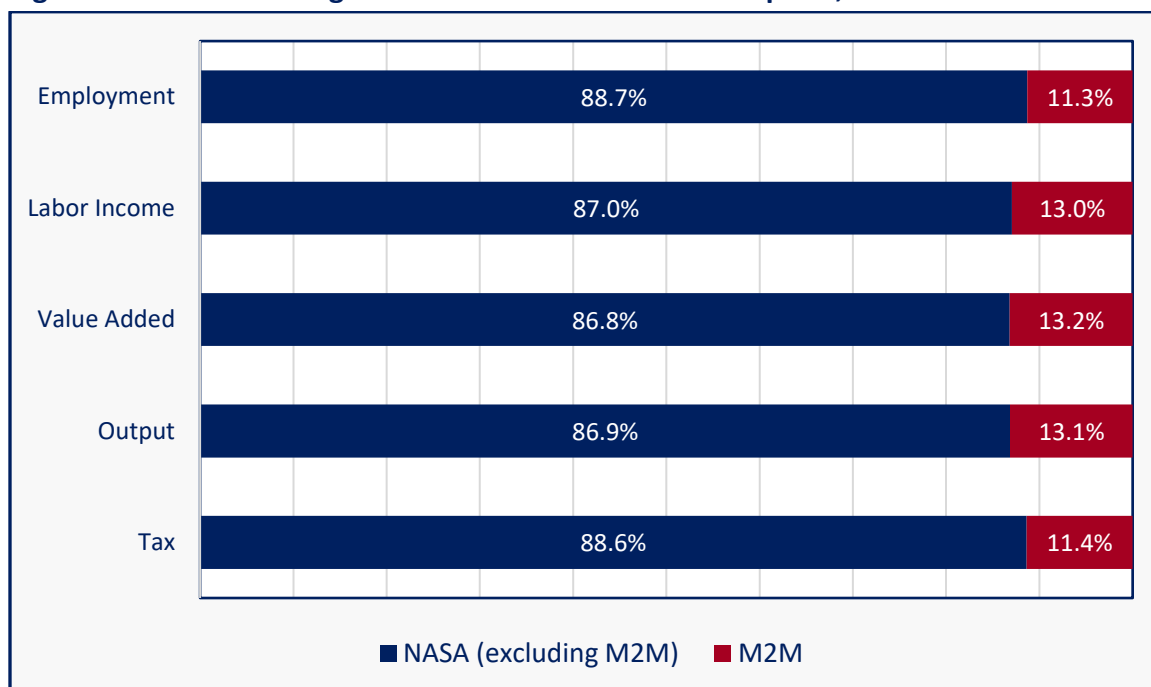
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	122,007	58.7	0	0.0	122,007	40.4	100.0	0.0
Indirect*	0	0.0	57,727	61.3	57,727	19.1	0.0	100.0
Induced	85,981	41.3	36,511	38.7	122,492	40.5	70.2	29.8
<b>Total</b>	<b>207,988</b>	<b>100</b>	<b>94,238</b>	<b>100</b>	<b>302,226</b>	<b>100</b>	<b>68.8</b>	<b>31.2</b>

### 6.37.3. The M2M Program's Share of NASA Impacts

Approximately 12% of overall NASA agency impacts in the state are attributable to the M2M program (Table 237 and Figure 99). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 237: The M2M Program Portion of Overall NASA Impacts, Ohio.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	11,139	805,335	1,188,443	2,300,329	76,637
M2M Portion	1,258	104,369	156,724	302,226	8,723
M2M Share (%)	11.3%	13.0%	13.2%	13.1%	11.4%

**Figure 99: The M2M Program Portion of Overall NASA Impacts, Ohio.**



## 6.38. Economic Impacts on the State of Oklahoma

### 6.38.1. NASA Impacts

In 2019, 10 NASA civil service employees (5 FTEs) residing in Oklahoma earned \$587,000 in labor income. NASA contracts sourced in Oklahoma in the same year totaled \$43.8 million. The total economic impact resulting from these activities is 625 jobs, \$35.5 million in labor income, and \$110.2 million in economic output. These economic activities generate nearly \$3 million in tax revenues for the state and local governments in Oklahoma (Table 238).

**Table 238: Summary of NASA Impacts by Types of Impact, Oklahoma.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	587	1,017	2,126	15
Indirect	420	25,733	33,593	76,823	1,431
Induced	200	9,162	15,970	31,296	1,518
<b>Total</b>	<b>625</b>	<b>35,482</b>	<b>50,579</b>	<b>110,245</b>	<b>2,964</b>
<i>Multiplier</i>	<i>127.0</i>	<i>60.5</i>	<i>49.8</i>	<i>51.9</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Oklahoma economy. Table 239 examines the sources of the employment figures in the second column of Table 238. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 98% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 2%.

**Table 239: NASA Employment Impacts by Sources of Impact, Oklahoma.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	5	49.3	0	0.0	5	0.8	100.0	0.0
Indirect*	0	0.0	420	68.4	420	67.3	0.0	100.0
Induced	5	50.7	195	31.6	200	31.9	2.5	97.5
<b>Total</b>	<b>10</b>	<b>100</b>	<b>615</b>	<b>100</b>	<b>625</b>	<b>100</b>	<b>1.6</b>	<b>98.4</b>



*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 240 examines the sources of the output figures in the fifth column of Table 238. Procurement spending is responsible for more than 97% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 3%.

**Table 240: NASA Output Impacts by Sources of Impact, Oklahoma.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,126	72.8	0	0.0	2,126	1.9	100.0	0.0
Indirect*	0	0.0	76,823	71.6	76,823	69.7	0.0	100.0
Induced	793	27.2	30,503	28.4	31,296	28.4	2.5	97.5
<b>Total</b>	<b>2,919</b>	<b>100</b>	<b>107,326</b>	<b>100</b>	<b>110,245</b>	<b>100</b>	<b>2.6</b>	<b>97.4</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

### 6.38.2. M2M Program Impacts

In 2019, Oklahoma had one M2M-related civil service employee (1 FTE) with a corresponding labor income of \$144,000. M2M program contracts sourced in the state in the same year totaled approximately \$238,000. The total Oklahoma employment impact is five jobs. The labor income and economic output associated with this employment are \$421,000 and \$1.3 million, respectively. The M2M program generates \$32,000 in tax revenues for the state and local governments in Oklahoma (Table 241).

**Table 241: Summary of M2M Program Impacts by Types of Impact, Oklahoma.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	144	207	432	4
Indirect	2	174	212	526	12
Induced	2	103	178	343	17
<b>Total</b>	<b>5</b>	<b>421</b>	<b>597</b>	<b>1,300</b>	<b>32</b>
<i>Multiplier</i>	<i>5.1</i>	<i>2.9</i>	<i>2.9</i>	<i>3.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Oklahoma economy. Fifty-seven (57) percent of the employment impacts and more than fifty-one (51) percent of the output impacts are due to NASA procurement sourced within the state.

**Table 242: M2M Program Employment Impacts by Sources of Impact, Oklahoma.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	45.2	0	0.0	1	19.5	100.0	0.0
Indirect*	0	0.0	2	70.0	2	39.9	0.0	100.0
Induced	1	54.8	1	30.0	2	40.6	58.0	42.0
<b>Total</b>	<b>2</b>	<b>100</b>	<b>3</b>	<b>100</b>	<b>5</b>	<b>100</b>	<b>43.0</b>	<b>57.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 243: M2M Program Output Impacts by Sources of Impact, Oklahoma.**

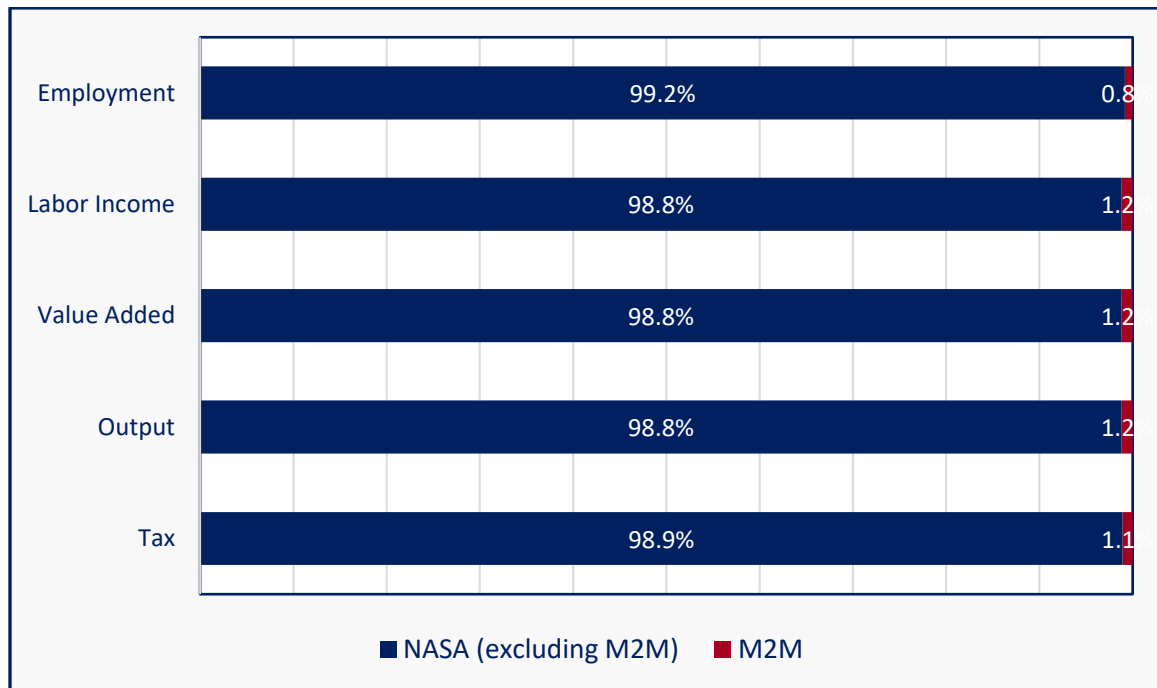
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	432	68.5	0	0.0	432	33.2	100.0	0.0
Indirect*	0	0.0	526	78.5	526	40.4	0.0	100.0
Induced	199	31.5	144	21.5	343	26.4	58.0	42.0
<b>Total</b>	<b>631</b>	<b>100</b>	<b>669</b>	<b>100</b>	<b>1,300</b>	<b>100</b>	<b>48.5</b>	<b>51.5</b>

### 6.38.3. The M2M Program's Share of NASA Impacts

Around 1% of overall NASA agency impacts in the state are attributable to the M2M program (Table 244 and Figure 100). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 244: The M2M Program Portion of Overall NASA Impacts, Oklahoma.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	625	35,482	50,579	110,245	2,964
M2M Portion	5	421	597	1,300	32
M2M Share (%)	0.8%	1.2%	1.2%	1.2%	1.1%

**Figure 100: The M2M Program Portion of Overall NASA Impacts, Oklahoma.**

## 6.39. Economic Impacts on the State of Oregon

### 6.39.1. NASA Impacts

In 2019, 8 NASA civil service employees (5 FTEs) residing in Oregon earned nearly \$777,000 in labor income. NASA contracts sourced in Oregon in the same year totaled \$16.3 million. The total economic impact resulting from these activities is 207 jobs, \$15.1 million in labor income, and \$43.3 million in economic output. These economic activities generate \$1.6 million in tax revenues for the state and local governments in Oregon (Table 245).

**Table 245: Summary of NASA Impacts by Types of Impact, Oregon.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	777	1,031	2,155	35
Indirect	113	9,575	15,917	26,905	826
Induced	90	4,712	7,953	14,285	727
<b>Total</b>	<b>207</b>	<b>15,064</b>	<b>24,901</b>	<b>43,345</b>	<b>1,588</b>
<i>Multiplier</i>	<i>41.5</i>	<i>19.4</i>	<i>24.2</i>	<i>20.1</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Oregon economy. Table 246 examines the sources of the employment figures in the second column of Table 245. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 94% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 6%.

**Table 246: NASA Employment Impacts by Sources of Impact, Oregon.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	5	39.6	0	0.0	5	2.4	100.0	0.0
Indirect*	0	0.0	113	57.9	113	54.4	0.0	100.0
Induced	8	60.4	82	42.1	90	43.2	8.5	91.5
<b>Total</b>	<b>13</b>	<b>100</b>	<b>194</b>	<b>100</b>	<b>207</b>	<b>100</b>	<b>6.1</b>	<b>93.9</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 247 examines the sources of the output figures in the fifth column of Table 245. Procurement spending is responsible for more than 92% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 8%.

**Table 247: NASA Output Impacts by Sources of Impact, Oregon.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,155	63.9	0	0.0	2,155	5.0	100.0	0.0
Indirect*	0	0.0	26,905	67.3	26,905	62.1	0.0	100.0
Induced	1,216	36.1	13,069	32.7	14,285	33.0	8.5	91.5
<b>Total</b>	<b>3,371</b>	<b>100</b>	<b>39,974</b>	<b>100</b>	<b>43,345</b>	<b>100</b>	<b>7.8</b>	<b>92.2</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.39.2. M2M Program Impacts

In 2019, Oregon had two M2M-related civil service employees (1 FTE) with a corresponding labor income of \$109,000. M2M program contracts sourced in the state in the same year totaled \$801,000. The total Oregon employment impact is nine jobs. The labor income and economic output associated with this employment are \$878,000 and \$2.3 million, respectively. The M2M program generates \$85,000 in tax revenues for the state and local governments in Oregon (Table 248).

**Table 248: Summary of M2M Program Impacts by Types of Impact, Oregon.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	109	142	298	5
Indirect	4	509	875	1,268	42
Induced	5	259	436	757	39
<b>Total</b>	<b>9</b>	<b>878</b>	<b>1,454</b>	<b>2,323</b>	<b>85</b>
<i>Multiplier</i>	<i>13.4</i>	<i>8.0</i>	<i>10.2</i>	<i>7.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Oregon economy. More than 81 percent of the employment impacts and nearly 80 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 249: M2M Program Employment Impacts by Sources of Impact, Oregon.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	39.5	0	0.0	1	7.5	100.0	0.0
Indirect*	0	0.0	4	52.7	4	42.7	0.0	100.0
Induced	1	60.5	4	47.3	5	49.8	23.0	77.0
<b>Total</b>	<b>2</b>	<b>100</b>	<b>7</b>	<b>100</b>	<b>9</b>	<b>100</b>	<b>18.9</b>	<b>81.1</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 250: M2M Program Output Impacts by Sources of Impact, Oregon.**

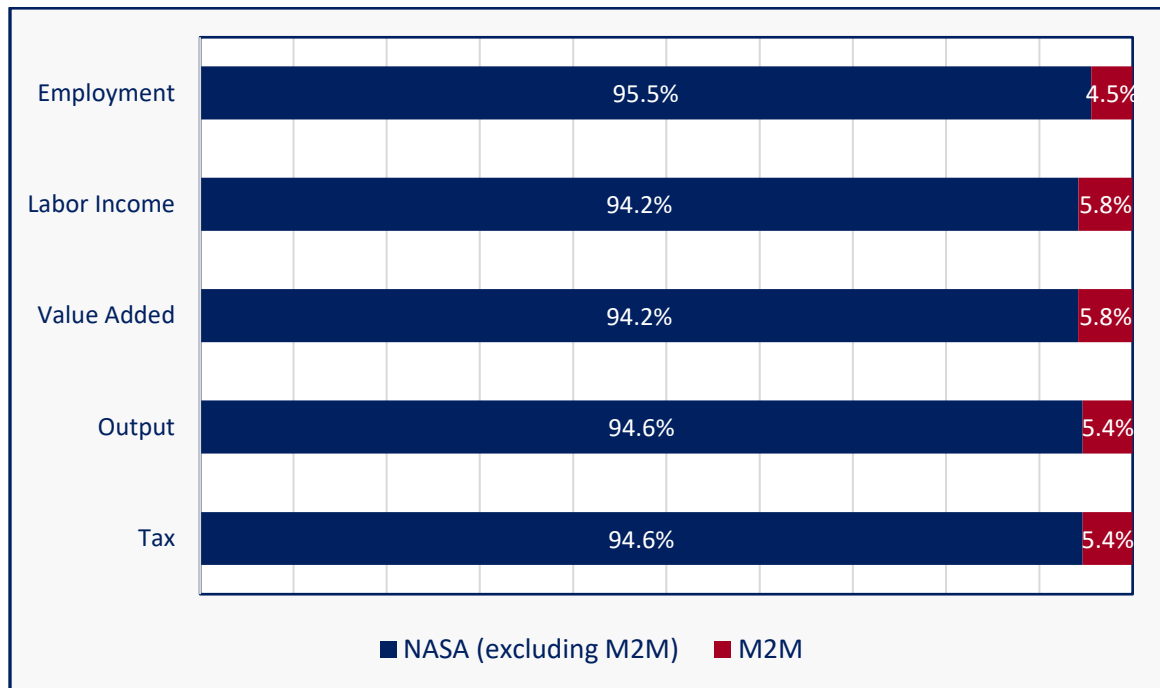
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	298	63.1	0	0.0	298	12.8	100.0	0.0
Indirect*	0	0.0	1,268	68.5	1,268	54.6	0.0	100.0
Induced	174	36.9	583	31.5	757	32.6	23.0	77.0
<b>Total</b>	<b>472</b>	<b>100</b>	<b>1,851</b>	<b>100</b>	<b>2,323</b>	<b>100</b>	<b>20.3</b>	<b>79.7</b>

### 6.39.3. The M2M Program's Share of NASA Impacts

Approximately 5% of overall NASA agency impacts in the state are attributable to the M2M program (Table 251 and Figure 101). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 251: The M2M Program Portion of Overall NASA Impacts, Oregon.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	207	15,064	24,901	43,345	1,588
M2M Portion	9	878	1,454	2,323	85
M2M Share (%)	4.5%	5.8%	5.8%	5.4%	5.4%

**Figure 101: The M2M Program Portion of Overall NASA Impacts, Oregon.**

## 6.40. Economic Impacts on the State of Pennsylvania

### 6.40.1. NASA Impacts

In 2019, 49 NASA civil service employees (28 FTEs) residing in Pennsylvania earned more than \$4.5 million in labor income. NASA contracts sourced in Pennsylvania in the same year totaled \$75.4 million. The total economic impact resulting from these activities is 1,080 jobs, \$86.2 million in labor income, and \$231.5 million in economic output. These economic activities generate nearly \$8.5 million in tax revenues for the state and local governments in Pennsylvania (Table 252).

**Table 252: Summary of NASA Impacts by Types of Impact, Pennsylvania.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	28	4,546	5,776	12,078	114
Indirect	533	51,590	73,478	132,107	3,629
Induced	519	30,108	49,431	87,309	4,752
<b>Total</b>	<b>1,080</b>	<b>86,245</b>	<b>128,686</b>	<b>231,495</b>	<b>8,495</b>
<i>Multiplier</i>	38.6	19.0	22.3	19.2	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Pennsylvania economy. Table 253 examines the sources of the employment figures in the second column of Table 252. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-three (93) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 7%.

**Table 253: NASA Employment Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	28	36.8	0	0.0	28	2.6	100.0	0.0
Indirect*	0	0.0	533	53.1	533	49.4	0.0	100.0
Induced	48	63.2	471	46.9	519	48.0	9.3	90.7
<b>Total</b>	<b>76</b>	<b>100</b>	<b>1,004</b>	<b>100</b>	<b>1,080</b>	<b>100</b>	<b>7.0</b>	<b>93.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.



Table 254 examines the sources of the output figures in the fifth column of Table 252. Procurement spending is responsible for more than 91% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 9%.

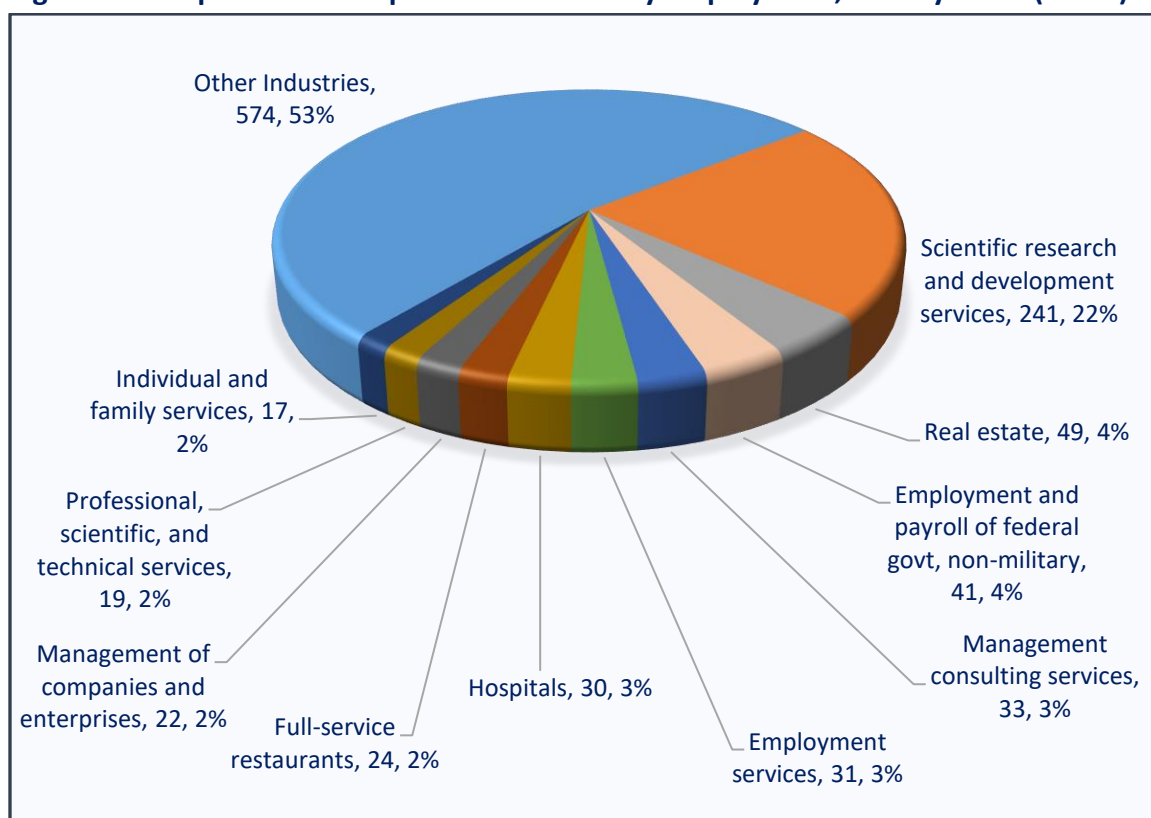
**Table 254: NASA Output Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	12,078	59.9	0	0.0	12,078	5.2	100.0	0.0
Indirect*	0	0.0	132,107	62.5	132,107	57.1	0.0	100.0
Induced	8,098	40.1	79,212	37.5	87,309	37.7	9.3	90.7
<b>Total</b>	<b>20,176</b>	<b>100</b>	<b>211,319</b>	<b>100</b>	<b>231,495</b>	<b>100</b>	<b>8.7</b>	<b>91.3</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

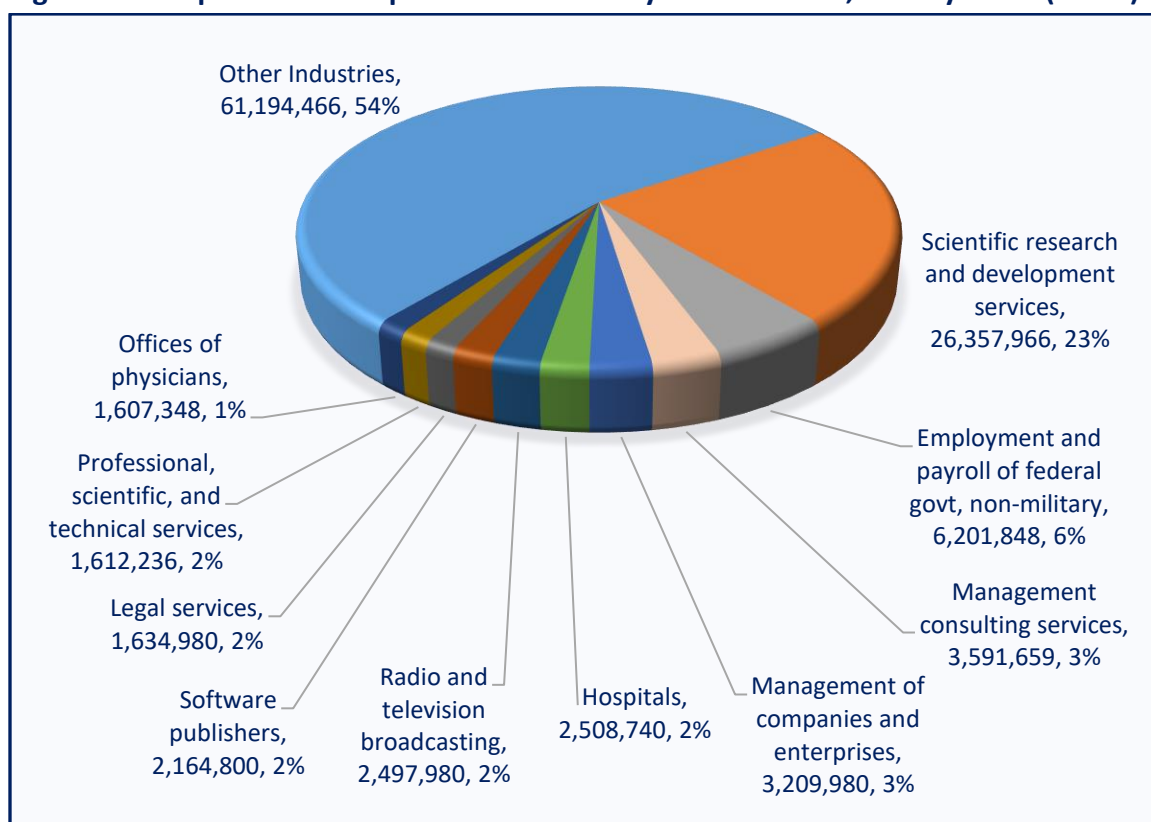
**1,080 jobs in the Pennsylvania economy were supported by NASA activities in Fiscal Year 2019.** Of these, 28 (3%) were directly located at NASA centers. As a result of the procurement of goods and services in the Pennsylvania economy, 533 additional jobs (49%) were created. The remaining employment—519 jobs (48%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 102 depicts the ten most impacted industries by employment. Scientific research and development services is the most impacted industry, accounting for 22% of the jobs created. The impact in the federal government sector represents mainly civil service employees working for NASA.

**Figure 102: Top Ten Most Impacted Industries by Employment, Pennsylvania (NASA).****The total income impact of NASA in Pennsylvania was \$86.2 million in Fiscal Year 2019.**

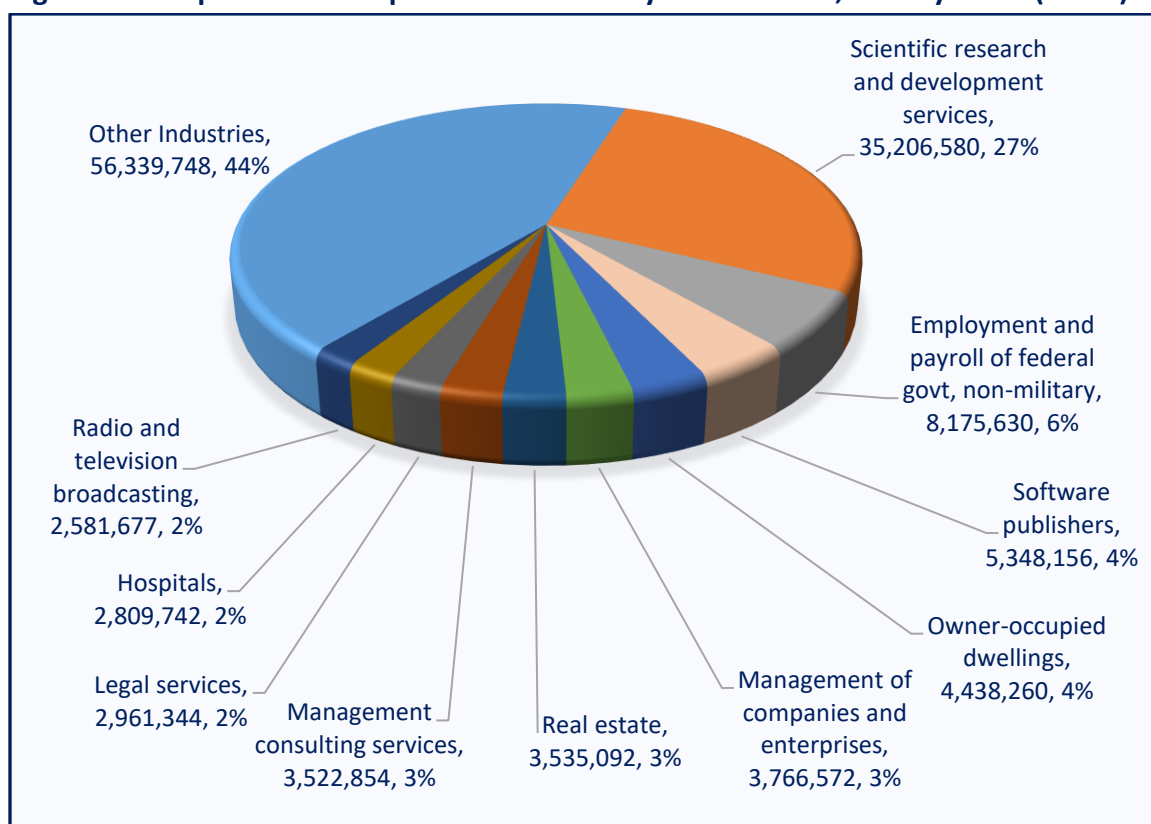
Of this amount, more than \$4.5 million (5%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$51.6 million (60%). The remaining income (induced impact), estimated to be \$30.1 million (35%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 103 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development services is the most impacted industry by income (along with the federal government sector). The two industries together account for 29% of the total labor income earned.

**Figure 103: Top Ten Most Impacted Industries by Labor Income, Pennsylvania (NASA).**

**The total value added impact of NASA in Pennsylvania was \$128.7 million in Fiscal Year 2019.** Of this amount, approximately \$5.8 million (5%) was created by civil service employees and \$73.5 million (57%) was created indirectly by the \$75.4 million in procurement spending across all industry sectors in Pennsylvania. \$49.4 million (38%) was generated by increased consumption spending supported by increased earnings.

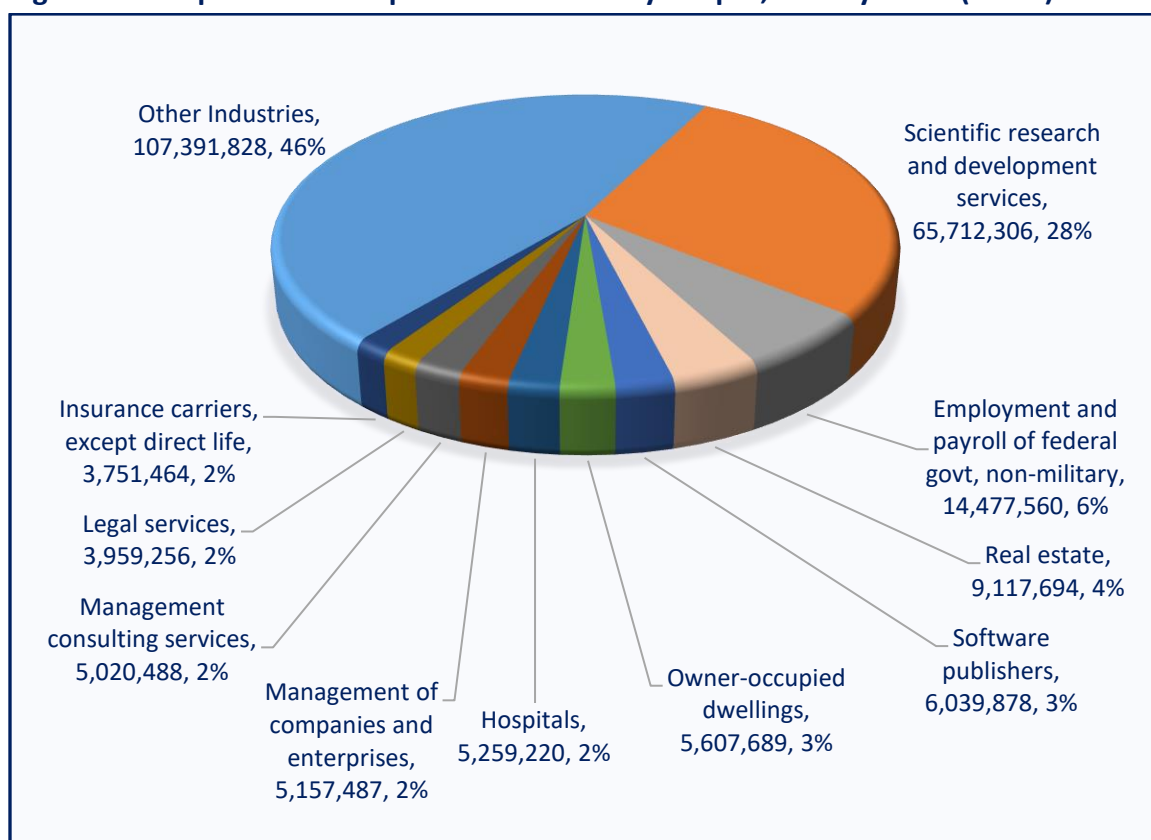
Figure 104 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development services is the most impacted industry (along with the federal government sector). The two industries together account for 33% of the total value added created. NASA activities accounted for an increase of more than \$35.2 million in value added in scientific research and development services. Eight (8) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 104: Top Ten Most Impacted Industries by Value Added, Pennsylvania (NASA).**

**The total output impact of NASA in Pennsylvania was \$231.5 million in Fiscal Year 2019.**

The direct impact of approximately \$12.1 million constitutes the value of production by NASA employees, accounting for around 5% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$75.4 million resulted in an additional increase in output (gross sales) of \$56.7 million across all industry sectors (adding up to the indirect total of \$132.1 million in Table 252). Around \$87.3 million (38%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$65.7 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services. Aside from software publishers and management consulting services, the output impacts reported in other industries mainly result from increases in consumption spending (induced impacts).

**Figure 105: Top Ten Most Impacted Industries by Output, Pennsylvania (NASA).**

#### 6.40.2. M2M Program Impacts

In 2019, Pennsylvania had nine M2M-related civil service employees (3 FTEs) with a corresponding labor income of \$290,000. M2M program contracts sourced in the state in the same year totaled more than \$32.1 million. The total Pennsylvania employment impact is 415 jobs. The labor income and economic output associated with this employment are \$36.2 million and \$91.7 million, respectively. The M2M program generates \$3.4 million in tax revenues for the state and local governments in Pennsylvania (Table 255).

**Table 255: Summary of M2M Program Impacts by Types of Impact, Pennsylvania.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	290	599	1,252	7
Indirect	205	22,815	32,149	54,513	1,459
Induced	207	13,097	21,113	35,964	1,957
<b>Total</b>	<b>415</b>	<b>36,202</b>	<b>53,860</b>	<b>91,728</b>	<b>3,424</b>
<i>Multiplier</i>	<i>143.3</i>	<i>124.8</i>	<i>90.0</i>	<i>73.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Pennsylvania economy. More than 98 percent of the employment and output impacts are due to NASA procurement sourced within the state.

**Table 256: M2M Program Employment Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	3	48.6	0	0.0	3	0.7	100.0	0.0
Indirect*	0	0.0	205	50.2	205	49.5	0.0	100.0
Induced	3	51.4	204	49.8	207	49.8	1.5	98.5
<b>Total</b>	<b>6</b>	<b>100</b>	<b>409</b>	<b>100</b>	<b>415</b>	<b>100</b>	<b>1.4</b>	<b>98.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 257: M2M Program Output Impacts by Sources of Impact, Pennsylvania.**

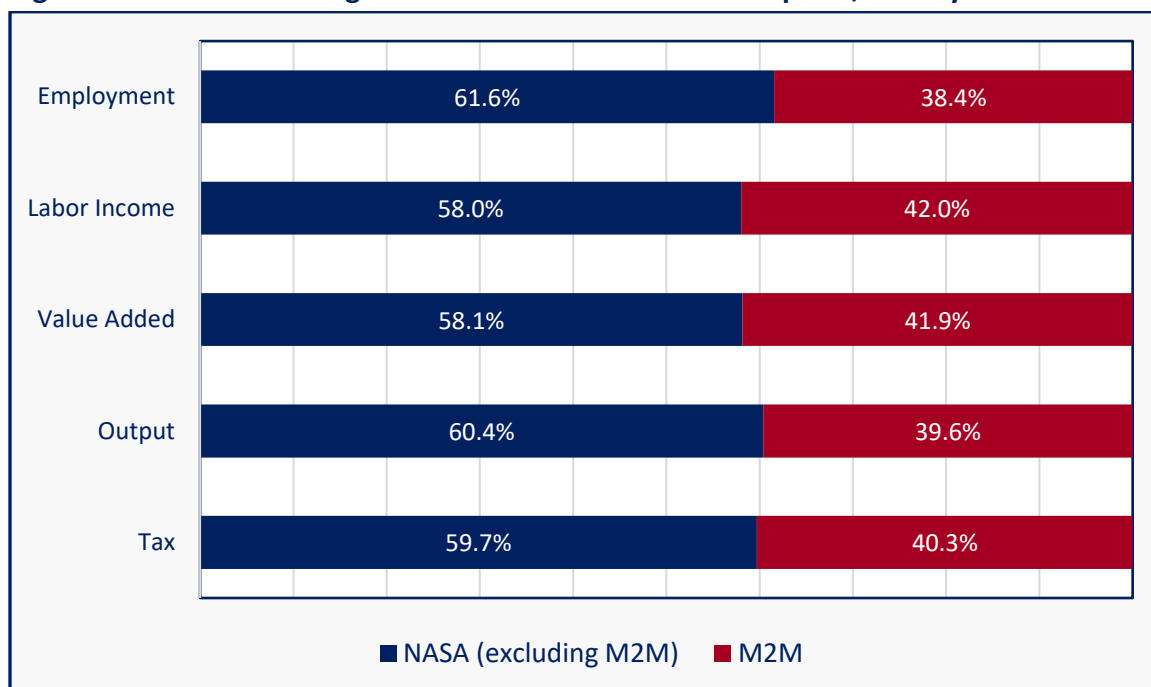
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,252	70.1	0	0.0	1,252	1.4	100.0	0.0
Indirect*	0	0.0	54,513	60.6	54,513	59.4	0.0	100.0
Induced	533	29.9	35,431	39.4	35,964	39.2	1.5	98.5
<b>Total</b>	<b>1,785</b>	<b>100</b>	<b>89,944</b>	<b>100</b>	<b>91,728</b>	<b>100</b>	<b>1.9</b>	<b>98.1</b>

### 6.40.3. The M2M Program's Share of NASA Impacts

Approximately 40% of overall NASA agency impacts in the state are attributable to the M2M program (Table 258 and Figure 106). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 258: The M2M Program Portion of Overall NASA Impacts, Pennsylvania.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	1,080	86,245	128,686	231,495	8,495
M2M Portion	415	36,202	53,860	91,728	3,424
M2M Share (%)	38.4%	42.0%	41.9%	39.6%	40.3%

**Figure 106: The M2M Program Portion of Overall NASA Impacts, Pennsylvania.**

## 6.41. Economic Impacts on the State of Rhode Island

### 6.41.1. NASA Impacts

In 2019, 2 NASA civil service employees (1 FTE) residing in Rhode Island earned \$51,000 in labor income. NASA contracts sourced in Rhode Island in the same year totaled approximately \$1.7 million. The total economic impact resulting from these activities is 25 jobs, \$1.6 million in labor income, and \$4.8 million in economic output. These economic activities generate \$195,000 in tax revenues for the state and local governments in Rhode Island (Table 259).

**Table 259: Summary of NASA Impacts by Types of Impact, Rhode Island.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	51	140	293	2
Indirect	15	1,047	1,543	3,024	96
Induced	9	485	853	1,451	97
<b>Total</b>	<b>25</b>	<b>1,583</b>	<b>2,536</b>	<b>4,768</b>	<b>195</b>
<i>Multiplier</i>	<i>36.4</i>	<i>31.1</i>	<i>18.1</i>	<i>16.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Rhode Island economy. Table 260 examines the sources of the employment figures in the second column of Table 259. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 95% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 5%.

**Table 260: NASA Employment Impacts by Sources of Impact, Rhode Island.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	58.8	0	0.0	1	2.8	100.0	0.0
Indirect*	0	0.0	15	62.1	15	59.2	0.0	100.0
Induced	<1	41.2	9	37.9	9	38.1	5.1	94.9
<b>Total</b>	<b>1</b>	<b>100</b>	<b>24</b>	<b>100</b>	<b>25</b>	<b>100</b>	<b>4.7</b>	<b>95.3</b>



*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 261 examines the sources of the output figures in the fifth column of Table 259. Procurement spending is responsible for 92% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 8%.

**Table 261: NASA Output Impacts by Sources of Impact, Rhode Island.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	293	80.0	0	0.0	293	6.1	100.0	0.0
Indirect*	0	0.0	3,024	68.7	3,024	63.4	0.0	100.0
Induced	73	20.0	1,377	31.3	1,451	30.4	5.1	94.9
<b>Total</b>	<b>366</b>	<b>100</b>	<b>4,401</b>	<b>100</b>	<b>4,768</b>	<b>100</b>	<b>7.7</b>	<b>92.3</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

### 6.41.2. M2M Program Impacts

There were no M2M-specific NASA employees in Rhode Island in FY 2019, but \$88,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is less than one job, \$53,000 in labor income, and \$178,000 worth of output (Table 262).

**Table 262: Summary of M2M Program Impacts by Types of Impact, Rhode Island.**

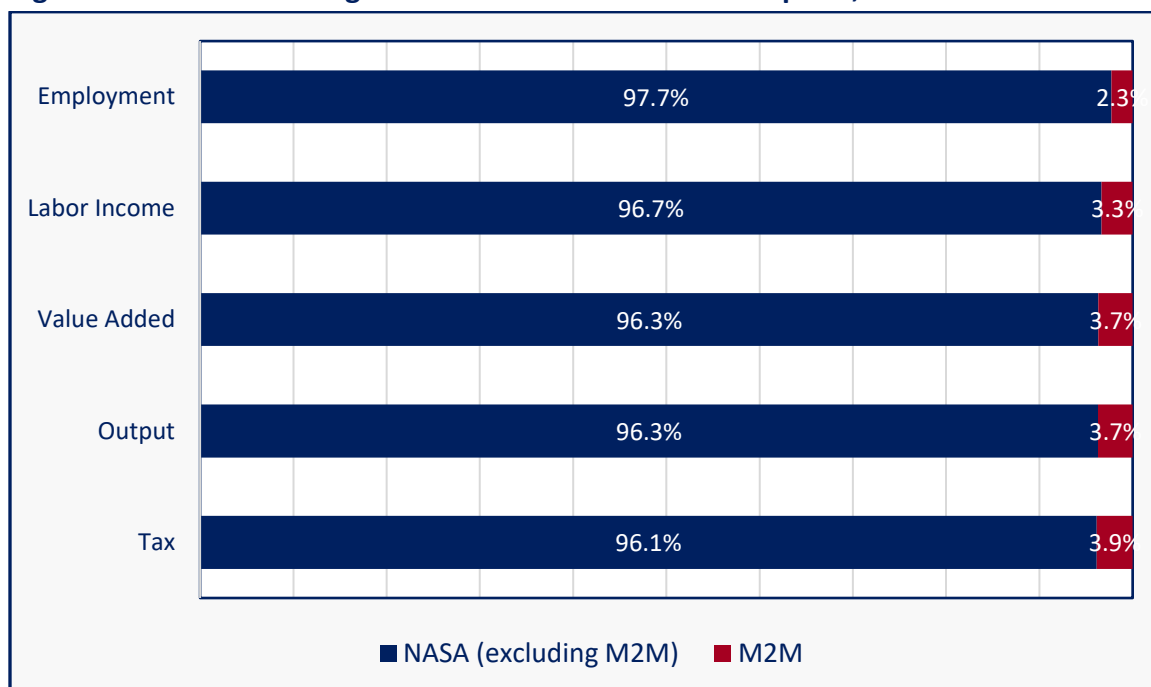
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	<1	38	68	136	5
Induced	<1	15	25	42	3
<b>Total</b>	<b>1</b>	<b>53</b>	<b>93</b>	<b>178</b>	<b>8</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.41.3. The M2M Program's Share of NASA Impacts

Approximately 3% of overall NASA agency impacts in the state are attributable to the M2M program (Table 263 and Figure 107). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 263: The M2M Program Portion of Overall NASA Impacts, Rhode Island.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	25	1,583	2,536	4,768	195
M2M Portion	1	53	93	178	8
M2M Share (%)	2.3%	3.3%	3.7%	3.7%	3.9%

**Figure 107: The M2M Program Portion of Overall NASA Impacts, Rhode Island.**

## 6.42. Economic Impacts on the State of South Carolina

### 6.42.1. NASA Impacts

In 2019, 14 NASA civil service employees (9 FTEs) residing in South Carolina earned \$1.3 million in labor income. NASA contracts sourced in South Carolina in the same year totaled \$12.4 million. The total economic impact resulting from these activities is 204 jobs, \$12.6 million in labor income, and \$36 million in economic output. These economic activities generate \$1.3 million in tax revenues for the state and local governments in South Carolina (Table 264).

**Table 264: Summary of NASA Impacts by Types of Impact, South Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	1,331	1,826	3,818	32
Indirect	116	7,836	10,979	20,625	630
Induced	78	3,410	5,999	11,607	663
<b>Total</b>	<b>204</b>	<b>12,578</b>	<b>18,804</b>	<b>36,049</b>	<b>1,326</b>
<i>Multiplier</i>	<i>23.0</i>	<i>9.4</i>	<i>10.3</i>	<i>9.4</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the South Carolina economy. Table 265 examines the sources of the employment figures in the second column of Table 264. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 90% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 10%.

**Table 265: NASA Employment Impacts by Sources of Impact, South Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	9	41.5	0	0.0	9	4.3	100.0	0.0
Indirect*	0	0.0	116	63.9	116	57.2	0.0	100.0
Induced	12	58.5	66	36.1	78	38.5	15.9	84.1
<b>Total</b>	<b>21</b>	<b>100</b>	<b>182</b>	<b>100</b>	<b>204</b>	<b>100</b>	<b>10.5</b>	<b>89.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 266 examines the sources of the output figures in the fifth column of Table 264. Procurement spending is responsible for 84% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 16%.

**Table 266: NASA Output Impacts by Sources of Impact, South Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	3,818	67.4	0	0.0	3,818	10.6	100.0	0.0
Indirect*	0	0.0	20,625	67.9	20,625	57.2	0.0	100.0
Induced	1,849	32.6	9,758	32.1	11,607	32.2	15.9	84.1
<b>Total</b>	<b>5,667</b>	<b>100</b>	<b>30,382</b>	<b>100</b>	<b>36,049</b>	<b>100</b>	<b>15.7</b>	<b>84.3</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.42.2. M2M Program Impacts

In 2019, South Carolina had three M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$246,000. M2M program contracts sourced in the state in the same year totaled approximately \$292,000. The total South Carolina employment impact is 11 jobs. The labor income and economic output associated with this employment are \$822,000 and \$2.8 million, respectively. The M2M program generates approximately \$77,000 in tax revenues for the state and local governments in South Carolina (Table 267).

**Table 267: Summary of M2M Program Impacts by Types of Impact, South Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	246	374	782	6
Indirect	4	326	459	1,144	23
Induced	5	250	437	838	48
<b>Total</b>	<b>11</b>	<b>822</b>	<b>1,270</b>	<b>2,763</b>	<b>77</b>
<i>Multiplier</i>	5.9	3.3	3.4	3.5	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the South Carolina economy. Approximately 62 percent of the employment impacts and 58 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 268: M2M Program Employment Impacts by Sources of Impact, South Carolina.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	43.8	0	0.0	2	16.9	100.0	0.0
Indirect*	0	0.0	4	56.0	4	34.4	0.0	100.0
Induced	2	56.2	3	44.0	5	48.7	44.5	55.5
<b>Total</b>	<b>4</b>	<b>100</b>	<b>7</b>	<b>100</b>	<b>11</b>	<b>100</b>	<b>38.5</b>	<b>61.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 269: M2M Program Output Impacts by Sources of Impact, South Carolina.**

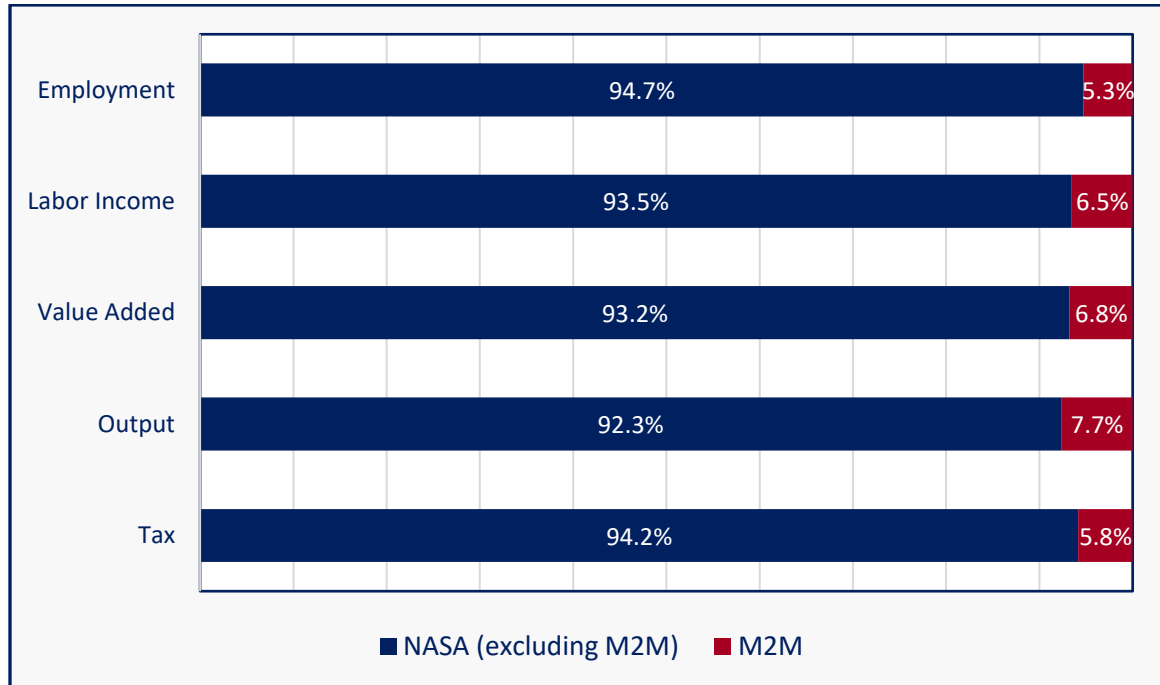
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	782	67.7	0	0.0	782	28.3	100.0	0.0
Indirect*	0	0.0	1,144	71.1	1,144	41.4	0.0	100.0
Induced	373	32.3	465	28.9	838	30.3	44.5	55.5
<b>Total</b>	<b>1,154</b>	<b>100</b>	<b>1,609</b>	<b>100</b>	<b>2,763</b>	<b>100</b>	<b>41.8</b>	<b>58.2</b>

### 6.42.3. The M2M Program's Share of NASA Impacts

Approximately 6% of overall NASA agency impacts in the state are attributable to the M2M program (Table 270 and Figure 108). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 270: The M2M Program Portion of Overall NASA Impacts, South Carolina.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	204	12,578	18,804	36,049	1,326
M2M Portion	11	822	1,270	2,763	77
M2M Share (%)	5.3%	6.5%	6.8%	7.7%	5.8%

**Figure 108: The M2M Program Portion of Overall NASA Impacts, South Carolina.**

## 6.43. Economic Impacts on the State of South Dakota

### 6.43.1. NASA Impacts

In 2019, 5 NASA civil service employees (2 FTEs) residing in South Dakota earned \$186,000 in labor income. NASA contracts sourced in South Dakota in the same year totaled \$13.3 million. The total economic impact resulting from these activities is 171 jobs, \$12.5 million in labor income, and \$27.9 million in economic output. These economic activities generate \$262,000 in tax revenues for the state and local governments in South Dakota (Table 271).

**Table 271: Summary of NASA Impacts by Types of Impact, South Dakota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	186	370	773	1
Indirect	89	8,487	11,450	14,438	148
Induced	81	3,818	6,682	12,666	113
<b>Total</b>	<b>171</b>	<b>12,491</b>	<b>18,501</b>	<b>27,878</b>	<b>262</b>
<i>Multiplier</i>	<i>95.8</i>	<i>67.1</i>	<i>50.0</i>	<i>36.1</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the South Dakota economy. Table 272 examines the sources of the employment figures in the second column of Table 271. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Ninety-eight (98) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 2%.

**Table 272: NASA Employment Impacts by Sources of Impact, South Dakota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	51.8	0	0.0	2	1.0	100.0	0.0
Indirect*	0	0.0	89	52.8	89	51.7	0.0	100.0
Induced	2	48.2	79	47.2	81	47.3	2.1	97.9
<b>Total</b>	<b>3</b>	<b>100</b>	<b>168</b>	<b>100</b>	<b>171</b>	<b>100</b>	<b>2.0</b>	<b>98.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 273 examines the sources of the output figures in the fifth column of Table 271. Procurement spending is responsible for more than 96% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 4%.

**Table 273: NASA Output Impacts by Sources of Impact, South Dakota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	773	74.8	0	0.0	773	2.8	100.0	0.0
Indirect*	0	0.0	14,438	53.8	14,438	51.8	0.0	100.0
Induced	261	25.2	12,406	46.2	12,666	45.4	2.1	97.9
<b>Total</b>	<b>1,034</b>	<b>100</b>	<b>26,844</b>	<b>100</b>	<b>27,878</b>	<b>100</b>	<b>3.7</b>	<b>96.3</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.43.2. M2M Program Impacts

In 2019, South Dakota had two M2M-related civil service employees (less than 1 FTE) with a corresponding labor income of \$17,000. M2M program contracts sourced in the state in the same year totaled approximately \$370,000. The total South Dakota employment impact is four jobs. The labor income and economic output associated with this employment are \$225,000 and \$733,000, respectively. The M2M program generates approximately \$15,000 in tax revenues for the state and local governments in South Dakota (Table 274).

**Table 274: Summary of M2M Program Impacts by Types of Impact, South Dakota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	17	22	45	<1
Indirect	3	147	212	488	7
Induced	1	62	108	200	8
<b>Total</b>	<b>4</b>	<b>225</b>	<b>341</b>	<b>733</b>	<b>15</b>
<i>Multiplier</i>	<i>36.8</i>	<i>13.6</i>	<i>15.8</i>	<i>16.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.



The following two tables examine the contribution of different NASA activities to the South Dakota economy. Approximately 94 percent of the employment impacts and 91 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 275: M2M Program Employment Impacts by Sources of Impact, South Dakota.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	<1	41.7	0	0.0	<1	2.7	100.0	0.0
Indirect*	0	0.0	3	69.8	3	65.2	0.0	100.0
Induced	<1	58.3	1	30.2	1	32.1	11.8	88.2
<b>Total</b>	<b>&lt;1</b>	<b>100</b>	<b>4</b>	<b>100</b>	<b>4</b>	<b>100</b>	<b>6.5</b>	<b>93.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 276: M2M Program Output Impacts by Sources of Impact, South Dakota.**

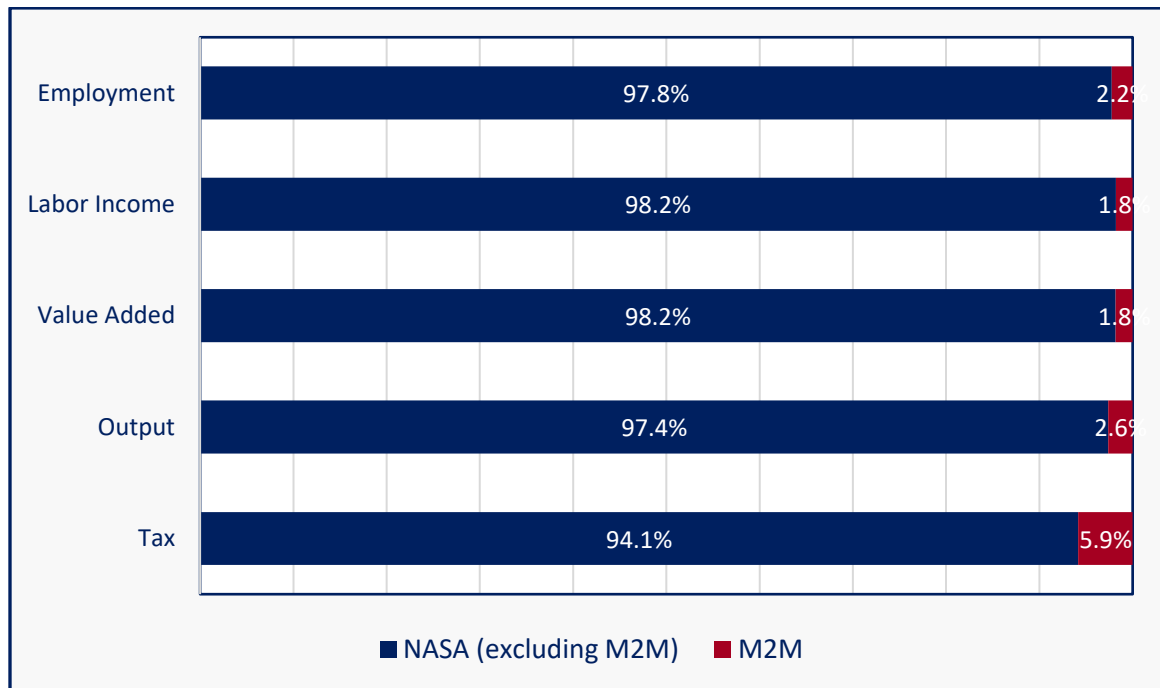
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	45	65.6	0	0.0	45	6.2	100.0	0.0
Indirect*	0	0.0	488	73.5	488	66.6	0.0	100.0
Induced	24	34.4	176	26.5	200	27.2	11.8	88.2
<b>Total</b>	<b>69</b>	<b>100</b>	<b>665</b>	<b>100</b>	<b>733</b>	<b>100</b>	<b>9.4</b>	<b>90.6</b>

### 6.43.3. The M2M Program's Share of NASA Impacts

Around 3% of overall NASA agency impacts in the state are attributable to the M2M program (Table 277 and Figure 109). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 277: The M2M Program Portion of Overall NASA Impacts, South Dakota.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	171	12,491	18,501	27,878	262
M2M Portion	4	225	341	733	15
M2M Share (%)	2.2%	1.8%	1.8%	2.6%	5.9%

**Figure 109: The M2M Program Portion of Overall NASA Impacts, South Dakota.**

## 6.44. Economic Impacts on the State of Tennessee

### 6.44.1. NASA Impacts

In 2019, 65 NASA civil service employees (52 FTEs) residing in Tennessee earned \$8.6 million in labor income. NASA contracts sourced in Tennessee in the same year totaled \$28.9 million. The total economic impact resulting from these activities is 726 jobs, \$50.4 million in labor income, and \$135.6 million in economic output. These economic activities generate nearly \$4 million in tax revenues for the state and local governments in Tennessee (Table 278).

**Table 278: Summary of NASA Impacts by Types of Impact, Tennessee.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	52	8,573	10,743	22,464	45
Indirect	379	25,133	26,999	63,671	1,150
Induced	294	16,731	27,289	49,432	2,718
<b>Total</b>	<b>726</b>	<b>50,436</b>	<b>65,031</b>	<b>135,567</b>	<b>3,913</b>
<i>Multiplier</i>	<i>14.0</i>	<i>5.9</i>	<i>6.1</i>	<i>6.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Tennessee economy. Table 279 examines the sources of the employment figures in the second column of Table 1. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 81% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 19%.

**Table 279: NASA Employment Impacts by Sources of Impact, Tennessee.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	52	38.7	0	0.0	52	7.2	100.0	0.0
Indirect*	0	0.0	379	64.2	379	52.3	0.0	100.0
Induced	82	61.3	212	35.8	294	40.5	28.0	72.0
<b>Total</b>	<b>134</b>	<b>100</b>	<b>591</b>	<b>100</b>	<b>726</b>	<b>100</b>	<b>18.5</b>	<b>81.5</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 280 examines the sources of the output figures in the fifth column of Table 278. Procurement spending is responsible for more than 73% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 27%.

**Table 280: NASA Output Impacts by Sources of Impact, Tennessee.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	22,464	61.9	0	0.0	22,464	16.6	100.0	0.0
Indirect*	0	0.0	63,671	64.1	63,671	47.0	0.0	100.0
Induced	13,836	38.1	35,596	35.9	49,432	36.5	28.0	72.0
<b>Total</b>	<b>36,300</b>	<b>100</b>	<b>99,267</b>	<b>100</b>	<b>135,567</b>	<b>100</b>	<b>26.8</b>	<b>73.2</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

#### 6.44.2. M2M Program Impacts

In 2019, Tennessee had 27 M2M-related civil service employees (18 FTEs) with a corresponding labor income of \$3.2 million. M2M program contracts sourced in the state in the same year totaled \$737,000. The total Tennessee employment impact is 58 jobs. The labor income and economic output associated with this employment are \$5.7 million and \$15 million, respectively. The M2M program generates \$357,000 in tax revenues for the state and local governments in Tennessee (Table 281).

**Table 281: Summary of M2M Program Impacts by Types of Impact, Tennessee.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	18	3,150	3,787	7,919	17
Indirect	6	528	721	1,249	19
Induced	34	2,059	3,339	5,843	321
<b>Total</b>	<b>58</b>	<b>5,737</b>	<b>7,847</b>	<b>15,011</b>	<b>357</b>
<i>Multiplier</i>	3.2	1.8	2.1	1.9	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Tennessee economy. Nearly 18 percent of the employment impacts and 13 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 282: M2M Program Employment Impacts by Sources of Impact, Tennessee.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	18	38.3	0	0.0	18	31.5	100.0	0.0
Indirect*	0	0.0	6	59.9	6	10.6	0.0	100.0
Induced	30	61.7	4	40.1	34	57.9	87.7	12.3
<b>Total</b>	<b>48</b>	<b>100</b>	<b>10</b>	<b>100</b>	<b>58</b>	<b>100</b>	<b>82.3</b>	<b>17.7</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 283: M2M Program Output Impacts by Sources of Impact, Tennessee.**

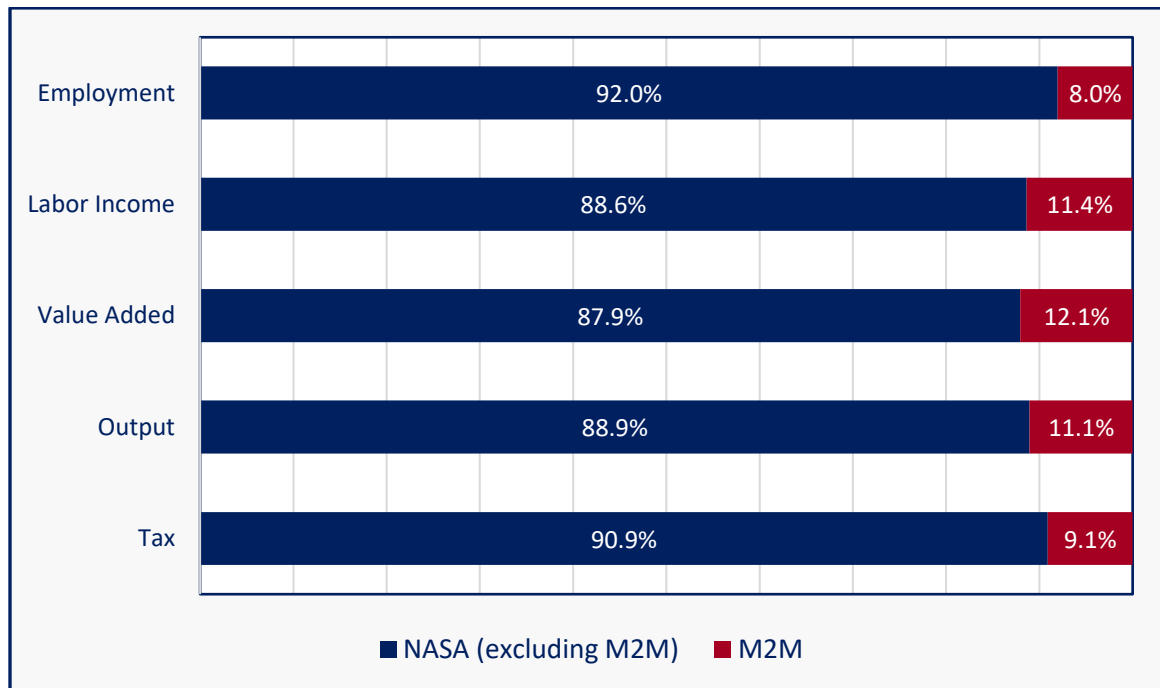
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	7,919	60.7	0	0.0	7,919	52.8	100.0	0.0
Indirect*	0	0.0	1,249	63.5	1,249	8.3	0.0	100.0
Induced	5,126	39.3	718	36.5	5,843	38.9	87.7	12.3
<b>Total</b>	<b>13,044</b>	<b>100</b>	<b>1,966</b>	<b>100</b>	<b>15,011</b>	<b>100</b>	<b>86.9</b>	<b>13.1</b>

### 6.44.3. The M2M Program's Share of NASA Impacts

Approximately 10% of overall NASA agency impacts in the state are attributable to the M2M program (Table 284 and Figure 110). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 284: The M2M Program Portion of Overall NASA Impacts, Tennessee.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	726	50,436	65,031	135,567	3,913
M2M Portion	58	5,737	7,847	15,011	357
M2M Share (%)	8.0%	11.4%	12.1%	11.1%	9.1%

**Figure 110: The M2M Program Portion of Overall NASA Impacts, Tennessee.**

## 6.45. Economic Impacts on the State of Texas

### 6.45.1. NASA Impacts

In 2019, 3,063 NASA civil service employees (2,843 FTEs) residing in Texas earned more than \$511 million in labor income. NASA contracts sourced in Texas in the same year totaled more than \$2.2 billion. The total economic impact resulting from these activities is 40,321 jobs, \$3 billion in labor income, and \$8.7 billion in economic output. These economic activities generate \$254.3 million in tax revenues for the state and local governments in Texas (Table 285).

The employment multiplier is 14.2, meaning that for every NASA job located in Texas, an additional 13.2 jobs are supported in the state economy. The output multiplier of 7.1 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$6.1 million worth of output is sustained throughout the state economy.

**Table 285: Summary of NASA Impacts by Types of Impact, Texas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,843	511,093	587,522	1,228,489	4,211
Indirect	18,414	1,443,458	2,221,403	4,093,677	83,063
Induced	19,064	1,022,177	1,774,910	3,395,398	167,072
<b>Total</b>	<b>40,321</b>	<b>2,976,728</b>	<b>4,583,835</b>	<b>8,717,564</b>	<b>254,347</b>
<i>Multiplier</i>	<i>14.2</i>	<i>5.8</i>	<i>7.8</i>	<i>7.1</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Texas economy. Table 286 examines the sources of the employment figures in the second column of Table 285. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 79% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 21%.

**Table 286: NASA Employment Impacts by Sources of Impact, Texas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2,843	34.0	0	0.0	2,843	7.1	100.0	0.0
Indirect*	0	0.0	18,414	57.6	18,414	45.7	0.0	100.0
Induced	5,509	66.0	13,555	42.4	19,064	47.3	28.9	71.1
<b>Total</b>	<b>8,353</b>	<b>100</b>	<b>31,969</b>	<b>100</b>	<b>40,321</b>	<b>100</b>	<b>20.7</b>	<b>79.3</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 287 examines the sources of the output figures in the fifth column of Table 285. Procurement spending is responsible for nearly 75% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 25%.

**Table 287: NASA Output Impacts by Sources of Impact, Texas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,228,489	55.6	0	0.0	1,228,489	14.1	100.0	0.0
Indirect*	0	0.0	4,093,677	62.9	4,093,677	47.0	0.0	100.0
Induced	981,764	44.4	2,413,634	37.1	3,395,398	38.9	28.9	71.1
<b>Total</b>	<b>2,210,253</b>	<b>100</b>	<b>6,507,311</b>	<b>100</b>	<b>8,717,564</b>	<b>100</b>	<b>25.4</b>	<b>74.6</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### **40,321 jobs in the Texas economy were supported by NASA activities in Fiscal Year 2019.**

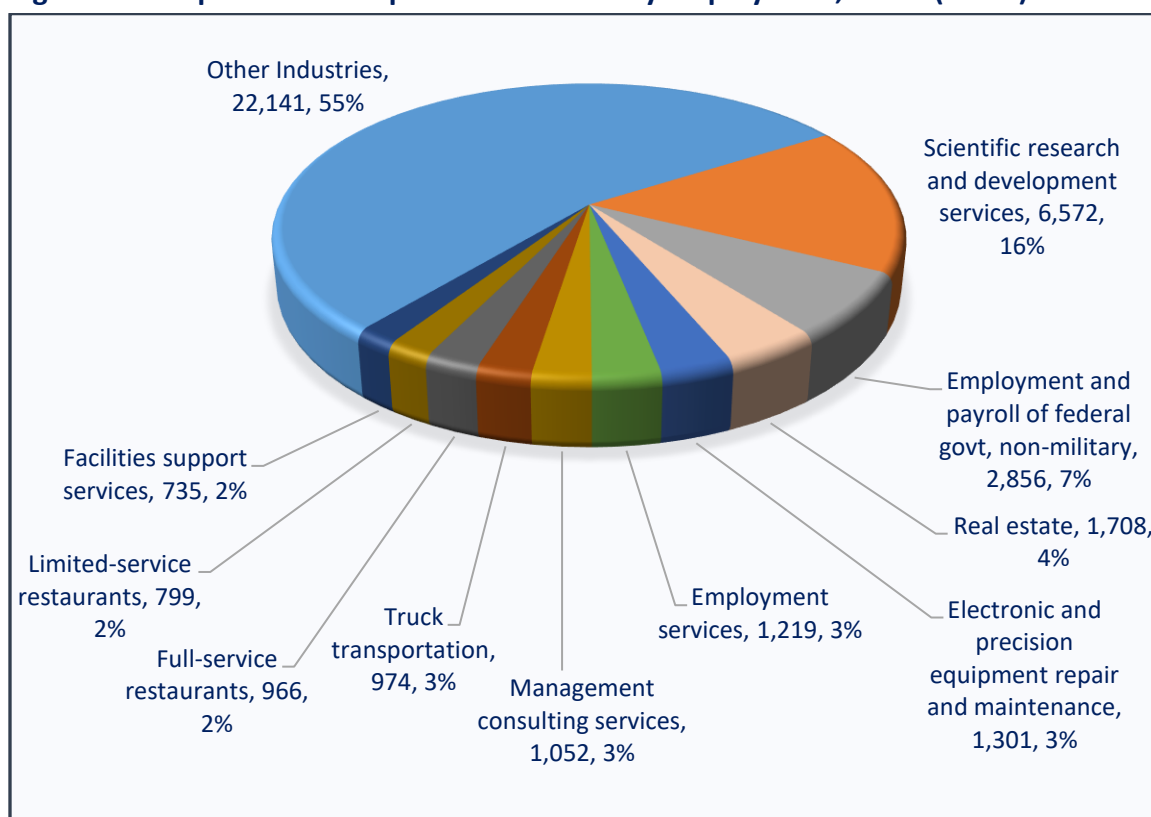
Of these, 2,843 (7%) were directly located at NASA centers. As a result of the procurement of goods and services in the Texas economy, 18,414 additional jobs (46%) were created. The remaining employment—19,064 jobs (47%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 111 depicts the ten most impacted industries by employment. Scientific research and development services and electronic and precision equipment repair and maintenance are the most impacted industries, respectively (along with the federal government and real estate). These three industries together account for 30% of the jobs created. The employment in the two private industries is driven largely by NASA procurement spending; these two industries accounted for approximately 82% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA. The



sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 111: Top Ten Most Impacted Industries by Employment, Texas (NASA).**

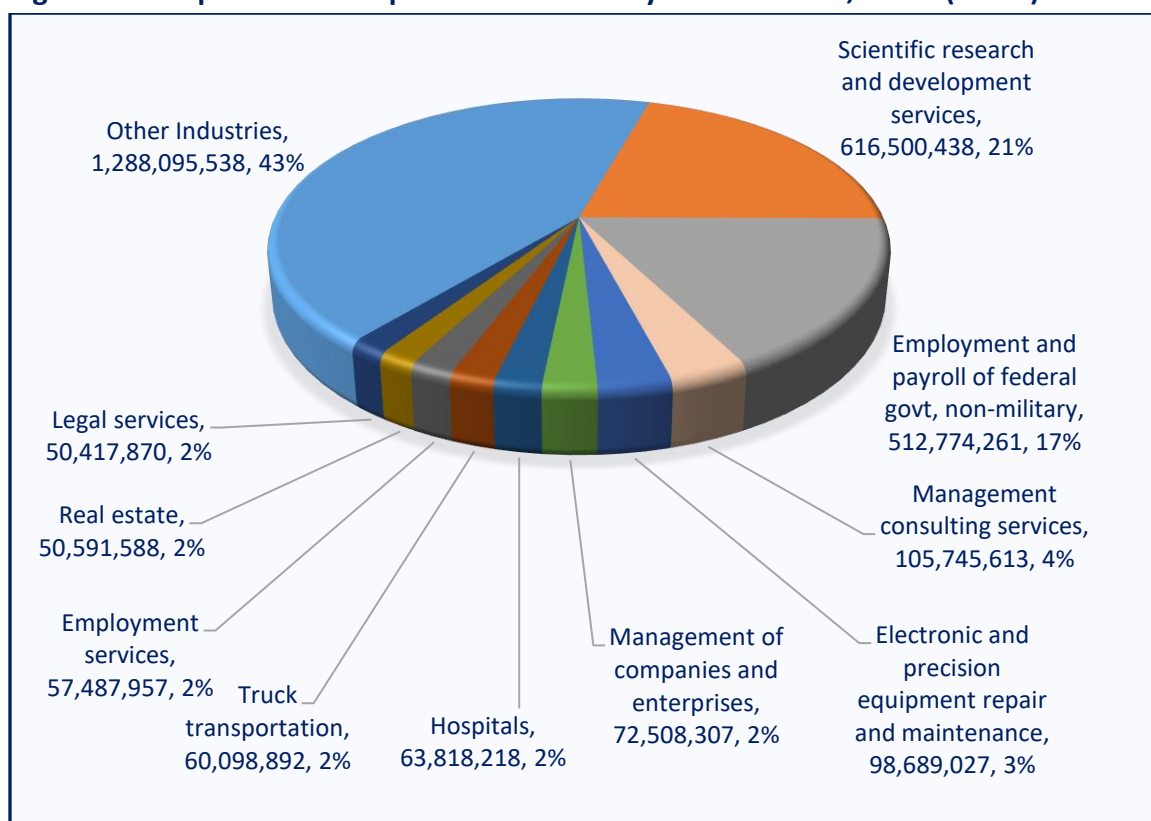


**The total income impact of NASA in Texas was \$3 billion in Fiscal Year 2019.** Of this amount, more than \$511 million (17%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$1.4 billion (49%). The remaining income (induced impact), estimated to be \$1 billion (34%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 112 depicts the ten most impacted industries by labor income. Scientific research and development services, management consulting services, and electronic and precision equipment repair and maintenance are the most impacted industries by income (along with the federal government sector). The four industries together account for 45% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee compensation in the

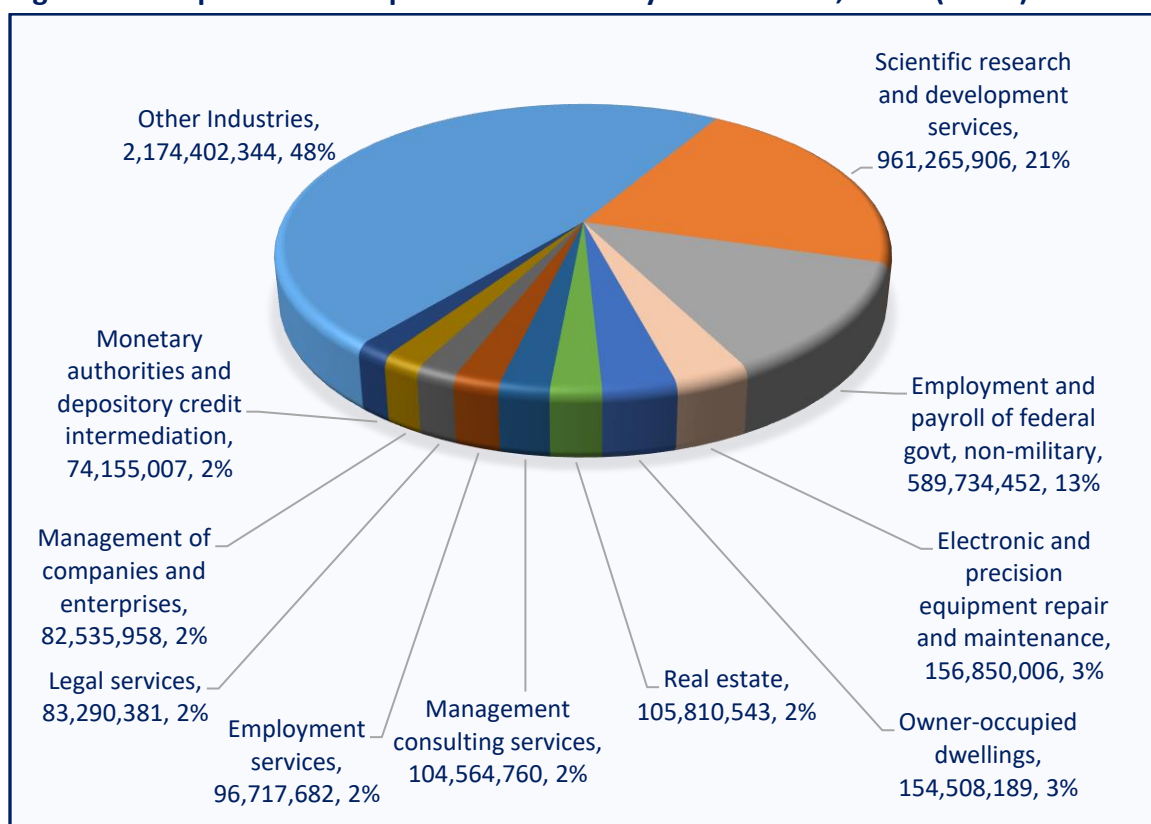
scientific research and development services industry was \$96,077 (including benefits), compared to an average of \$62,012 across Texas.

**Figure 112: Top Ten Most Impacted Industries by Labor Income, Texas (NASA).**



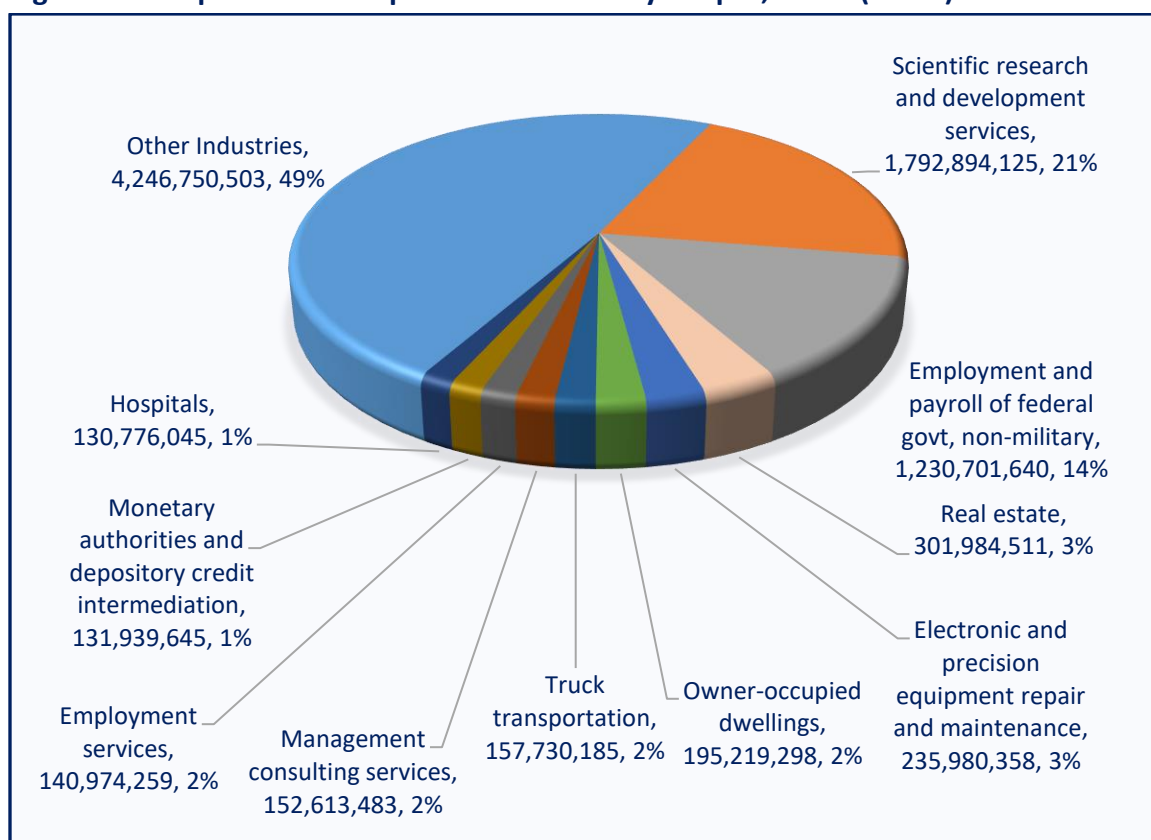
**The total value added impact of NASA in Texas was \$4.6 billion in Fiscal Year 2019.** Of this amount, \$587.5 million (13%) was created by civil service employees and \$2.2 billion (48%) was created indirectly by the \$2.2 billion in procurement spending across all industry sectors in Texas. \$1.8 million (39%) was generated by increased consumption spending supported by increased earnings.

Figure 113 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development and electronic and precision equipment repair and maintenance are the most impacted industries (along with the federal government sector). The three industries together account for 37% of the total value added created. NASA activities accounted for an increase of \$961.3 million in value added in scientific research and development services, and a \$156.9 million increase in value added in electronic and precision equipment repair and maintenance. Five hundred eighty nine (589) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

**Figure 113: Top Ten Most Impacted Industries by Value Added, Texas (NASA).**

**The total output impact of NASA in Texas was \$8.7 billion in Fiscal Year 2019.** The direct impact of \$1.2 billion constitutes the value of production by NASA employees, accounting for around 14% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$2.2 billion resulted in an additional increase in output (gross sales) of \$1.8 billion across all industry sectors (adding up to the indirect total of \$4 billion in Table 285). Approximately \$3.4 billion (39%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$1.8 billion in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services, and a nearly \$236 million increase in sales in electronic and precision equipment repair and maintenance (Figure 106). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these two industries accounted for approximately 82% of NASA procurement spending in the state in Fiscal Year 2019. The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 114: Top Ten Most Impacted Industries by Output, Texas (NASA).**

### 6.45.2. M2M Program Impacts

In 2019, Texas had 1,365 M2M-related civil service employees (793 FTEs) with a corresponding labor income of \$140.4 million. M2M program contracts sourced in the state in the same year totaled approximately \$600 million. The total Texas employment impact is 10,108 jobs. The labor income and economic output associated with this employment are \$818.5 million and \$2.3 billion, respectively. The M2M program generates \$64.7 million in tax revenues for the state and local governments in Texas (Table 288).

**Table 288: Summary of M2M Program Impacts by Types of Impact, Texas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	793	140,430	163,887	342,683	1,157
Indirect	4,283	389,404	596,500	1,051,459	18,009
Induced	5,032	288,651	498,282	924,804	45,513
<b>Total</b>	<b>10,108</b>	<b>818,486</b>	<b>1,258,669</b>	<b>2,318,946</b>	<b>64,679</b>
<i>Multiplier</i>	<i>12.7</i>	<i>5.8</i>	<i>7.7</i>	<i>6.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Texas economy. More than 77 percent of the employment impacts and more than 73 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 289: M2M Program Employment Impacts by Sources of Impact, Texas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	793	34.8	0	0.0	793	7.8	100.0	0.0
Indirect*	0	0.0	4,283	54.7	4,283	42.4	0.0	100.0
Induced	1,483	65.2	3,549	45.3	5,032	49.8	29.5	70.5
<b>Total</b>	<b>2,276</b>	<b>100</b>	<b>7,832</b>	<b>100</b>	<b>10,108</b>	<b>100</b>	<b>22.5</b>	<b>77.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 290: M2M Program Output Impacts by Sources of Impact, Texas.**

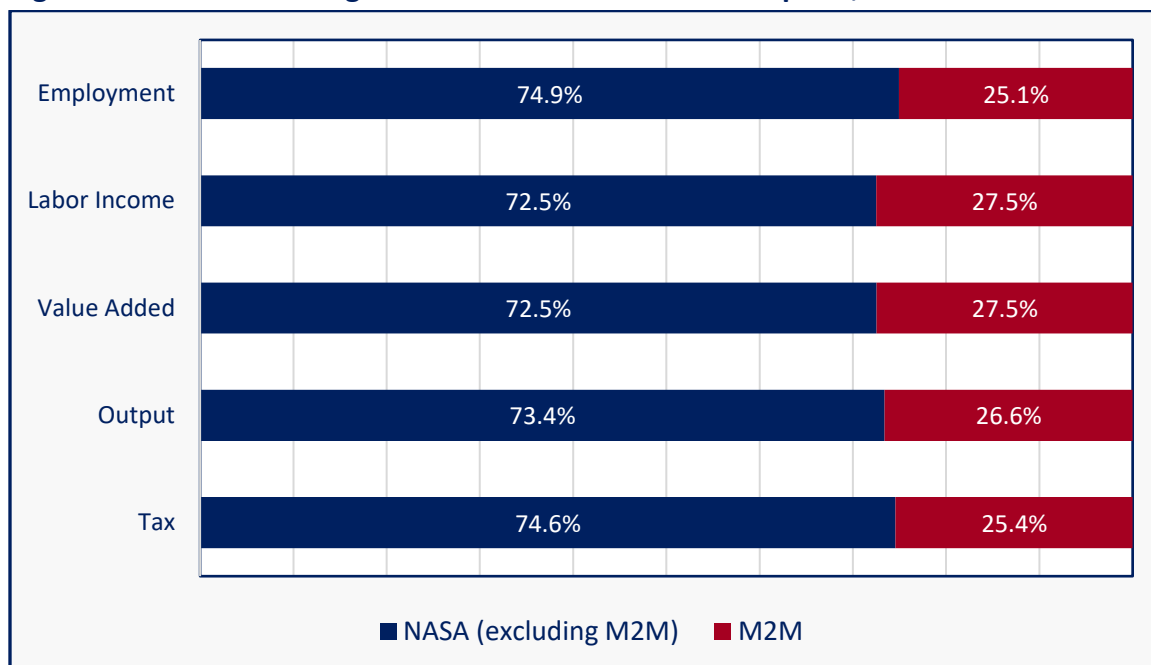
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	342,683	55.7	0	0.0	342,683	14.8	100.0	0.0
Indirect*	0	0.0	1,051,459	61.7	1,051,459	45.3	0.0	100.0
Induced	272,666	44.3	652,138	38.3	924,804	39.9	29.5	70.5
<b>Total</b>	<b>615,349</b>	<b>100</b>	<b>1,703,597</b>	<b>100</b>	<b>2,318,946</b>	<b>100</b>	<b>26.5</b>	<b>73.5</b>

### 6.45.3. The M2M Program's Share of NASA Impacts

Approximately 26% of overall NASA agency impacts in the state are attributable to the M2M program (Table 291 and Figure 115). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 291: The M2M Program Portion of Overall NASA Impacts, Texas.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	40,321	2,976,728	4,583,835	8,717,564	254,347
M2M Portion	10,108	818,486	1,258,669	2,318,946	64,679
M2M Share (%)	25.1%	27.5%	27.5%	26.6%	25.4%

**Figure 115: The M2M Program Portion of Overall NASA Impacts, Texas.**

## 6.46. Economic Impacts on the State of Utah

### 6.46.1. NASA Impacts

In 2019, 8 NASA civil service employees (6 FTEs) residing in Utah earned \$908,000 in labor income. NASA contracts sourced in Utah in the same year totaled \$310.7 million. The total economic impact resulting from these activities is 4,831 jobs, \$281 million in labor income, and \$914.7 million in economic output. These economic activities generate \$28.8 million in tax revenues for the state and local governments in Utah (Table 292).

**Table 292: Summary of NASA Impacts by Types of Impact, Utah.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	6	908	1,237	2,586	26
Indirect	3,027	194,942	292,161	609,507	13,162
Induced	1,798	85,076	158,560	302,621	15,591
<b>Total</b>	<b>4,831</b>	<b>280,926</b>	<b>451,958</b>	<b>914,714</b>	<b>28,779</b>
<i>Multiplier</i>	<i>807.1</i>	<i>309.3</i>	<i>365.4</i>	<i>353.7</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Utah economy. Table 293 examines the sources of the employment figures in the second column of Table 292. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly all of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is less than 1%.

**Table 293: NASA Employment Impacts by Sources of Impact, Utah.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	6	39.0	0	0.0	6	0.1	100.0	0.0
Indirect*	0	0.0	3,027	62.9	3,027	62.7	0.0	100.0
Induced	9	61.0	1,789	37.1	1,798	37.2	0.5	99.5
<b>Total</b>	<b>15</b>	<b>100</b>	<b>4,816</b>	<b>100</b>	<b>4,831</b>	<b>100</b>	<b>0.3</b>	<b>99.7</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 294 examines the sources of the output figures in the fifth column of Table 292. Procurement spending is responsible for the majority of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is less than 1%.

**Table 294: NASA Output Impacts by Sources of Impact, Utah.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,586	62.1	0	0.0	2,586	0.3	100.0	0.0
Indirect*	0	0.0	609,507	66.9	609,507	66.6	0.0	100.0
Induced	1,578	37.9	301,044	33.1	302,621	33.1	0.5	99.5
<b>Total</b>	<b>4,164</b>	<b>100</b>	<b>910,551</b>	<b>100</b>	<b>914,714</b>	<b>100</b>	<b>0.5</b>	<b>99.5</b>

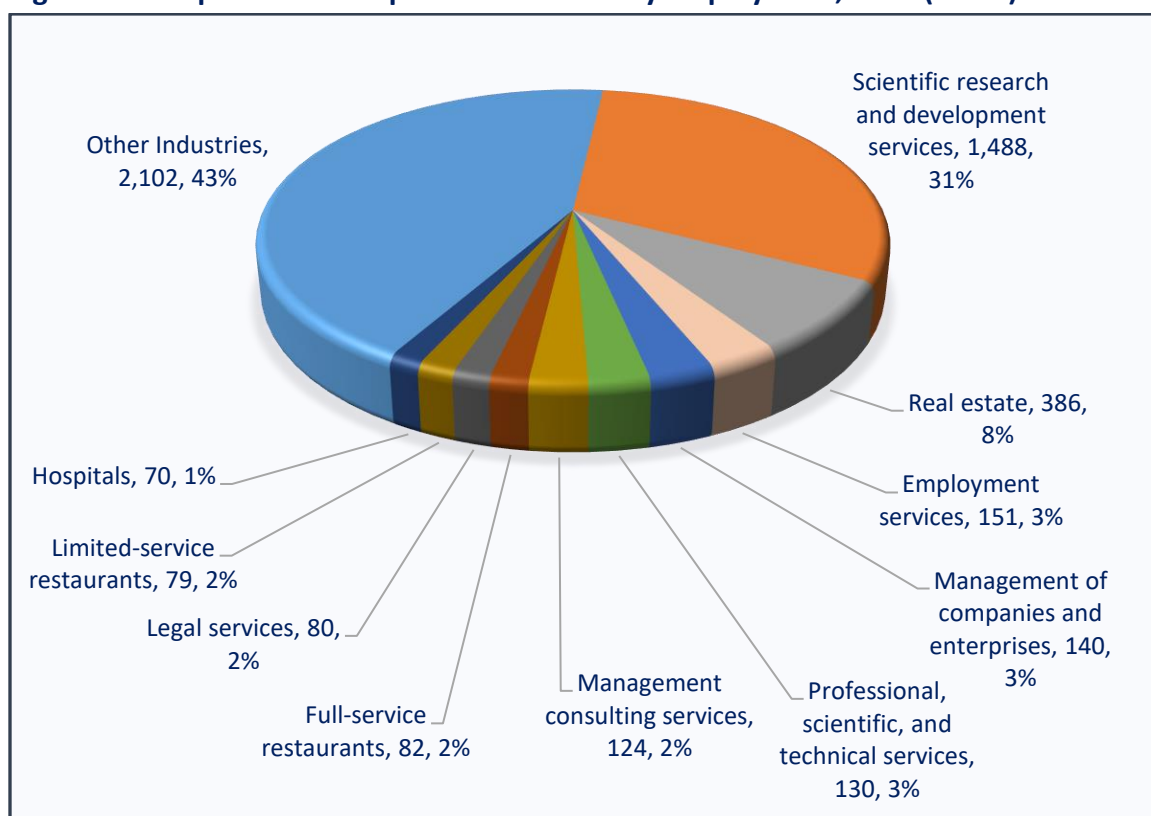
\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**4,831 jobs in the Utah economy were supported by NASA activities in Fiscal Year 2019.**

Of these, 6 (<1%) were directly located at NASA centers. As a result of the procurement of goods and services in the Utah economy, 3,027 additional jobs (63%) were created. The remaining employment—1,798 jobs (37%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

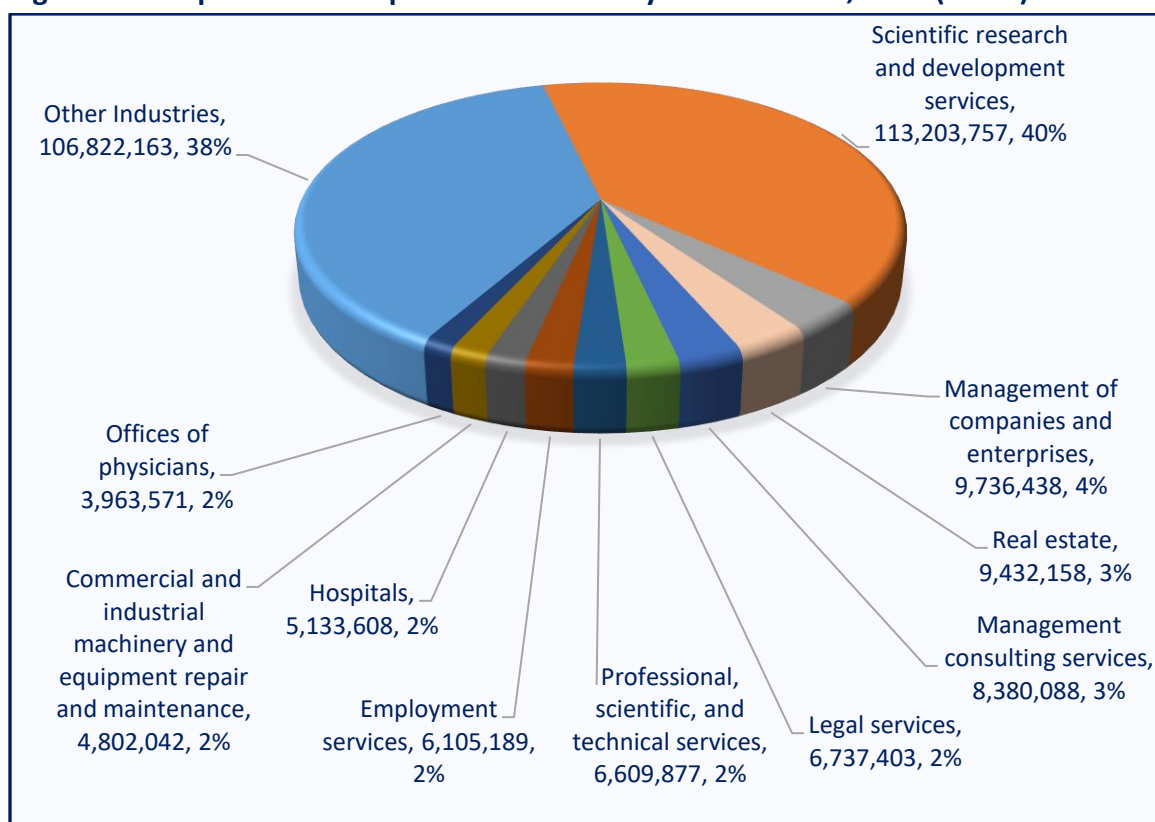
Figure 116 depicts the ten most impacted industries by employment. Scientific research and development services is the most impacted industry, accounting for nearly a third of the jobs created. The employment in this industry is driven largely by NASA procurement spending; scientific research and development services accounted for approximately 97% of NASA procurement spending in the state in Fiscal Year 2019.



**Figure 116: Top Ten Most Impacted Industries by Employment, Utah (NASA).**

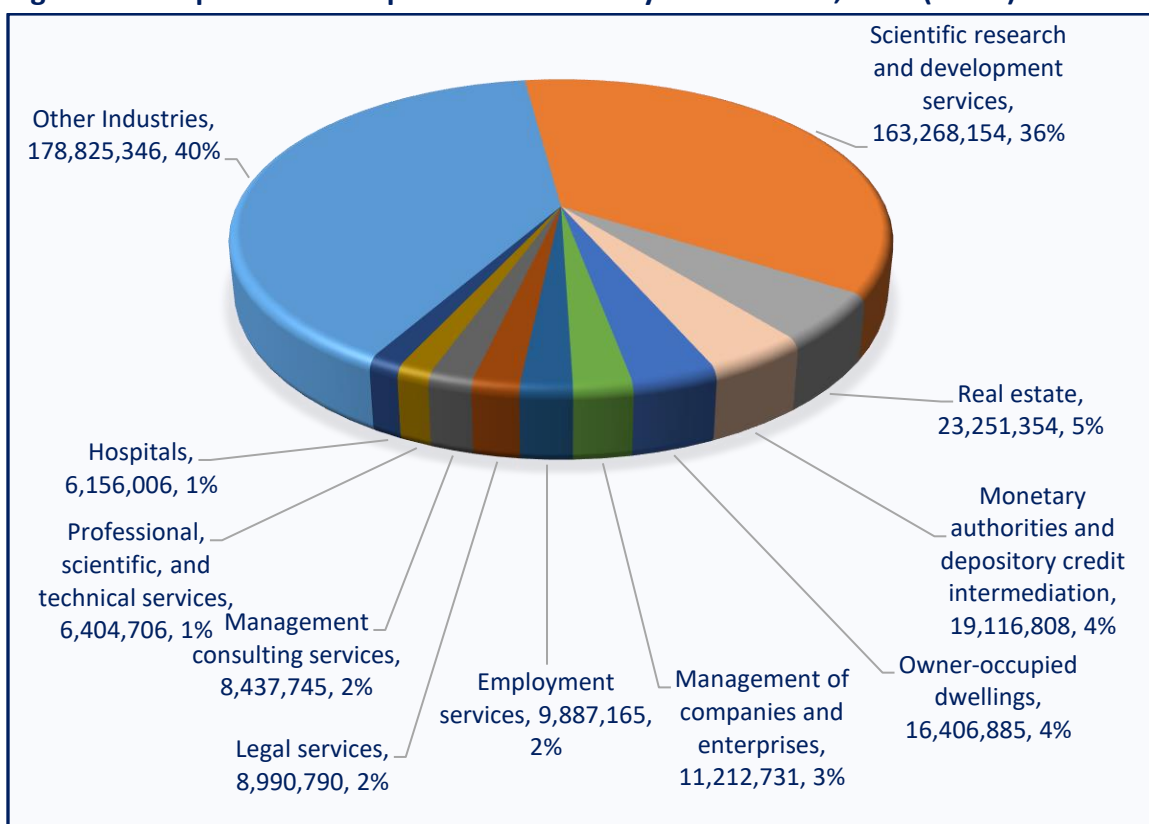
**The total income impact of NASA in Utah was \$281 million in Fiscal Year 2019.** Of this amount, \$908,000 (<1%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$195 million (69%). The remaining income (induced impact), estimated to be \$85 million (30%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 117 depicts the ten most impacted industries by labor income. As a consequence of its share of total employment, scientific research and development services is the most impacted industry by income, accounting for 40% of the total labor income earned. The reason that this industry's share of labor income is larger than its share of employment is that employee compensation in this industry is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$77,932 (including benefits), compared to an average of \$52,475 across Utah.

**Figure 117: Top Ten Most Impacted Industries by Labor Income, Utah (NASA).**

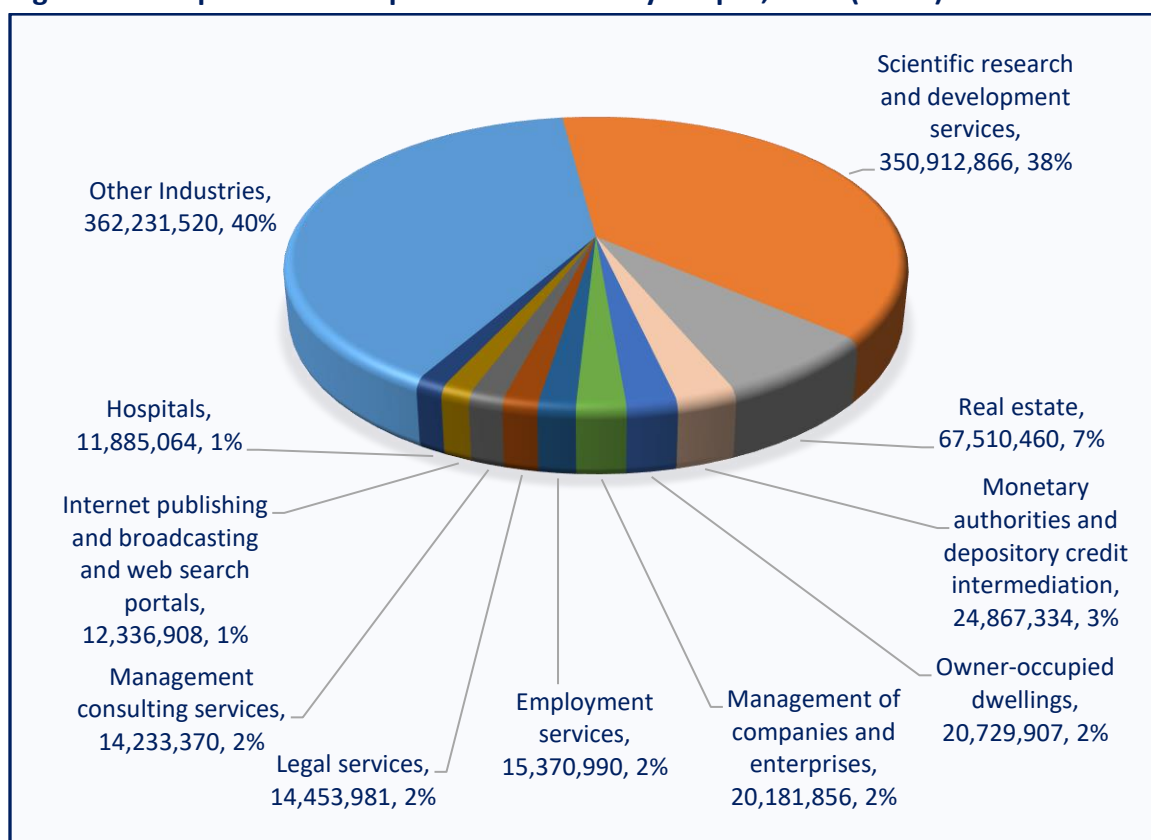
**The total value added impact of NASA in Utah was \$452 million in Fiscal Year 2019.** Of this amount, \$1.2 million (<1%) was created by civil service employees and \$292.2 million (65%) was created indirectly by the \$310.7 million in procurement spending across all industry sectors in Utah. \$158.6 million (35%) was generated by increased consumption spending supported by increased earnings.

Figure 118 depicts the ten most heavily impacted industries in terms of value added. Scientific research and development is the most impacted sector, accounting for 36% of the total value added created. NASA activities accounted for an increase of \$163.3 million in value added in scientific research and development services.

**Figure 118: Top Ten Most Impacted Industries by Value Added, Utah (NASA).**

**The total output impact of NASA in Utah was \$914.7 million in Fiscal Year 2019.** The direct impact of \$2.6 million constitutes the value of production by NASA employees, accounting for around 1% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$310.7 million resulted in an additional increase in output (gross sales) of \$298.8 million across all industry sectors (adding up to the indirect total of \$609.5 million in Table 292). More than \$302.6 million (33%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of approximately \$351 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in scientific research and development services (Figure 119). Similar to employment, impacts in this sector are largely driven by NASA procurement spending; scientific research and development services accounted for approximately 97% of NASA procurement spending in the state in Fiscal Year 2019. The output impacts reported in other industries mainly result from increases in consumption spending (induced impacts). The sizable impacts in the real estate industry are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 119: Top Ten Most Impacted Industries by Output, Utah (NASA).**

### 6.46.2. M2M Program Impacts

In 2019, Utah had five M2M-related civil service employees (5 FTEs) with a corresponding labor income of \$850,000. M2M program contracts sourced in the state in the same year totaled more than \$288 million. The total Utah employment impact is 4,121 jobs. The labor income and economic output associated with this employment are \$268.2 million and \$831.4 million, respectively. The M2M program generates \$26 million in tax revenues for the state and local governments in Utah (Table 295).

**Table 295: Summary of M2M Program Impacts by Types of Impact, Utah.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	850	1,033	2,161	25
Indirect	2,494	184,370	279,304	545,802	11,375
Induced	1,622	83,017	153,166	283,470	14,604
<b>Total</b>	<b>4,121</b>	<b>268,237</b>	<b>433,503</b>	<b>831,433</b>	<b>26,004</b>
<i>Multiplier</i>	<i>824.1</i>	<i>315.7</i>	<i>419.5</i>	<i>384.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-

employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Utah economy. Nearly all the employment and output impacts are due to NASA procurement sourced within the state.

**Table 296: M2M Program Employment Impacts by Sources of Impact, Utah.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	5	36.9	0	0.0	5	0.1	100.0	0.0
Indirect*	0	0.0	2,494	60.7	2,494	60.5	0.0	100.0
Induced	9	63.1	1,614	39.3	1,622	39.4	0.5	99.5
<b>Total</b>	<b>14</b>	<b>100</b>	<b>4,107</b>	<b>100</b>	<b>4,121</b>	<b>100</b>	<b>0.3</b>	<b>99.7</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 297: M2M Program Output Impacts by Sources of Impact, Utah.**

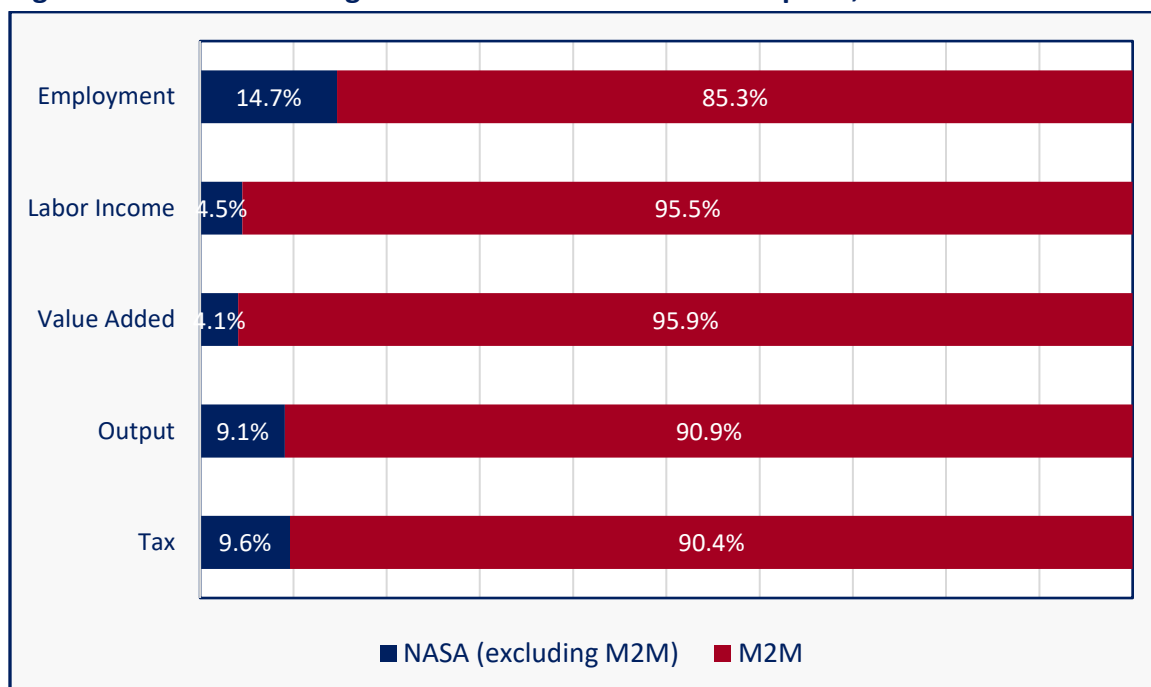
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	2,161	59.1	0	0.0	2,161	0.3	100.0	0.0
Indirect*	0	0.0	545,802	65.9	545,802	65.6	0.0	100.0
Induced	1,493	40.9	281,977	34.1	283,470	34.1	0.5	99.5
<b>Total</b>	<b>3,653</b>	<b>100</b>	<b>827,779</b>	<b>100</b>	<b>831,433</b>	<b>100</b>	<b>0.4</b>	<b>99.6</b>

#### 6.46.3. The M2M Program's Share of NASA Impacts

More than 90% of overall NASA agency impacts in the state are attributable to the M2M program (Table 298 and Figure 120). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 298: The M2M Program Portion of Overall NASA Impacts, Utah.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	4,831	280,926	451,958	914,714	28,779
M2M Portion	4,121	268,237	433,503	831,433	26,004
M2M Share (%)	85.3%	95.5%	95.9%	90.9%	90.4%

**Figure 120: The M2M Program Portion of Overall NASA Impacts, Utah.**

## 6.47. Economic Impacts on the State of Vermont

### 6.47.1. NASA Impacts

In 2019, 2 NASA civil service employees (1 FTE) residing in Vermont earned \$212,000 in labor income. NASA contracts sourced in Vermont in the same year totaled \$1.9 million. The total economic impact resulting from these activities is 29 jobs, \$1.9 million in labor income, and \$5.1 million in economic output. These economic activities generate \$201,000 in tax revenues for the state and local governments in Vermont (Table 299).

**Table 299: Summary of NASA Impacts by Types of Impact, Vermont.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	212	247	517	5
Indirect	15	1,126	1,591	2,720	76
Induced	13	604	1,026	1,846	121
<b>Total</b>	<b>29</b>	<b>1,942</b>	<b>2,864</b>	<b>5,083</b>	<b>201</b>
<i>Multiplier</i>	<i>23.8</i>	<i>9.2</i>	<i>11.6</i>	<i>9.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Vermont economy. Table 300 examines the sources of the employment figures in the second column of Table 299. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 89% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 11%.

**Table 300: NASA Employment Impacts by Sources of Impact, Vermont.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	1	36.6	0	0.0	1	4.2	100.0	0.0
Indirect*	0	0.0	15	58.0	15	51.4	0.0	100.0
Induced	2	63.4	11	42.0	13	44.4	16.4	83.6
<b>Total</b>	<b>3</b>	<b>100</b>	<b>25</b>	<b>100</b>	<b>29</b>	<b>100</b>	<b>11.5</b>	<b>88.5</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 301 examines the sources of the output figures in the fifth column of Table 299. Procurement spending is responsible for nearly 84% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 16%.

**Table 301: NASA Output Impacts by Sources of Impact, Vermont.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	517	63.1	0	0.0	517	10.2	100.0	0.0
Indirect*	0	0.0	2,720	63.8	2,720	53.5	0.0	100.0
Induced	302	36.9	1,543	36.2	1,846	36.3	16.4	83.6
<b>Total</b>	<b>819</b>	<b>100</b>	<b>4,264</b>	<b>100</b>	<b>5,083</b>	<b>100</b>	<b>16.1</b>	<b>83.9</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.47.2. M2M Program Impacts

There were no M2M-specific NASA employees in Vermont in FY 2019, but \$273,000 in M2M-related NASA contracts were sourced in the state. The total economic impact attributable to this procurement activity is three jobs, \$207,000 in labor income, and \$576,000 worth of output (Table 302).

**Table 302: Summary of M2M Program Impacts by Types of Impact, Vermont.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	2	147	228	400	12
Induced	1	60	101	177	12
<b>Total</b>	<b>3</b>	<b>207</b>	<b>330</b>	<b>576</b>	<b>23</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

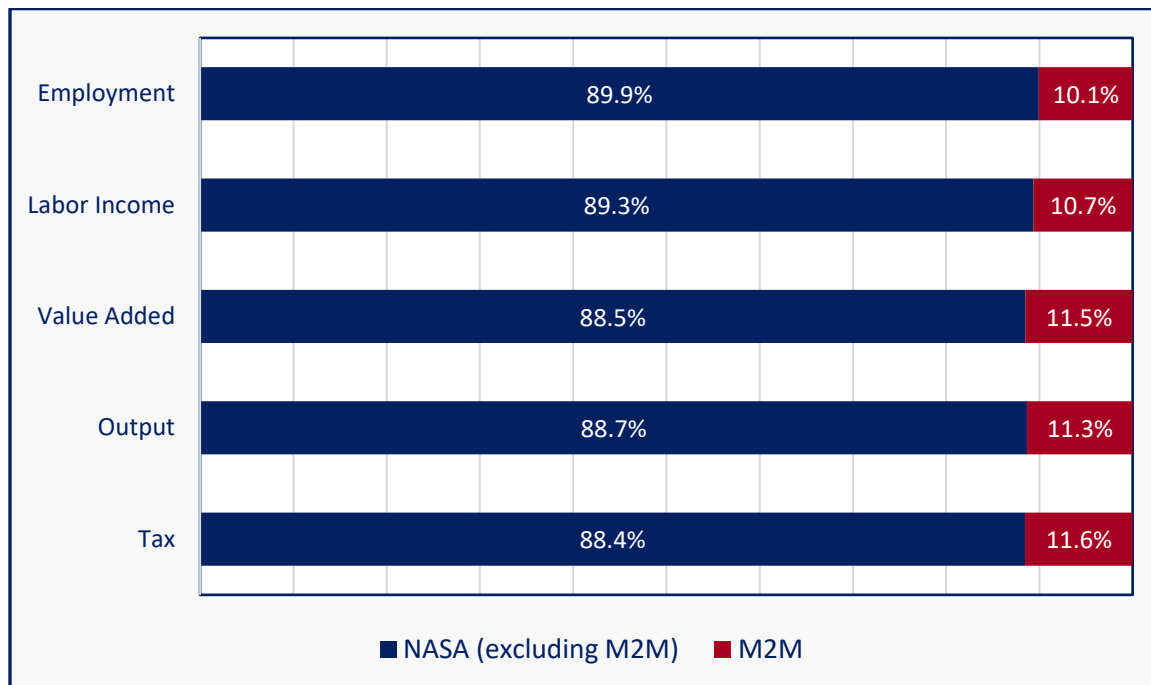
### 6.47.3. The M2M Program's Share of NASA Impacts

Around 11% of overall NASA agency impacts in the state are attributable to the M2M program (Table 303 and Figure 121). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).



**Table 303: The M2M Program Portion of Overall NASA Impacts, Vermont.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	29	1,942	2,864	5,083	201
M2M Portion	3	207	330	576	23
M2M Share (%)	10.1%	10.7%	11.5%	11.3%	11.6%

**Figure 121: The M2M Program Portion of Overall NASA Impacts, Vermont.**

## 6.48. Economic Impacts on the State of Virginia

### 6.48.1. NASA Impacts

In 2019, 2,623 NASA civil service employees (2,429 FTEs) residing in Virginia earned \$412.2 million in labor income. NASA contracts sourced in Virginia in the same year totaled more than \$1.6 billion. The total economic impact resulting from these activities is 27,097 jobs, \$2 billion in labor income, and \$5.5 billion in economic output. These economic activities generate \$219.9 million in tax revenues for the state and local governments in Virginia (Table 304).

The employment multiplier is 11.2, meaning that for every NASA job located in Virginia, an additional 10.2 jobs are supported in the state economy. The output multiplier of 5.2 indicates that for every million dollars' worth of economic output generated by NASA employees, an additional \$4.2 million worth of output is sustained throughout the state economy.

**Table 304: Summary of NASA Impacts by Types of Impact, Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,429	412,227	501,871	1,049,396	12,517
Indirect	13,157	1,029,265	1,441,702	2,571,635	97,939
Induced	11,512	589,787	1,079,037	1,883,558	109,394
<b>Total</b>	<b>27,097</b>	<b>2,031,279</b>	<b>3,022,610</b>	<b>5,504,590</b>	<b>219,850</b>
<i>Multiplier</i>	<i>11.2</i>	<i>4.9</i>	<i>6.0</i>	<i>5.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Virginia economy. Table 305 examines the sources of the employment figures in the second column of Table 304. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Seventy-eight (78) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 22 percent.

**Table 305: NASA Employment Impacts by Sources of Impact, Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2,429	40.8	0	0.0	2,429	9.0	100.0	0.0
Indirect*	0	0.0	13,157	62.2	13,157	48.6	0.0	100.0
Induced	3,526	59.2	7,986	37.8	11,512	42.5	30.6	69.4
<b>Total</b>	<b>5,955</b>	<b>100</b>	<b>21,142</b>	<b>100</b>	<b>27,097</b>	<b>100</b>	<b>22.0</b>	<b>78.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 306 examines the sources of the output figures in the fifth column of Table 304. Procurement spending is responsible for more than 70% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 30%.

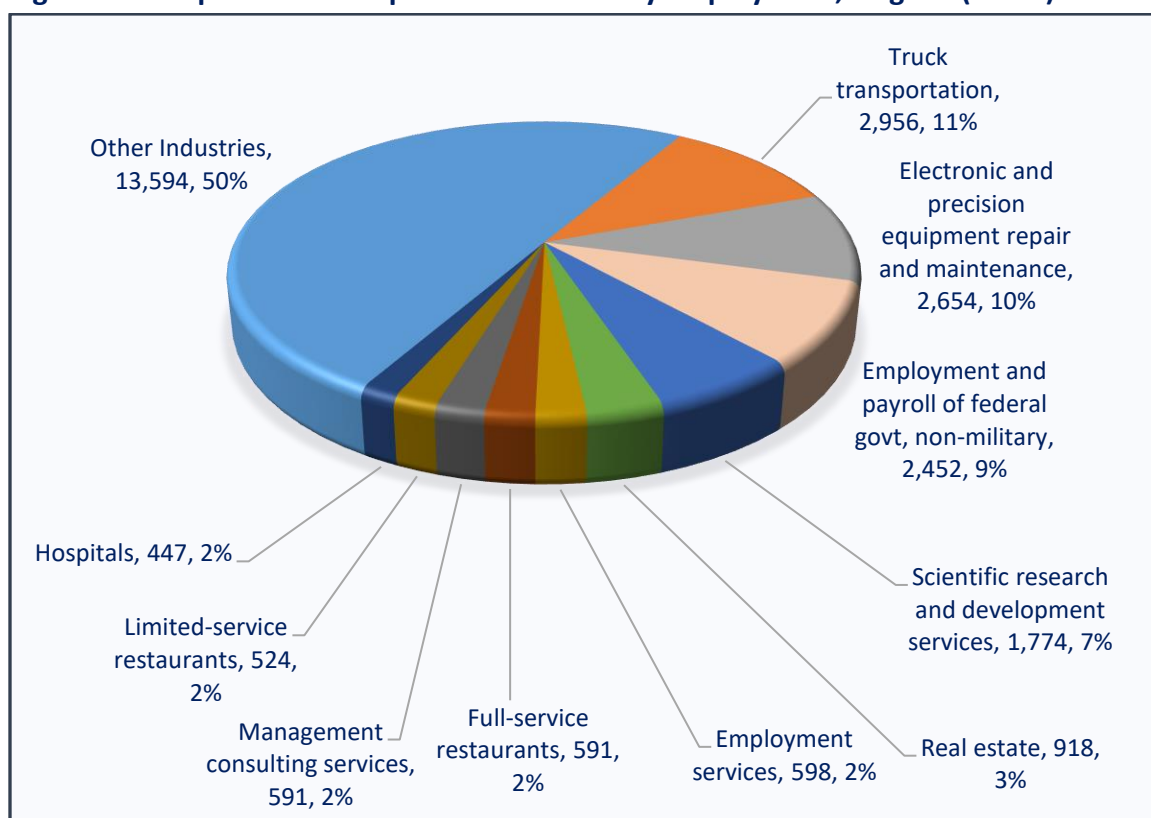
**Table 306: NASA Output Impacts by Sources of Impact, Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,049,396	64.5	0	0.0	1,049,396	19.1	100.0	0.0
Indirect*	0	0.0	2,571,635	66.3	2,571,635	46.7	0.0	100.0
Induced	577,378	35.5	1,306,180	33.7	1,883,558	34.2	30.7	69.3
<b>Total</b>	<b>1,626,774</b>	<b>100</b>	<b>3,877,816</b>	<b>100</b>	<b>5,504,590</b>	<b>100</b>	<b>29.6</b>	<b>70.4</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

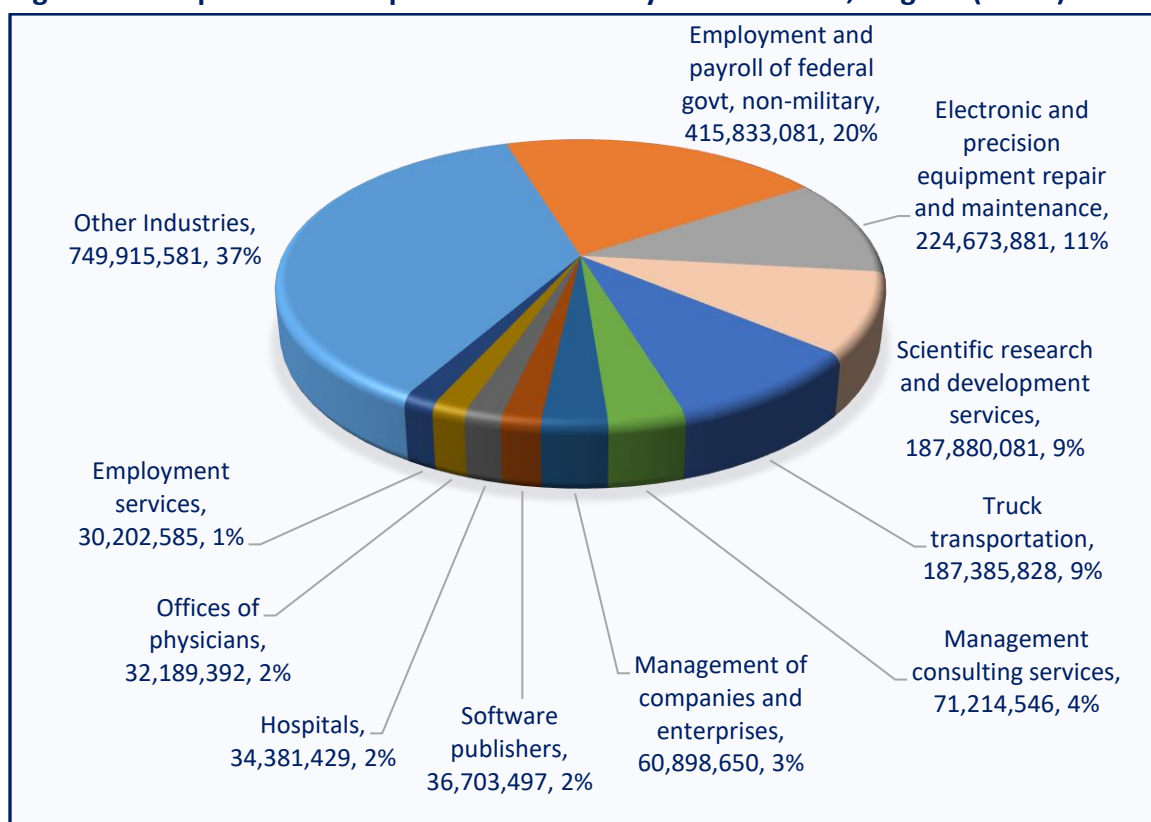
**27,097 jobs in the Virginia economy were supported by NASA activities in Fiscal Year 2019.** Of these, 2,429 (9%) were directly located at NASA centers. As a result of the procurement of goods and services in the Virginia economy, 13,157 additional jobs (49%) were created. The remaining employment—11,512 jobs (42%)—was in the form of induced impacts as labor income and proprietor earnings were spent locally.

Figure 122 depicts the ten most impacted industries by employment. Truck transportation, electronic and precision equipment repair and maintenance, and scientific research and development services are the most impacted industries, respectively (along with the federal government sector). These four industries together account for 37% of the jobs created. The employment in these industries is driven largely by NASA procurement spending; the three private industries accounted for approximately 81% of NASA procurement spending in the state in Fiscal Year 2019. The impact in the federal government sector represents mainly civil service employees working for NASA.

**Figure 122: Top Ten Most Impacted Industries by Employment, Virginia (NASA).**

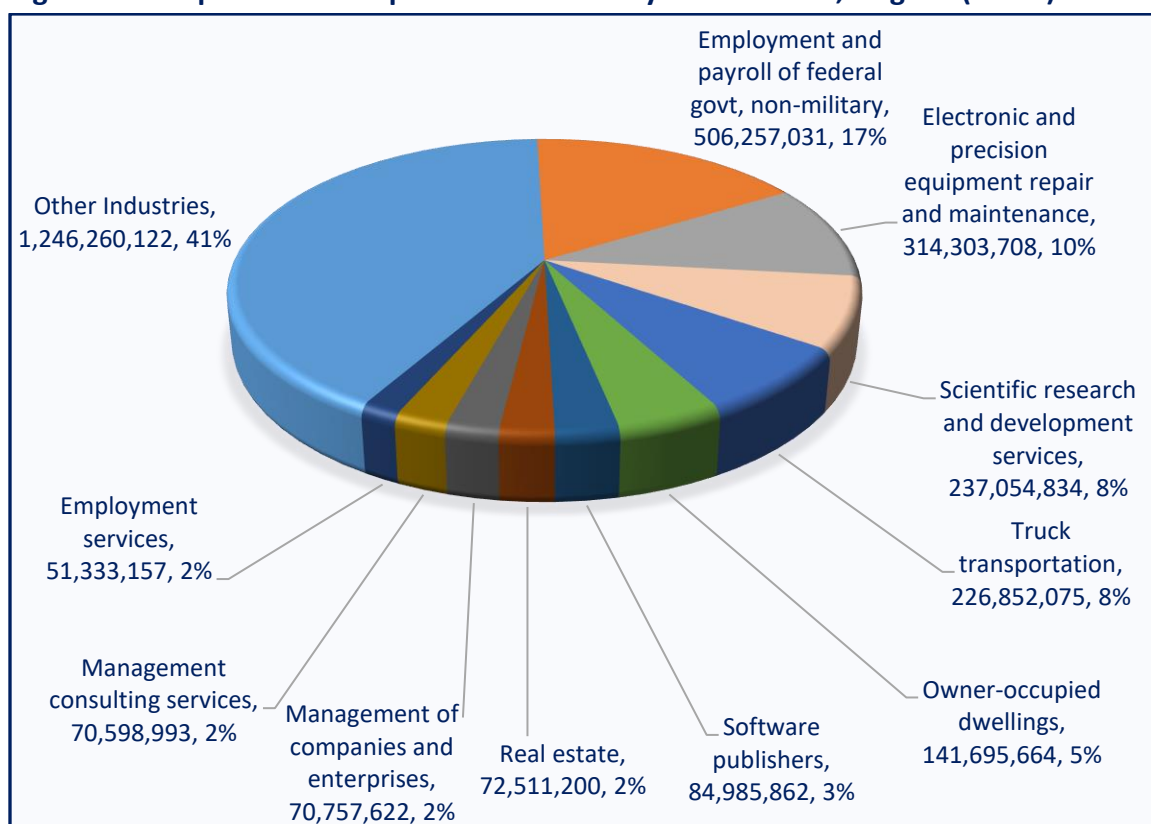
**The total income impact of NASA in Virginia was \$2 billion in Fiscal Year 2019.** Of this amount, \$412.2 million (20%) represented wages and benefits paid to NASA employees in the state (direct impact). Payments to employees of private firms and organizations across the state that supplied goods and services to NASA (indirect impact) represented \$1 billion (51%). The remaining income (induced impact), estimated to be \$589.8 million (29%), resulted from expenditures by those earning income through the direct and indirect impacts.

Figure 123 depicts the ten most impacted industries by labor income. As a consequence of their share of total employment, scientific research and development, electronic and precision equipment repair and maintenance, and truck transportation are the most impacted industries by income (along with the federal government sector). The four industries together account for 49% of the total labor income earned. The reason that these industries' share of labor income is larger than their share of employment is that employee compensation in these industries is greater than the state average. As of 2018, the average employee compensation in the scientific research and development services industry was \$108,484 (including benefits), compared to an average of \$64,100 across Virginia.

**Figure 123: Top Ten Most Impacted Industries by Labor Income, Virginia (NASA).**

**The total value added impact of NASA in Virginia was \$3 billion in Fiscal Year 2019.** Of this amount, \$501.9 million (17%) was created by civil service employees and \$1.4 billion (48%) was created indirectly by the \$1.6 billion in procurement spending across all industry sectors in Virginia. \$1.1 billion (36%) was generated by increased consumption spending supported by increased earnings.

Figure 124 depicts the ten most heavily impacted industries in terms of value added. Electronic and precision equipment repair and maintenance, scientific research and development, truck transportation are the most impacted industries (along with the federal government sector). The four industries together account for 43% of the total value added created. NASA activities accounted for an increase of more than a \$314.3 million increase in electronic and precision equipment repair and maintenance, and \$237.1 million in value added in scientific research and development services. Five hundred six (506) million dollars in the federal government non-military sector corresponds mainly to value added by NASA employees.

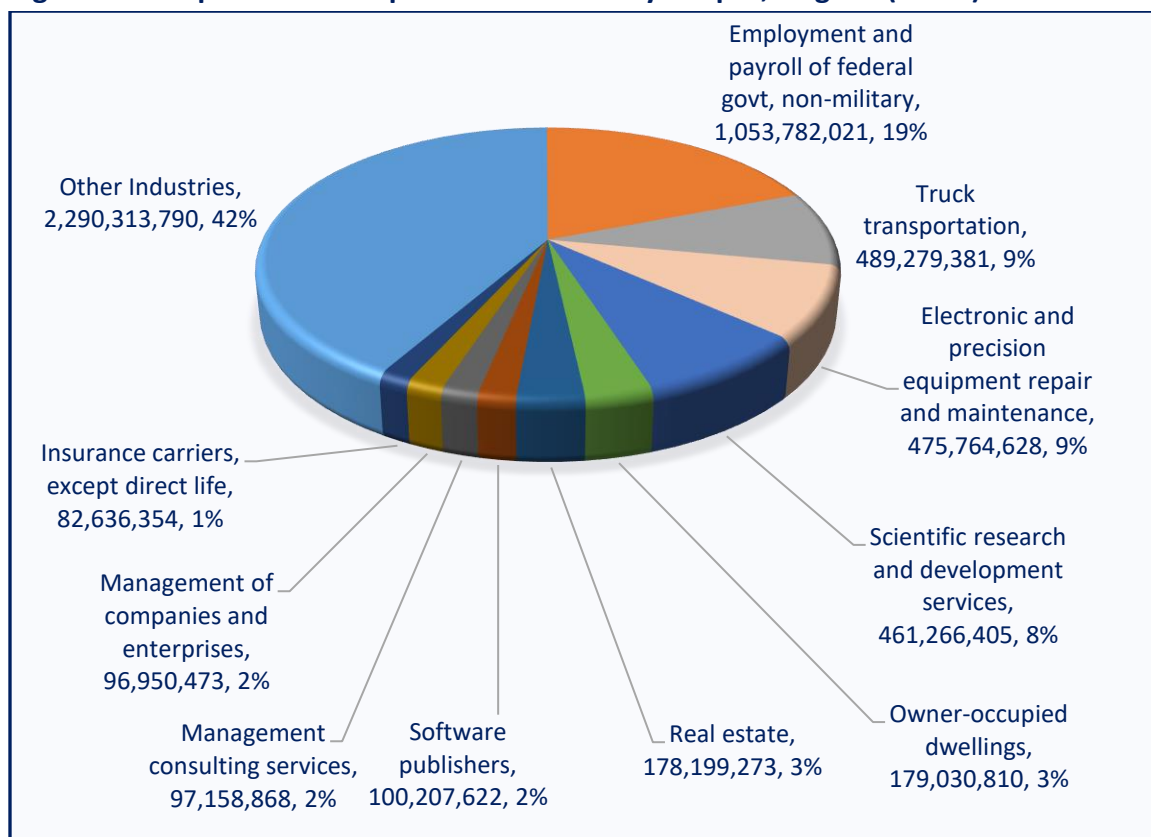
**Figure 124: Top Ten Most Impacted Industries by Value Added, Virginia (NASA).**

**The total output impact of NASA in Virginia was \$5.5 billion in Fiscal Year 2019.** The direct impact of \$1 billion constitutes the value of production by NASA employees, accounting for around 19% of the total output impact. The indirect impact is the sum of NASA procurement spending and the value of production throughout the supply chain of NASA procurement. NASA procurement expenditures of \$1.6 billion resulted in an additional increase in output (gross sales) of \$1 billion across all industry sectors (adding up to the indirect total of \$2.6 billion in Table 304). Approximately \$1.9 billion (34%) of the total output impact was the result of consumption spending due to increased earnings (induced impacts).

NASA activities were responsible for an increase of \$489.3 million in sales (including direct, indirect, and induced impacts—see Box 2 in Section 1) in truck transportation, \$475.8 in electronic and precision equipment repair and maintenance, and \$461.3 million in sales scientific research and development services (Figure 125). Similar to employment, impacts in these industries are largely driven by NASA procurement spending; these three industries accounted for approximately 81% of NASA procurement spending in the state in Fiscal Year 2019. Aside from software publishers and management consulting services, the output impacts reported in other industries mainly result from increases in consumption spending (induced impacts). The sizable impacts in the real estate industry

are a typical feature of induced impacts, as a substantial proportion of household income goes to purchase or lease real estate.

**Figure 125: Top Ten Most Impacted Industries by Output, Virginia (NASA).**



#### 6.48.2. M2M Program Impacts

In 2019, Virginia had 493 M2M-related civil service employees (213 FTEs) with a corresponding labor income of \$33.3 million. M2M program contracts sourced in the state in the same year totaled \$68.3 million. The total Virginia employment impact is 1,221 jobs. The labor income and economic output associated with this employment are \$107.5 million and \$298.6 million, respectively. The M2M program generates \$9.2 million in tax revenues for the state and local governments in Virginia (Table 307).

**Table 307: Summary of M2M Program Impacts by Types of Impact, Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	213	33,331	43,932	91,860	1,012
Indirect	431	42,271	60,239	108,471	2,448
Induced	577	31,901	58,329	98,305	5,711
<b>Total</b>	<b>1,221</b>	<b>107,502</b>	<b>162,499</b>	<b>298,636</b>	<b>9,171</b>
<i>Multiplier</i>	<i>5.7</i>	<i>3.2</i>	<i>3.7</i>	<i>3.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Virginia economy. Approximately 60 percent of the employment impacts and 53 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 308: M2M Program Employment Impacts by Sources of Impact, Virginia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	213	43.1	0	0.0	213	17.4	100.0	0.0
Indirect*	0	0.0	431	59.2	431	35.3	0.0	100.0
Induced	280	56.9	297	40.8	577	47.3	48.6	51.4
<b>Total</b>	<b>493</b>	<b>100</b>	<b>728</b>	<b>100</b>	<b>1,221</b>	<b>100</b>	<b>40.4</b>	<b>59.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 309: M2M Program Output Impacts by Sources of Impact, Virginia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	91,860	65.8	0	0.0	91,860	30.8	100.0	0.0
Indirect*	0	0.0	108,471	68.2	108,471	36.3	0.0	100.0
Induced	47,746	34.2	50,559	31.8	98,305	32.9	48.6	51.4
<b>Total</b>	<b>139,606</b>	<b>100</b>	<b>159,030</b>	<b>100</b>	<b>298,636</b>	<b>100</b>	<b>46.7</b>	<b>53.3</b>



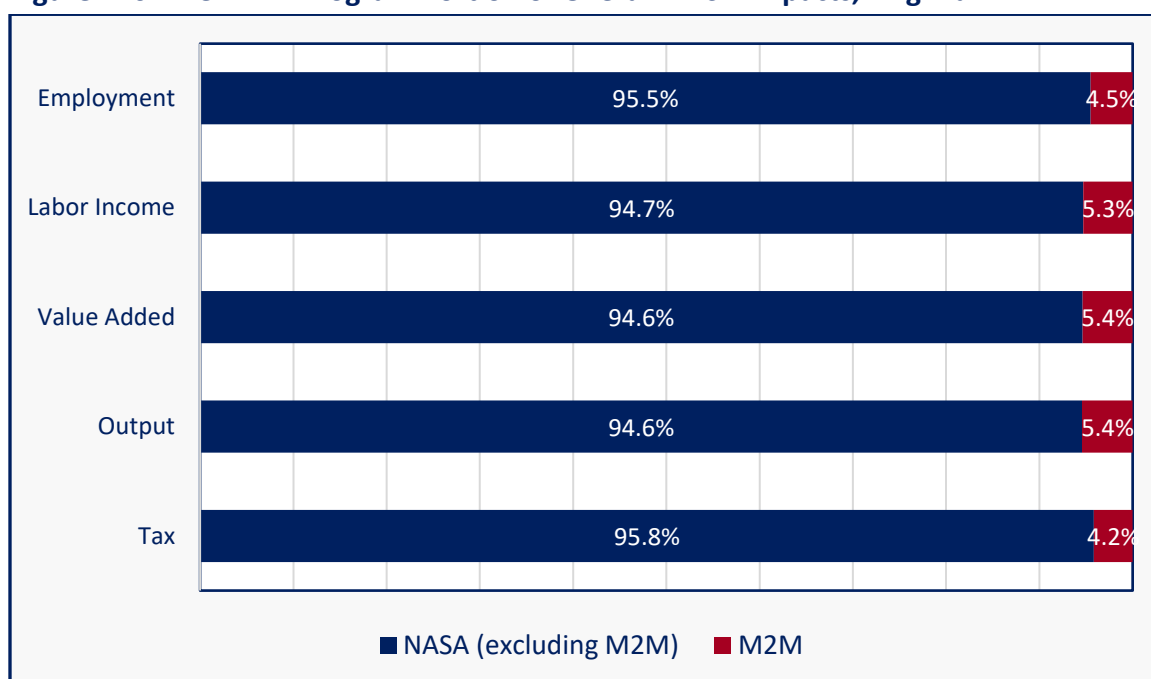
### 6.48.3. The M2M Program's Share of NASA Impacts

Around 5% of overall NASA agency impacts in the state are attributable to the M2M program (Table 310 and Figure 126). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 310: The M2M Program Portion of Overall NASA Impacts, Virginia.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	27,097	2,031,279	3,022,610	5,504,590	219,850
M2M Portion	1,221	107,502	162,499	298,636	9,171
M2M Share (%)	4.5%	5.3%	5.4%	5.4%	4.2%

**Figure 126: The M2M Program Portion of Overall NASA Impacts, Virginia.**



## 6.49. Economic Impacts on the State of Washington

### 6.49.1. NASA Impacts

In 2019, 14 NASA civil service employees (7 FTEs) residing in Washington earned \$1.2 million in labor income. NASA contracts sourced in Washington in the same year totaled approximately \$88 million. The total economic impact resulting from these activities is 874 jobs, \$78.1 million in labor income, and \$217.4 million in economic output. These economic activities generate \$8 million in tax revenues for the state and local governments in Washington (Table 311).

**Table 311: Summary of NASA Impacts by Types of Impact, Washington.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	1,237	1,383	2,892	16
Indirect	485	53,074	88,114	140,663	2,955
Induced	382	23,748	42,929	73,872	5,057
<b>Total</b>	<b>874</b>	<b>78,059</b>	<b>132,427</b>	<b>217,426</b>	<b>8,028</b>
<i>Multiplier</i>	<i>130.6</i>	<i>63.1</i>	<i>95.8</i>	<i>75.2</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Washington economy. Table 312 examines the sources of the employment figures in the second column of Table 311. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 98% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 2%.

**Table 312: NASA Employment Impacts by Sources of Impact, Washington.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	7	41.2	0	0.0	7	0.8	100.0	0.0
Indirect*	0	0.0	485	56.6	485	55.5	0.0	100.0
Induced	10	58.8	372	43.4	382	43.7	2.5	97.5
<b>Total</b>	<b>16</b>	<b>100</b>	<b>858</b>	<b>100</b>	<b>874</b>	<b>100</b>	<b>1.9</b>	<b>98.1</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 313 examines the sources of the output figures in the fifth column of Table 311. Procurement spending is responsible for nearly 98% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is 2%.

**Table 313: NASA Output Impacts by Sources of Impact, Washington.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,892	61.0	0	0.0	2,892	1.3	100.0	0.0
Indirect*	0	0.0	140,663	66.1	140,663	64.7	0.0	100.0
Induced	1,845	39.0	72,027	33.9	73,872	34.0	2.5	97.5
<b>Total</b>	<b>4,737</b>	<b>100</b>	<b>212,690</b>	<b>100</b>	<b>217,426</b>	<b>100</b>	<b>2.2</b>	<b>97.8</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

### 6.49.2. M2M Program Impacts

In 2019, Washington had three M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$391,000. M2M program contracts sourced in the state in the same year totaled \$7.4 million. The total Washington employment impact is 74 jobs. The labor income and economic output associated with this employment are \$7.5 million and \$20.1 million, respectively. The M2M program generates \$753,000 in tax revenues for the state and local governments in Washington (Table 314).

**Table 314: Summary of M2M Program Impacts by Types of Impact, Washington.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	391	403	843	5
Indirect	38	4,846	8,105	12,584	292
Induced	33	2,233	4,009	6,664	456
<b>Total</b>	<b>74</b>	<b>7,470</b>	<b>12,517</b>	<b>20,090</b>	<b>753</b>
<i>Multiplier</i>	<i>37.7</i>	<i>19.1</i>	<i>31.1</i>	<i>23.8</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Washington economy. More than 93 percent of the employment impacts and nearly 93 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 315: M2M Program Employment Impacts by Sources of Impact, Washington.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	39.6	0	0.0	2	2.7	100.0	0.0
Indirect*	0	0.0	38	55.9	38	52.2	0.0	100.0
Induced	3	60.4	30	44.1	33	45.2	8.9	91.1
<b>Total</b>	<b>5</b>	<b>100</b>	<b>69</b>	<b>100</b>	<b>74</b>	<b>100</b>	<b>6.7</b>	<b>93.3</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 316: M2M Program Output Impacts by Sources of Impact, Washington.**

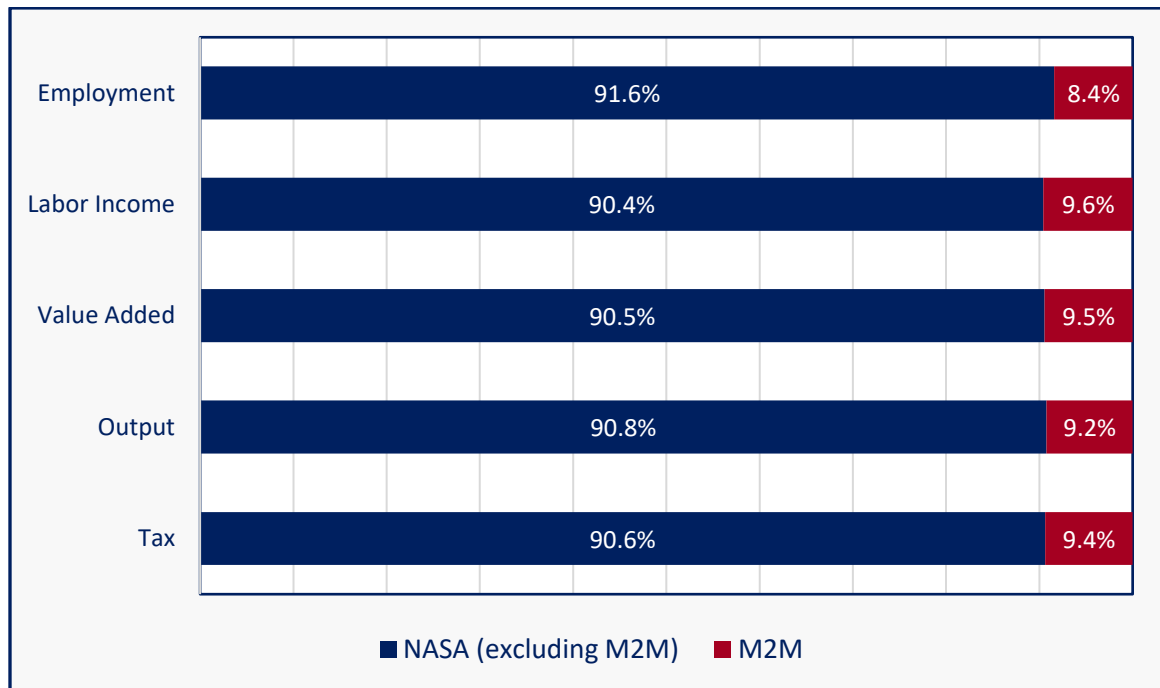
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	843	58.6	0	0.0	843	4.2	100.0	0.0
Indirect*	0	0.0	12,584	67.5	12,584	62.6	0.0	100.0
Induced	596	41.4	6,067	32.5	6,664	33.2	9.0	91.0
<b>Total</b>	<b>1,439</b>	<b>100</b>	<b>18,651</b>	<b>100</b>	<b>20,090</b>	<b>100</b>	<b>7.2</b>	<b>92.8</b>

### 6.49.3. The M2M Program's Share of NASA Impacts

Approximately 9% of overall NASA agency impacts in the state are attributable to the M2M program (Table 317 and Figure 127). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 317: The M2M Program Portion of Overall NASA Impacts, Washington.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	874	78,059	132,427	217,426	8,028
M2M Portion	74	7,470	12,517	20,090	753
M2M Share (%)	8.4%	9.6%	9.5%	9.2%	9.4%

**Figure 127: The M2M Program Portion of Overall NASA Impacts, Washington.**

## 6.50. Economic Impacts on the State of West Virginia

### 6.50.1. NASA Impacts

In 2019, 58 NASA civil service employees (53 FTEs) residing in West Virginia earned \$8.4 million in labor income. NASA contracts sourced in West Virginia in the same year totaled \$50.3 million. The total economic impact resulting from these activities is 728 jobs, \$48.1 million in labor income, and \$137.5 million in economic output. These economic activities generate \$4.3 million in tax revenues for the state and local governments in West Virginia (Table 318).

**Table 318: Summary of NASA Impacts by Types of Impact, West Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	53	8,403	10,876	22,742	224
Indirect	391	27,273	37,974	75,701	1,768
Induced	284	12,469	21,022	39,053	2,327
<b>Total</b>	<b>728</b>	<b>48,144</b>	<b>69,872</b>	<b>137,496</b>	<b>4,319</b>
<i>Multiplier</i>	<i>13.8</i>	<i>5.7</i>	<i>6.4</i>	<i>6.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the West Virginia economy. Table 319 examines the sources of the employment figures in the second column of Table 318. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Eighty-three (83) percent of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 17%.

**Table 319: NASA Employment Impacts by Sources of Impact, West Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	53	42.5	0	0.0	53	7.2	100.0	0.0
Indirect*	0	0.0	391	64.7	391	53.7	0.0	100.0
Induced	71	57.5	213	35.3	284	39.1	25.1	74.9
<b>Total</b>	<b>124</b>	<b>100</b>	<b>604</b>	<b>100</b>	<b>728</b>	<b>100</b>	<b>17.0</b>	<b>83.0</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 320 examines the sources of the output figures in the fifth column of Table 318. Procurement spending is responsible more than 76% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 24%.

**Table 320: NASA Output Impacts by Sources of Impact, West Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	22,742	69.9	0	0.0	22,742	16.5	100.0	0.0
Indirect*	0	0.0	75,701	72.1	75,701	55.1	0.0	100.0
Induced	9,794	30.1	29,260	27.9	39,053	28.4	25.1	74.9
<b>Total</b>	<b>32,535</b>	<b>100</b>	<b>104,961</b>	<b>100</b>	<b>137,496</b>	<b>100</b>	<b>23.7</b>	<b>76.3</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.50.2. M2M Program Impacts

There were no M2M-specific NASA employees in West Virginia in FY 2019, but \$2.6 million in M2M-related NASA contracts were sourced in the state. The total West Virginia employment impact is 28 jobs. The labor income and economic output associated with this employment are \$1.8 million and \$5.4 million, respectively. The M2M program generates approximately \$173,000 in tax revenues for the state and local governments in West Virginia (Table 321).

**Table 321: Summary of M2M Program Impacts by Types of Impact, West Virginia.**

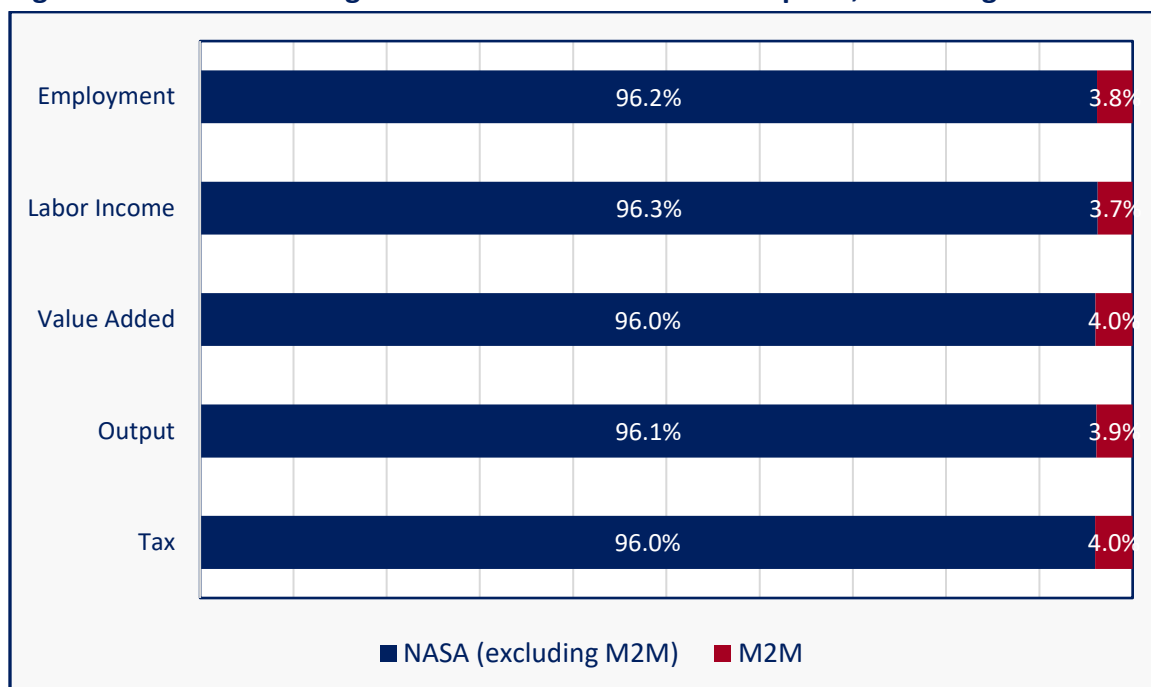
Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	0	0	0	0
Indirect	18	1,338	2,005	3,960	89
Induced	10	465	780	1,410	84
<b>Total</b>	<b>28</b>	<b>1,803</b>	<b>2,786</b>	<b>5,370</b>	<b>173</b>
<i>Multiplier</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

### 6.50.3. The M2M Program's Share of NASA Impacts

Approximately 4% of overall NASA agency impacts in the state are attributable to the M2M program (Table 322 and Figure 128). The primary reason the shares are slightly different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 322: The M2M Program Portion of Overall NASA Impacts, West Virginia.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	728	48,144	69,872	137,496	4,319
M2M Portion	28	1,803	2,786	5,370	173
M2M Share (%)	3.8%	3.7%	4.0%	3.9%	4.0%

**Figure 128: The M2M Program Portion of Overall NASA Impacts, West Virginia.**



## 6.51. Economic Impacts on the State of Wisconsin

### 6.51.1. NASA Impacts

In 2019, 21 NASA civil service employees (11 FTEs) residing in Wisconsin earned \$1.2 million in labor income. NASA contracts sourced in Wisconsin in the same year totaled \$15.8 million. The total economic impact resulting from these activities is 252 jobs, \$16.3 million in labor income, and \$49.9 million in economic output. These economic activities generate \$1.5 million in tax revenues for the state and local governments in Wisconsin (Table 323).

**Table 323: Summary of NASA Impacts by Types of Impact, Wisconsin.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	11	1,155	2,206	4,613	10
Indirect	142	10,196	14,310	29,372	623
Induced	99	4,949	8,476	15,904	894
<b>Total</b>	<b>252</b>	<b>16,300</b>	<b>24,992</b>	<b>49,889</b>	<b>1,527</b>
<i>Multiplier</i>	23.6	14.1	11.3	10.8	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Wisconsin economy. Table 324 examines the sources of the employment figures in the second column of Table 323. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. More than 94% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is approximately 6%.

**Table 324: NASA Employment Impacts by Sources of Impact, Wisconsin.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	11	72.6	0	0.0	11	4.2	100.0	0.0
Indirect*	0	0.0	142	59.9	142	56.4	0.0	100.0
Induced	4	27.4	95	40.1	99	39.4	4.1	95.9
<b>Total</b>	<b>15</b>	<b>100</b>	<b>238</b>	<b>100</b>	<b>252</b>	<b>100</b>	<b>5.8</b>	<b>94.2</b>

*\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.*

Table 325 examines the sources of the output figures in the fifth column of Table 323. Procurement spending is responsible for more than 89% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 11%.

**Table 325: NASA Output Impacts by Sources of Impact, Wisconsin.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	4,613	87.7	0	0.0	4,613	9.2	100.0	0.0
Indirect*	0	0.0	29,372	65.8	29,372	58.9	0.0	100.0
Induced	646	12.3	15,258	34.2	15,904	31.9	4.1	95.9
<b>Total</b>	<b>5,259</b>	<b>100</b>	<b>44,630</b>	<b>100</b>	<b>49,889</b>	<b>100</b>	<b>10.5</b>	<b>89.5</b>

*\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.*

### 6.51.2. M2M Program Impacts

In 2019, Wisconsin had four M2M-related civil service employees (2 FTEs) with a corresponding labor income of \$230,000. M2M program contracts sourced in the state in the same year totaled approximately \$818,000. The total Wisconsin employment impact is 33 jobs. The labor income and economic output associated with this employment are \$2.3 million and \$6.2 million, respectively. The M2M program generates approximately \$235,000 in tax revenues for the state and local governments in Wisconsin (Table 326).

**Table 326: Summary of M2M Program Impacts by Types of Impact, Wisconsin.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	230	332	694	6
Indirect	18	1,377	601	3,297	104
Induced	13	718	1,221	2,228	125
<b>Total</b>	<b>33</b>	<b>2,325</b>	<b>2,153</b>	<b>6,219</b>	<b>235</b>
<i>Multiplier</i>	<i>20.5</i>	<i>10.1</i>	<i>6.5</i>	<i>9.0</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Wisconsin economy. Approximately 88 percent of the employment impacts and more than 82 percent of the output impacts are due to NASA procurement sourced within the state.

**Table 327: M2M Program Employment Impacts by Sources of Impact, Wisconsin.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	39.9	0	0.0	2	4.9	100.0	0.0
Indirect*	0	0.0	18	61.9	18	54.3	0.0	100.0
Induced	2	60.1	11	38.1	13	40.8	18.0	82.0
<b>Total</b>	<b>4</b>	<b>100</b>	<b>29</b>	<b>100</b>	<b>33</b>	<b>100</b>	<b>12.2</b>	<b>87.8</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

**Table 328: M2M Program Output Impacts by Sources of Impact, Wisconsin.**

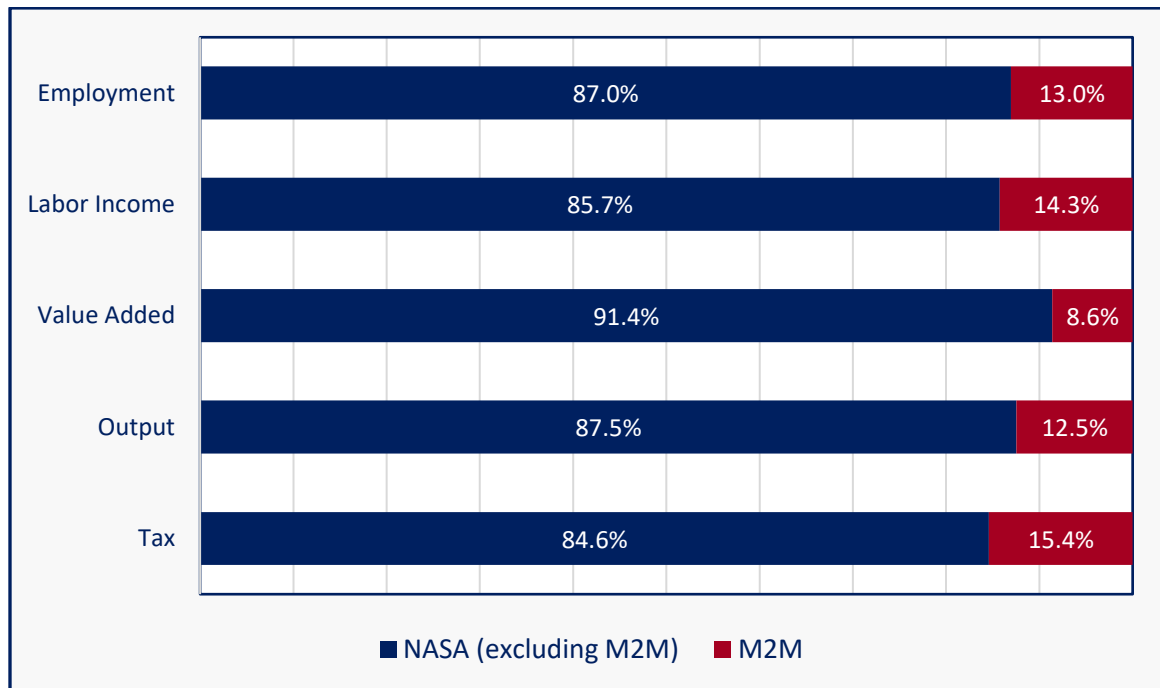
Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	694	63.4	0	0.0	694	11.2	100.0	0.0
Indirect*	0	0.0	3,297	64.3	3,297	53.0	0.0	100.0
Induced	401	36.6	1,827	35.7	2,228	35.8	18.0	82.0
<b>Total</b>	<b>1,095</b>	<b>100</b>	<b>5,124</b>	<b>100</b>	<b>6,219</b>	<b>100</b>	<b>17.6</b>	<b>82.4</b>

### 6.51.3. The M2M Program's Share of NASA Impacts

Approximately 13% of overall NASA agency impacts in the state are attributable to the M2M program (Table 329 and Figure 129). The primary reason the shares are different is that the sectoral distribution of procurement spending for the M2M program is different from the sectoral distribution of procurement spending for NASA as a whole and spending in different industry sectors produce different value added/output/tax impacts (due to industry-specific multipliers).

**Table 329: The M2M Program Portion of Overall NASA Impacts, Wisconsin.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	252	16,300	24,992	49,889	1,527
M2M Portion	33	2,325	2,153	6,219	235
M2M Share (%)	13.0%	14.3%	8.6%	12.5%	15.4%

**Figure 129: The M2M Program Portion of Overall NASA Impacts, Wisconsin.**

## 6.52. Economic Impacts on the State of Wyoming

### 6.52.1. NASA Impacts

In 2019, 3 NASA civil service employees (2 FTEs) residing in Wyoming earned \$378,000 in labor income. NASA contracts sourced in Wyoming in the same year totaled \$3.2 million. The total economic impact resulting from these activities is 42 jobs, \$2.7 million in labor income, and \$7.5 million in economic output. These economic activities generate \$234,000 in tax revenues for the state and local governments in Wyoming (Table 330).

**Table 330: Summary of NASA Impacts by Types of Impact, Wyoming.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	378	453	947	18
Indirect	26	1,750	2,255	4,410	81
Induced	14	569	1,120	2,171	135
<b>Total</b>	<b>42</b>	<b>2,698</b>	<b>3,829</b>	<b>7,528</b>	<b>234</b>
<i>Multiplier</i>	<i>19.2</i>	<i>7.1</i>	<i>8.5</i>	<i>7.9</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

The following two tables examine the contribution of different NASA activities to the Wyoming economy. Table 331 examines the sources of the employment figures in the second column of Table 330. NASA procurement sourced within the state is largely responsible for the overall NASA employment impacts. Nearly 83% of the jobs supported throughout the state economy by NASA are due to its procurement spending. The share of NASA direct labor force in the overall employment impact is 17%.

**Table 331: NASA Employment Impacts by Sources of Impact, Wyoming.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Jobs	%	Jobs	%	Jobs	%	Emp.	Proc.
Direct*	2	29.9	0	0.0	2	5.2	100.0	0.0
Indirect*	0	0.0	26	73.6	26	60.8	0.0	100.0
Induced	5	70.1	9	26.4	14	34.0	35.8	64.2
<b>Total</b>	<b>7</b>	<b>100</b>	<b>35</b>	<b>100</b>	<b>42</b>	<b>100</b>	<b>17.4</b>	<b>82.6</b>

\*Note that direct employment impact consists of NASA jobs (FTEs) while indirect employment impact consists of NASA contractor employees and employees in the supply chain of those contractors.

Table 332 examines the sources of the output figures in the fifth column of Table 330. Procurement spending is responsible for more than 77% of the increase in output in the state economy arising from NASA. NASA labor force's share of overall NASA output impact is approximately 23%.

**Table 332: NASA Output Impacts by Sources of Impact, Wyoming.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Output (\$ 000)	%	Output (\$ 000)	%	Output (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	947	54.9	0	0.0	947	12.6	100.0	0.0
Indirect*	0	0.0	4,410	76.0	4,410	58.6	0.0	100.0
Induced	778	45.1	1,394	24.0	2,171	28.8	35.8	64.2
<b>Total</b>	<b>1,725</b>	<b>100</b>	<b>5,804</b>	<b>100</b>	<b>7,528</b>	<b>100</b>	<b>22.9</b>	<b>77.1</b>

\* Note that direct output impact is associated with NASA labor force while indirect output impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 6.52.2. M2M Program Impacts<sup>28</sup>

In 2019, Wyoming had one M2M-related civil service employee (1 FTE) with a corresponding labor income of \$160,000. The total economic impact attributable to this income is two jobs, \$195,000 in labor income, and \$561,000 worth of output (Table 333).

**Table 333: Summary of M2M Program Impacts by Types of Impact, Wyoming.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	160	207	432	3
Indirect	0	0	0	0	0
Induced	1	35	69	129	8
<b>Total</b>	<b>2</b>	<b>195</b>	<b>275</b>	<b>561</b>	<b>11</b>
<i>Multiplier</i>	<i>1.8</i>	<i>1.2</i>	<i>1.3</i>	<i>1.3</i>	<i>n.a.</i>

**Note:** The direct value added figure represents the economic value added by NASA employees to products and services they procure for their production and management. It is calculated using the value-added-to-employee ratio in two industries: (1) guided missile and space vehicle manufacturing, and (2) propulsion units and parts for space vehicle and guided missiles manufacturing. Similarly, the direct output figure represents the value of production and management within the NASA program, including the value of intermediary products and services, and is calculated based on the estimated ratios of output-to-employee in the same two industries.

<sup>28</sup> Wyoming along with North Dakota are the only states with no M2M program-related procurement activity.

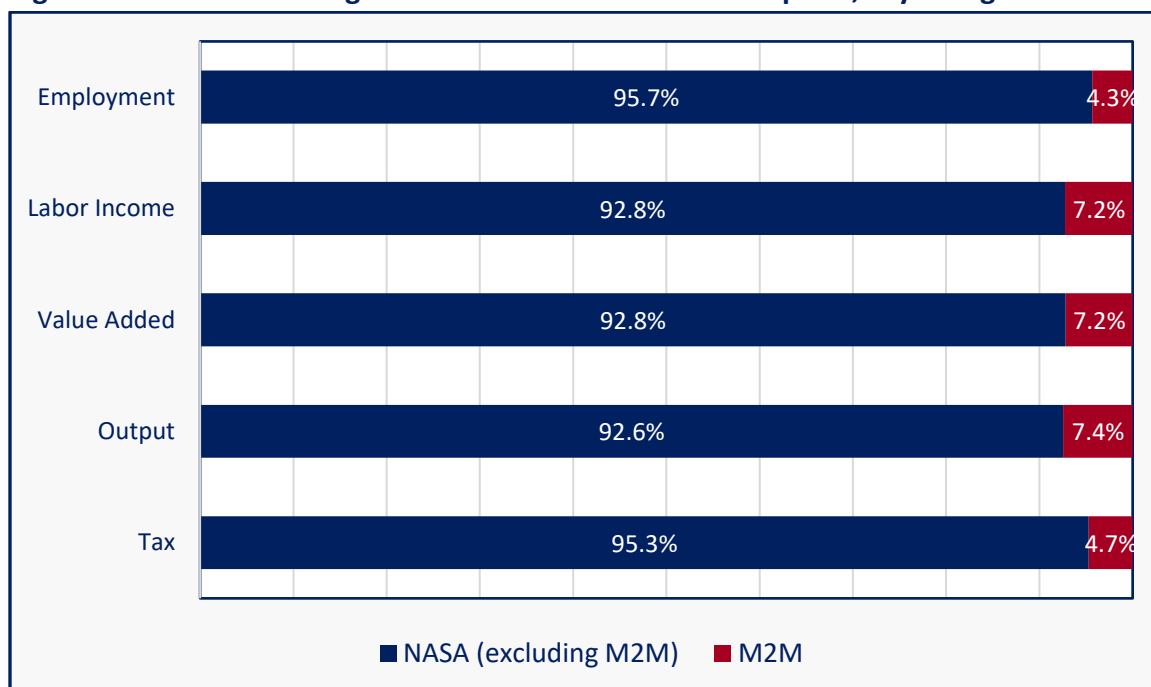
### 6.52.3. The M2M Program's Share of NASA Impacts

Around 7% of overall NASA agency impacts in the state are attributable to the M2M program (Table 334 and Figure 130). The primary reason the M2M program's output share is larger than other shares is that per employee productivity (employee output of goods/services per hour worked) is higher for civil servants than aerospace supply chain employees.

**Table 334: The M2M Program Portion of Overall NASA Impacts, Wyoming.**

Impact Component	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
NASA Total	42	2,698	3,829	7,528	234
M2M Portion	2	195	275	561	11
M2M Share (%)	4.3%	7.2%	7.2%	7.4%	4.7%

**Figure 130: The M2M Program Portion of Overall NASA Impacts, Wyoming.**



## 7. CONCLUSION

In this study, we examined the economic impacts of National Aeronautics and Space Administration (NASA) and the Moon to Mars (M2M) program on the U.S., the fifty (50) states, and Washington, DC for the Fiscal Year 2019. We first presented economic impacts of NASA on each region and then examined M2M program impacts. We distinguished the portion of NASA impacts attributable the M2M program to highlight the relative contribution of the M2M program in every state as well as the nation.

The impact estimates reported in this study are the sum of three channels of economic impact: (1) the direct contribution of NASA's own activities; (2) indirect (contracting) activities within NASA's U.S. supply chain; and (3) the induced effect that results as federal civil servants at NASA facilities, employees of contractors, and employees within the supply chain of those contractors spend their wages in the wider consumer economy. The economic impact was examined through a detailed analysis of the changes in employment, output (gross sales), labor income, value added, and taxes due to NASA's activities.

### NASA

At the national level, NASA directly employs 18,694 civil servants (corresponding to 17,022 full-time equivalent (FTE) jobs), paying \$2.9 billion in annual wages and benefits (Fiscal Year 2019). The \$19.3 billion in contracting activity originating from NASA is very diverse, involving almost every category of manufacturing or service industry. Taking the domestic portions of these spending streams into account, the total employment impact of NASA across the U.S. is more than 312,600 jobs (direct, indirect, and induced). The labor income and economic output associated with this total amount of employment are, respectively, \$23.7 billion and \$64.3 billion. Contracting activities along with NASA's direct employment generated an estimated \$6.9 billion in federal, state and local tax revenues in 2019.

For every FTE civil service job located at NASA facilities, more than 17 additional jobs are supported throughout the U.S. economy. For each million dollars of labor income earned by NASA civil service employees, an additional \$7 million of labor income is generated in the U.S. And for each million dollar worth of output produced by NASA, an additional \$7.7 million of output—consisting of both intermediary inputs and consumption goods and services—is produced throughout the national economy. These figures are boosted by the large volume of procurement spending administered through NASA.

NASA's economic impacts are concentrated both geographically and sectorally. The top ten most impacted states account for 91% of total NASA impacts. These states are California, Texas, Alabama, Maryland, Florida, Virginia, Colorado, Ohio, Arizona, and Utah. Impacts on Mississippi, Washington, DC, Massachusetts, Louisiana, New York, Indiana,



New Mexico, and Pennsylvania are also significant. The top three most impacted industries (scientific research and development services, management-consulting services, and professional and technical services) account for nearly a quarter of total NASA impacts.

Finally, approximately 22% of overall NASA agency impacts in the U.S. are attributable to the M2M program. It is still early in the M2M program; consequently, the contribution is expected to grow larger with the addition of other elements beyond 2019. The M2M program-specific employment accounts for 2.4% of overall NASA employment impacts while M2M program-related procurement accounts for 19.7% of overall NASA employment impacts.

### **M2M Program**

At the national level, NASA directly employs 5,563 civil servants (3,155 FTEs) to support the M2M program, paying more than \$520 million in annual wages and benefits. The M2M contracts originating from NASA are both large in volume and very diverse— involving almost every major category of manufacturing or service activity. There are indirect effects from the purchases of goods and services by NASA Centers as well as by the firms that supply those centers. Consumption expenditures made by the M2M labor force, by suppliers to the M2M program, and by suppliers further upstream within the production chain, create induced effects. Taking the domestic portions of these spending streams into account, the total employment impact of the M2M program across the U.S., is more than 69,000 jobs. The labor income and economic output associated with this total amount of employment are, respectively, \$5.2 billion and \$14.1 billion. M2M contracting activities along with NASA’s direct employment for the M2M program generated an estimated \$1.5 billion in federal, state and local tax revenues in 2019.

For every (FTE) civil service job located at NASA centers related to M2M, nearly 21 additional jobs are supported throughout the U.S. economy. For each million dollars of labor income earned by M2M-assigned NASA employees, an additional \$9 million of labor income is generated in the U.S. And for each \$1 million worth of output produced by the M2M program, an additional \$9.4 million of output—consisting of both intermediary inputs and consumption goods and services—is produced throughout the national economy. These figures are exceptionally large because of the extremely high volume of procurement spending relative to civil service employment.

The M2M program related labor and procurement activity is concentrated in certain states, as a result the economic impacts resulting from those activities. Alabama, Colorado, Florida, Texas, California, Utah, Ohio, Virginia, Louisiana, and Mississippi are the most impacted states, respectively. Ten states account for 98 percent of all M2M-related employment impacts. The share of M2M program in overall NASA impacts is

particularly high in Utah, Colorado, and Alabama. More than half of overall NASA impacts in those states are attributable to the M2M program.

NASA and M2M program impacts in the state and national economies go beyond the dollars they generate and the jobs they support. In addition to the economic benefits they generate, they help drive an innovation-based economy with the infusion of billions of dollars of spending in research and development in the aerospace sector.

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### A. ECONOMIC MODELING WITH IMPLAN

Economic impact analysis using IMPLAN depends on input-output models of the economy. Input-output models are powerful tools for estimating the economy-wide effects of an initial change in economic activity: they trace purchasing relationships among businesses, government, and consumers to provide a full accounting of the way spending flows through a regional economy. By accounting for linkages across industries and other economic sectors, studies that use these models are able to document the multiple ways in which a change in one industry impacts other industries and consumers.

To effectively use these models and interpret the results, readers as well as analysts should be aware of the basics of the model structure as well as the assumptions and limitations of these models. In this section, we briefly discuss the mechanics of the input-output models and the assumptions underlying them.

#### 1. Input-Output Analysis

Francois Quesnay first described inter-industry relationships in 1758. Wassily Leontief developed the concept of multipliers from input-output tables, receiving a Nobel Prize in 1973 for his work. Input-output analysis is a means of examining relationships within an economy, both between businesses and between businesses and final consumers. It captures all monetary market transactions for consumption in a given time period. The resulting mathematical formulae allow examination of the effects of a change in one or several economic activities on an entire economy (impact analysis).

A primary input-output study is based on data collected directly from industries. An example is the United States Bureau of Economic Analysis' Benchmark Study of Input-Output accounts (the data is based on economic censuses collected directly from firms). Other countries have conducted primary national level input-output studies as well. Primary state or local level input-output studies are not common due to the high cost of data collection.

Secondary input-output studies rely on data collected from other sources to construct the accounts. The inter-industry transaction information usually comes from some other primary study. IMPLAN is an example of a secondary input-output modeling system that relies on the data from the national Benchmark Input-Output accounts along with a variety of sources of regional information.

There are two phases in input/output analysis:

1. Descriptive modeling
2. Predictive modeling

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### 1.1. Descriptive Model

A Descriptive Model includes information about local economic interactions known as regional economic accounts. These tables describe a local economy in terms of the flow of dollars from purchasers to producers within the region.

Trade Flows are also part of the descriptive model. They describe the movement of goods and services within a region and the outside world (regional imports and exports). The initial IMPLAN data details all purchases, including imported goods and services. When regional economic accounts are created, imports to the region are isolated from the initial data, allowing examination of local inter-industry transactions and final purchases.

By adding Social Accounting data, an analyst can examine non-industrial transactions, such as payment of taxes by businesses and households. Social accounting data include tax collection by governments and payments to households and businesses. Input-output accounting describes the flow of commodities from producers to intermediate and final consumers. Social Accounting Matrices (SAMs) show the flow of money among institutions. Both are part of the descriptive model.

### 1.2. Predictive Model

The regional economic accounts are used to construct local multipliers. Multipliers describe the response of the economy to a stimulus (a change in demand or production). The multipliers represent the Predictive Model. Purchases for final use (final demand) drive an input-output model.

Industries producing goods and services for consumption purchase goods and services from other producers. These other producers, in turn, purchase goods and services. These indirect purchases (indirect effects) continue until compounding leakages from the regional purchasing cycle (imports, wages, profits, etc.) halt the cycle or shrink it to negligible size. The indirect effects and the effects of increased household spending (induced effects) can be mathematically derived as sets of multipliers. The derivation is called the *Leontief inverse*. The resulting sets of multipliers describe the change of output for each industry caused by a one dollar change in final demand for any given industry.

#### **Multipliers**

Final consumption (or final demand) drives input-output models. Industries respond to meet demands directly or indirectly (by supplying goods and services to industries responding directly). Each industry that produces goods and services generates demands for other goods and services and so on, round by round. Multipliers describe these iterations.

Based on a production function of the industry, which shows where an industry spends and in what proportions to generate each dollar of output, IMPLAN develops the A Matrix. Through algebraic manipulation of the A Matrix, it then derives the multipliers. The resulting equation is the predictive model:

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$$X = (I - A)^{-1} \cdot Y$$

Where;

X = Total industry output

I = Identity matrix

A = A Matrix

Y = Final Demand.

This can also be interpreted as:

$$\Delta X = (I - A)^{-1} \cdot \Delta Y$$

or,

Change in Total Industry Output =  $(I - A)^{-1}$  multiplied by Change in Final Demand.

The predictive model shows how output will change with a given change in final demand. The  $(I - A)$  inverse is the matrix of multipliers also known as the *Leontief inverse*.

Multipliers break the effects of stimuli on economic activity down into three components.

1. **Direct effects** are the changes in the industries to which a final demand change was made.
2. **Indirect effects** are the changes in inter-industry purchases as they respond to the new demands of the directly affected industries.
3. **Induced effects** typically reflect changes in spending from households as income increases or decreases due to the changes in production.

The Type I multiplier measures the direct and indirect effects of a change in economic activity. It captures the inter-industry effects only, i.e. industries buying from local industries.

The Type II multiplier captures direct, indirect, and induced effects. In addition to the inter-industry effects, the Type II also takes into account the income and expenditures of households. The household income and the household expenditures are treated as industries. This internalizes the household sector, including the induced or household spending, effects. This report employs Type II multipliers.

### 1.3. Key Assumptions

The accounting conventions that form the basis of an Input-Output (I-O) model and the way IMPLAN makes estimations impose assumptions that readers ought to be aware of when interpreting the results. Since many of these assumptions can lead to an overstatement of the

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impacts of a project or program, many users of Impact models consider the estimates as upper bounds (Bess & Ambargis, 2011).

Input-output modeling is based on several assumptions:

- Constant Returns to Scale
- No Supply Constraints
- Fixed Commodity Input Structure
- Homogenous Sector Output
- Industry Technology Assumption

The first assumption is that the production functions (an industry's list of expenditures) are assumed to embody constant returns to scale. This means the production functions are linear; if additional output is required, all inputs increase proportionately. Under this assumption, if \$1 of new business in the impact area triggers \$2 in total economic activity, then \$1,000 will trigger \$2,000, \$1 million will trigger \$2 million, and \$1 billion will trigger \$2 billion. In reality, this might not be the case. A plant operating at full capacity might not be able to increase its capacity without undertaking aggressive capital investment, hiring new workers in a tight labor market, or acquiring expensive new property – realities that will impact the ratio of total economic activity to the direct impact. These common business practices are examples of the “non-linear” reality of business.

Second, no supply constraints means supplies are unlimited. An industry has unlimited access to raw materials and its output is limited only by the demand for its products. In the world of business, rising demand creates scarcity. Just as the housing boom of the mid-2000s drove up prices for construction materials and China's rising industrial output has created scarcities in concrete and energy supply, diverting hundreds of millions in federal contracts to a region might create short-term shortages in labor, materials, services and raw inputs.

Third, a fixed commodity input structure implies that price changes do not cause a firm to buy substitute goods. This structure assumes that changes in the economy will affect the industry's output but not the mix of commodities and services it requires to make its products. Input-output analysis will not be as accurate in cases in which a long-term spike in costs or a shortage in supply induces businesses to locate new suppliers or make their products differently (by substituting advanced machinery for labor, for example). Consequently, our analysis can only establish how spending would flow through the economy at a fixed point in time, not how the structure of the economy would change as a result of that spending.

Fourth, there is homogeneous sector output. That is, the proportions of all the commodities produced by that industry remain the same, regardless of total output. An industry will not increase the output of one product without proportionately increasing the output of all its other products.

Finally, the industry technology assumption comes into play when data are collected on an industry-by-commodity basis and then converted to industry-by-industry matrices. The assumption is that an industry uses the same technology to produce all its products. In other words,

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an industry has a primary or main product and all other products are byproducts of the primary product.

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### B. SUMMARY IMPACTS BY SOURCES OF IMPACT

This section presents summary impact results by the source of impact (employment and procurement). The examination of summary impacts by NASA employment and procurement components highlights the relative contributions of NASA's employment and procurement activities to the overall NASA impacts. In addition, it allows the reader to assess economic multipliers associated with NASA employment and NASA procurement separately. The analogous tables for the M2M Program are provided following the NASA section.

#### 1. The United States

##### NASA

**Table 1: Summary of Employment Component of NASA Impacts by Types of Impact, U.S.**

Impact Type	Employment <sup>1</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	17,022	2,904,480	3,517,219	7,354,389	635,516
Indirect	0	0	0	0	0
Induced	24,842	1,372,187	2,425,828	4,338,870	519,903
<b>Total</b>	<b>41,864</b>	<b>4,276,667</b>	<b>5,943,047</b>	<b>11,693,258</b>	<b>1,155,419</b>
<i>Multiplier*</i>	2.5	1.5	1.7	1.6	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 2: Summary of Procurement Component of NASA Impacts by Types of Impact, U.S.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	88,753	8,288,793	10,876,386	19,284,940	1,977,979
Indirect	69,408	4,867,851	7,518,550	13,717,739	1,482,936
Induced	112,605	6,219,206	10,986,438	19,646,749	2,354,504
<b>Total</b>	<b>270,766</b>	<b>19,375,850</b>	<b>29,381,375</b>	<b>52,649,428</b>	<b>5,815,418</b>
<i>Multiplier</i>	3.1	2.3	2.7	2.7	<i>n.a.</i>

<sup>1</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 3: Summary of Employment Component of M2M Program Impacts by Types of Impact, U.S.**

Impact Type	Employment <sup>2</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3,155	520,785	651,896	1,363,093	113,951
Indirect	0	0	0	0	0
Induced	4,454	246,039	434,961	777,977	93,221
<b>Total</b>	<b>7,609</b>	<b>766,824</b>	<b>1,086,857</b>	<b>2,141,071</b>	<b>207,171</b>
<i>Multiplier*</i>	2.4	1.5	1.7	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 4: Summary of Procurement Component of M2M Program Impacts by Types of Impact, U.S.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	19,699	1,899,382	2,521,718	4,407,483	451,575
Indirect	16,024	1,126,684	1,714,403	3,096,017	326,898
Induced	25,901	1,430,485	2,526,860	4,518,652	541,530
<b>Total</b>	<b>61,624</b>	<b>4,456,551</b>	<b>6,762,981</b>	<b>12,022,151</b>	<b>1,320,002</b>
<i>Multiplier</i>	3.1	2.3	2.7	2.7	n.a.

## 2. Alabama

### NASA

**Table 5: Summary of Employment Component of NASA Impacts by Types of Impact, Alabama.**

Impact Type	Employment <sup>3</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,214	365,050	457,537	956,695	8,078
Indirect	0	0	0	0	0
Induced	3,187	140,976	253,229	487,369	27,978
<b>Total</b>	<b>5,401</b>	<b>506,026</b>	<b>710,766</b>	<b>1,444,064</b>	<b>36,056</b>
<i>Multiplier*</i>	2.4	1.4	1.6	1.5	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>2</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>3</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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**Table 6: Summary of Procurement Component of NASA Impacts by Types of Impact, Alabama.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	13,648	895,813	1,054,708	1,933,185	36,342
Indirect	6,578	407,517	561,811	1,132,536	28,132
Induced	10,141	448,204	804,464	1,548,622	88,809
<b>Total</b>	<b>30,367</b>	<b>1,751,533</b>	<b>2,420,984</b>	<b>4,614,343</b>	<b>153,283</b>
<i>Multiplier</i>	2.2	2.0	2.3	2.4	<i>n.a.</i>

### **M2M Program**

**Table 7: Summary of Employment Component of M2M Program Impacts by Types of Impact, Alabama.**

Impact Type	Employment <sup>4</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	864	138,436	178,589	373,425	3,063
Indirect	0	0	0	0	0
Induced	1,170	54,788	98,599	183,512	10,535
<b>Total</b>	<b>2,035</b>	<b>193,224</b>	<b>277,188</b>	<b>556,937</b>	<b>13,598</b>
<i>Multiplier*</i>	2.4	1.4	1.6	1.5	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 8: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Alabama.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7,784	505,793	626,068	1,171,298	18,658
Indirect	3,046	270,091	383,035	654,260	15,269
Induced	5,744	268,664	483,096	899,350	51,571
<b>Total</b>	<b>16,574</b>	<b>1,044,548</b>	<b>1,492,199</b>	<b>2,724,909</b>	<b>85,498</b>
<i>Multiplier</i>	2.1	2.1	2.4	2.3	<i>n.a.</i>

<sup>4</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### 3. Alaska

#### NASA

**Table 9: Summary of Employment Component of NASA Impacts by Types of Impact, Alaska.**

Impact Type	Employment <sup>5</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	131	352	737	1
Indirect	0	0	0	0	0
Induced	1	51	91	156	6
Total	3	183	444	893	7
<i>Multiplier*</i>	1.6	1.4	1.3	1.2	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 10: Summary of Procurement Component of NASA Impacts by Types of Impact, Alaska.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	77	7,067	8,127	17,225	140
Indirect	46	2,647	3,928	7,976	133
Induced	66	3,563	6,342	10,835	431
Total	189	13,278	18,397	36,036	704
<i>Multiplier</i>	2.4	1.9	2.3	2.1	n.a.

#### M2M Program

**Table 11: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Alaska.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	9	26	48	1
Indirect	<1	9	11	17	0
Induced	<1	5	9	15	1
<b>Total</b>	<1	24	46	81	2
<i>Multiplier</i>	1.2	2.6	1.8	1.7	n.a.

<sup>5</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### 4. Arizona

#### NASA

**Table 12: Summary of Employment Component of NASA Impacts by Types of Impact, Arizona.**

Impact Type	Employment <sup>6</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	2,538	2,948	6,165	45
Indirect	0	0	0	0	0
Induced	28	1,422	2,466	4,431	244
Total	42	3,960	5,414	10,596	289
Multiplier*	2.9	1.6	1.8	1.7	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 13: Summary of Procurement Component of NASA Impacts by Types of Impact, Arizona.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,318	121,873	179,088	343,764	4,653
Indirect	1,589	92,051	142,432	281,929	6,705
Induced	2,092	107,437	186,266	334,722	18,409
Total	4,999	321,361	507,786	960,415	29,767
Multiplier	3.8	2.6	2.8	2.8	n.a.

#### M2M Program

**Table 14: Summary of Employment Component of M2M Program Impacts by Types of Impact, Arizona.**

Impact Type	Employment <sup>7</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	147	139	290	3
Indirect	0	0	0	0	0
Induced	2	87	150	261	14
Total	2	234	289	550	17
Multiplier*	3.3	1.6	2.1	1.9	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>6</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>7</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 15: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Arizona.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	48	4,423	6,516	13,705	219
Indirect	50	3,981	6,438	11,182	279
Induced	75	4,166	7,171	12,462	685
<b>Total</b>	<b>173</b>	<b>12,570</b>	<b>20,125</b>	<b>37,350</b>	<b>1,183</b>
<i>Multiplier</i>	<i>3.6</i>	<i>2.8</i>	<i>3.1</i>	<i>2.7</i>	<i>n.a.</i>

### 5. Arkansas

#### NASA

**Table 16: Summary of Employment Component of NASA Impacts by Types of Impact, Arkansas.**

Impact Type	Employment <sup>8</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	158	207	432	4
Indirect	0	0	0	0	0
Induced	1	59	107	209	13
<b>Total</b>	<b>2</b>	<b>217</b>	<b>314</b>	<b>641</b>	<b>16</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.4</i>	<i>1.5</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 17: Summary of Procurement Component of NASA Impacts by Types of Impact, Arkansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	12	917	1,229	2,253	35
Indirect	7	348	493	1,173	34
Induced	11	449	813	1,587	95
<b>Total</b>	<b>30</b>	<b>1,714</b>	<b>2,535</b>	<b>5,014</b>	<b>164</b>
<i>Multiplier</i>	<i>2.5</i>	<i>1.9</i>	<i>2.1</i>	<i>2.2</i>	<i>n.a.</i>

<sup>8</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 18: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Arkansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	31	43	107	1
Indirect	<1	25	38	70	2
Induced	<1	19	35	66	4
<b>Total</b>	<b>1</b>	<b>75</b>	<b>115</b>	<b>243</b>	<b>7</b>
<i>Multiplier</i>	<i>2.6</i>	<i>2.4</i>	<i>2.7</i>	<i>2.3</i>	<i>n.a.</i>

### 6. California

#### NASA

**Table 19: Summary of Employment Component of NASA Impacts by Types of Impact, California.**

Impact Type	Employment <sup>9</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,679	308,027	346,867	725,288	13,068
Indirect	0	0	0	0	0
Induced	2,847	185,625	329,937	572,974	37,270
<b>Total</b>	<b>4,526</b>	<b>493,652</b>	<b>676,804</b>	<b>1,298,263</b>	<b>50,338</b>
<i>Multiplier*</i>	<i>2.7</i>	<i>1.6</i>	<i>2.0</i>	<i>1.8</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 20: Summary of Procurement Component of NASA Impacts by Types of Impact, California.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	17,877	2,389,469	3,339,991	5,253,710	163,943
Indirect	16,208	1,384,200	2,192,610	3,796,559	166,396
Induced	31,114	2,028,321	3,601,879	6,255,108	406,611
<b>Total</b>	<b>65,199</b>	<b>5,801,990</b>	<b>9,134,479</b>	<b>15,305,377</b>	<b>736,950</b>
<i>Multiplier</i>	<i>3.6</i>	<i>2.4</i>	<i>2.7</i>	<i>2.9</i>	<i>n.a.</i>

<sup>9</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 21: Summary of Employment Component of M2M Program Impacts by Types of Impact, California.**

Impact Type	Employment <sup>10</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	162	31,400	33,377	69,789	1,332
Indirect	0	0	0	0	0
Induced	294	21,091	37,445	62,814	4,086
<b>Total</b>	<b>455</b>	<b>52,491</b>	<b>70,822</b>	<b>132,603</b>	<b>5,418</b>
<i>Multiplier*</i>	<i>2.8</i>	<i>1.7</i>	<i>2.1</i>	<i>1.9</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 22: Summary of Procurement Component of M2M Program Impacts by Types of Impact, California.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,432	226,697	332,486	506,074	15,087
Indirect	1,215	145,993	229,455	321,800	11,382
Induced	3,004	215,582	382,525	641,680	41,722
<b>Total</b>	<b>5,652</b>	<b>588,272</b>	<b>944,467</b>	<b>1,469,553</b>	<b>68,191</b>
<i>Multiplier</i>	<i>3.9</i>	<i>2.6</i>	<i>2.8</i>	<i>2.9</i>	<i>n.a.</i>

## 7. Colorado

### NASA

**Table 23: Summary of Employment Component of NASA Impacts by Types of Impact, Colorado.**

Impact Type	Employment <sup>11</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	32	5,589	6,697	14,003	155
Indirect	0	0	0	0	0
Induced	56	3,022	5,252	9,581	519
<b>Total</b>	<b>89</b>	<b>8,611</b>	<b>11,949</b>	<b>23,584</b>	<b>674</b>
<i>Multiplier*</i>	<i>2.7</i>	<i>1.5</i>	<i>1.8</i>	<i>1.7</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>10</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>11</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 24: Summary of Procurement Component of NASA Impacts by Types of Impact, Colorado.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	6,049	599,862	792,219	1,535,120	14,858
Indirect	7,063	469,631	712,145	1,317,872	36,838
Induced	9,650	516,951	898,037	1,638,162	88,781
<b>Total</b>	<b>22,762</b>	<b>1,586,444</b>	<b>2,402,401</b>	<b>4,491,153</b>	<b>140,476</b>
<i>Multiplier</i>	3.8	2.6	3.0	2.9	<i>n.a.</i>

### **M2M Program**

**Table 25: Summary of Employment Component of M2M Program Impacts by Types of Impact, Colorado.**

Impact Type	Employment <sup>12</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	6	966	1,255	2,624	27
Indirect	0	0	0	0	0
Induced	10	547	950	1,673	91
<b>Total</b>	<b>16</b>	<b>1,513</b>	<b>2,205</b>	<b>4,297</b>	<b>117</b>
<i>Multiplier*</i>	2.6	1.6	1.8	1.6	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 26: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Colorado.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3,436	355,272	483,938	919,347	16,840
Indirect	3,342	294,661	437,630	713,100	18,017
Induced	5,626	322,458	559,741	986,247	53,451
<b>Total</b>	<b>12,404</b>	<b>972,391</b>	<b>1,481,309</b>	<b>2,618,694</b>	<b>88,309</b>
<i>Multiplier</i>	3.6	2.7	3.1	2.8	<i>n.a.</i>

<sup>12</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 8. Connecticut

#### NASA

**Table 27: Summary of Employment Component of NASA Impacts by Types of Impact, Connecticut.**

Impact Type	Employment <sup>13</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	604	928	1,940	20
Indirect	0	0	0	0	0
Induced	5	316	536	855	58
<b>Total</b>	<b>9</b>	<b>920</b>	<b>1,464</b>	<b>2,795</b>	<b>79</b>
<i>Multiplier*</i>	<i>2.1</i>	<i>1.5</i>	<i>1.6</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 28: Summary of Procurement Component of NASA Impacts by Types of Impact, Connecticut.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	91	10,850	17,059	30,046	877
Indirect	88	7,982	11,728	20,151	869
Induced	128	8,396	14,239	22,714	1,549
<b>Total</b>	<b>307</b>	<b>27,228</b>	<b>43,026</b>	<b>72,912</b>	<b>3,295</b>
<i>Multiplier</i>	<i>3.4</i>	<i>2.5</i>	<i>2.5</i>	<i>2.4</i>	<i>n.a.</i>

#### M2M Program

**Table 29: Summary of Employment Component of M2M Program Impacts by Types of Impact, Connecticut.**

Impact Type	Employment <sup>14</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	62	144	301	2
Indirect	0	0	0	0	0
Induced	<1	35	59	90	6
<b>Total</b>	<b>1</b>	<b>97</b>	<b>203</b>	<b>391</b>	<b>8</b>
<i>Multiplier*</i>	<i>1.7</i>	<i>1.6</i>	<i>1.4</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>13</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>14</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.

**Table 30: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Connecticut.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	25	2,860	4,464	8,932	230
Indirect	24	2,652	3,930	6,189	275
Induced	36	2,564	4,313	6,624	452
<b>Total</b>	<b>85</b>	<b>8,076</b>	<b>12,707</b>	<b>21,746</b>	<b>956</b>
<i>Multiplier</i>	<i>3.4</i>	<i>2.8</i>	<i>2.8</i>	<i>2.4</i>	<i>n.a.</i>

### 9. District of Columbia (D.C.)

#### NASA

**Table 31: Summary of Employment Component of NASA Impacts by Types of Impact, D.C.**

Impact Type	Employment <sup>15</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	281	50,301	58,153	121,595	819
Indirect	0	0	0	0	0
Induced	115	9,138	13,570	20,044	1,222
<b>Total</b>	<b>396</b>	<b>59,440</b>	<b>71,722</b>	<b>141,639</b>	<b>2,041</b>
<i>Multiplier*</i>	<i>1.4</i>	<i>1.2</i>	<i>1.2</i>	<i>1.2</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 32: Summary of Procurement Component of NASA Impacts by Types of Impact, D.C.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,339	159,466	213,781	309,057	6,522
Indirect	432	47,281	15,470	105,691	4,167
Induced	530	42,267	62,422	92,251	5,586
<b>Total</b>	<b>2,300</b>	<b>249,014</b>	<b>291,673</b>	<b>506,999</b>	<b>16,275</b>
<i>Multiplier</i>	<i>1.7</i>	<i>1.6</i>	<i>1.4</i>	<i>1.6</i>	<i>n.a.</i>

<sup>15</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### M2M Program

**Table 33: Summary of Employment Component of M2M Program Impacts by Types of Impact, D.C.**

Impact Type	Employment <sup>16</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	772	1,017	2,126	13
Indirect	0	0	0	0	0
Induced	2	156	228	322	20
<b>Total</b>	<b>7</b>	<b>928</b>	<b>1,244</b>	<b>2,448</b>	<b>32</b>
<i>Multiplier*</i>	<i>1.4</i>	<i>1.2</i>	<i>1.2</i>	<i>1.2</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 34: Summary of Procurement Component of M2M Program Impacts by Types of Impact, D.C.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	41	5,927	6,793	11,198	207
Indirect	15	2,924	3,850	4,845	158
Induced	22	1,886	2,746	3,883	235
<b>Total</b>	<b>78</b>	<b>10,737</b>	<b>13,389</b>	<b>19,926</b>	<b>600</b>
<i>Multiplier</i>	<i>1.9</i>	<i>1.8</i>	<i>2.0</i>	<i>1.8</i>	<i>n.a.</i>

### 10. Delaware

#### NASA

**Table 35: Summary of Employment Component of NASA Impacts by Types of Impact, Delaware.**

Impact Type	Employment <sup>17</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	819	1,043	2,182	24
Indirect	0	0	0	0	0
Induced	7	351	636	1,041	52
<b>Total</b>	<b>12</b>	<b>1,170</b>	<b>1,679</b>	<b>3,223</b>	<b>75</b>
<i>Multiplier*</i>	<i>2.3</i>	<i>1.4</i>	<i>1.6</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>16</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>17</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 36: Summary of Procurement Component of NASA Impacts by Types of Impact, Delaware.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	30	3,679	4,635	8,099	201
Indirect	24	1,731	2,751	4,676	227
Induced	41	2,176	3,937	6,448	320
<b>Total</b>	<b>95</b>	<b>7,586</b>	<b>11,323</b>	<b>19,223</b>	<b>747</b>
<i>Multiplier</i>	<i>3.1</i>	<i>2.1</i>	<i>2.4</i>	<i>2.4</i>	<i>n.a.</i>

### **M2M Program**

**Table 37: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Delaware.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	106	128	234	6
Indirect	1	62	96	141	7
Induced	1	70	123	197	10
<b>Total</b>	<b>3</b>	<b>238</b>	<b>347</b>	<b>572</b>	<b>22</b>
<i>Multiplier</i>	<i>3.2</i>	<i>2.2</i>	<i>2.7</i>	<i>2.4</i>	<i>n.a.</i>

## **11. Florida**

### **NASA**

**Table 38: Summary of Employment Component of NASA Impacts by Types of Impact, Florida.**

Impact Type	Employment <sup>18</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,021	317,406	417,526	873,033	2,249
Indirect	0	0	0	0	0
Induced	3,679	180,146	320,125	586,448	31,698
<b>Total</b>	<b>5,699</b>	<b>497,552</b>	<b>737,651</b>	<b>1,459,481</b>	<b>33,947</b>
<i>Multiplier*</i>	<i>2.8</i>	<i>1.6</i>	<i>1.8</i>	<i>1.7</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>18</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 39: Summary of Procurement Component of NASA Impacts by Types of Impact, Florida.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9,683	608,475	729,315	1,471,654	22,016
Indirect	7,186	442,576	660,135	1,305,576	53,796
Induced	10,525	515,293	914,987	1,676,456	90,504
<b>Total</b>	<b>27,394</b>	<b>1,566,344</b>	<b>2,304,437</b>	<b>4,453,687</b>	<b>166,315</b>
<i>Multiplier</i>	<i>2.8</i>	<i>2.6</i>	<i>3.2</i>	<i>3.0</i>	<i>n.a.</i>

### **M2M Program**

**Table 40: Summary of Employment Component of M2M Program Impacts by Types of Impact, Florida.**

Impact Type	Employment <sup>19</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	624	98,998	128,981	269,696	701
Indirect	0	0	0	0	0
Induced	1,123	59,272	105,549	186,558	10,084
<b>Total</b>	<b>1,747</b>	<b>158,269</b>	<b>234,531</b>	<b>456,254</b>	<b>10,785</b>
<i>Multiplier*</i>	<i>2.8</i>	<i>1.6</i>	<i>1.8</i>	<i>1.7</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 41: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Florida.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3,338	220,274	260,286	516,968	7,162
Indirect	2,073	169,943	245,313	424,515	15,330
Induced	3,712	195,863	348,533	616,121	33,264
<b>Total</b>	<b>9,122</b>	<b>586,081</b>	<b>854,131</b>	<b>1,557,604</b>	<b>55,756</b>
<i>Multiplier</i>	<i>2.7</i>	<i>2.7</i>	<i>3.3</i>	<i>3.0</i>	<i>n.a.</i>

<sup>19</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### 12. Georgia

#### NASA

**Table 42: Summary of Employment Component of NASA Impacts by Types of Impact, Georgia.**

Impact Type	Employment <sup>20</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	1,885	2,957	6,184	51
Indirect	0	0	0	0	0
Induced	20	1,021	1,846	3,330	172
<b>Total</b>	<b>34</b>	<b>2,906</b>	<b>4,803</b>	<b>9,514</b>	<b>223</b>
<i>Multiplier*</i>	2.4	1.5	1.6	1.5	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 43: Summary of Procurement Component of NASA Impacts by Types of Impact, Georgia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	107	9,316	13,142	24,575	428
Indirect	104	6,746	10,770	20,088	561
Induced	148	7,503	13,548	24,445	1,265
<b>Total</b>	<b>359</b>	<b>23,565</b>	<b>37,460</b>	<b>69,108</b>	<b>2,254</b>
<i>Multiplier</i>	3.4	2.5	2.9	2.8	n.a.

#### M2M Program

**Table 44: Summary of Employment Component of M2M Program Impacts by Types of Impact, Georgia.**

Impact Type	Employment <sup>21</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	305	353	738	8
Indirect	0	0	0	0	0
Induced	3	181	327	569	29
<b>Total</b>	<b>5</b>	<b>486</b>	<b>680</b>	<b>1,307</b>	<b>38</b>
<i>Multiplier*</i>	2.9	1.6	1.9	1.8	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>20</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>21</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 45: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Georgia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	6	579	870	1,709	30
Indirect	6	527	831	1,352	35
Induced	10	533	962	1,675	87
<b>Total</b>	<b>22</b>	<b>1,639</b>	<b>2,663</b>	<b>4,736</b>	<b>152</b>
<i>Multiplier</i>	3.5	2.8	3.1	2.8	<i>n.a.</i>

### 13. Hawaii

#### NASA

**Table 46: Summary of Employment Component of NASA Impacts by Types of Impact, Hawaii.**

Impact Type	Employment <sup>22</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	63	76	159	2
Indirect	0	0	0	0	0
Induced	1	27	50	89	7
<b>Total</b>	<b>1</b>	<b>91</b>	<b>126</b>	<b>248</b>	<b>8</b>
<i>Multiplier*</i>	2.5	1.4	1.7	1.6	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 47: Summary of Procurement Component of NASA Impacts by Types of Impact, Hawaii.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	143	12,564	13,791	30,725	525
Indirect	117	6,567	10,186	19,203	696
Induced	150	7,636	13,932	24,652	1,809
<b>Total</b>	<b>411</b>	<b>26,768</b>	<b>37,910</b>	<b>74,580</b>	<b>3,031</b>
<i>Multiplier</i>	2.9	2.1	2.7	2.4	<i>n.a.</i>

<sup>22</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### M2M Program

**Table 48: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Hawaii.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	70,598	76,956	178,777	2,978
Indirect	<1	42,654	66,287	105,871	3,806
Induced	<1	46,623	84,339	144,345	10,595
<b>Total</b>	<b>2</b>	<b>159,875</b>	<b>227,582</b>	<b>428,993</b>	<b>17,379</b>
<i>Multiplier</i>	<i>2.7</i>	<i>2.3</i>	<i>3.0</i>	<i>2.4</i>	<i>n.a.</i>

### 14. Idaho

#### NASA

**Table 49: Summary of Employment Component of NASA Impacts by Types of Impact, Idaho.**

Impact Type	Employment <sup>23</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	185	215	450	6
Indirect	0	0	0	0	0
Induced	2	74	127	252	14
<b>Total</b>	<b>3</b>	<b>259</b>	<b>342</b>	<b>702</b>	<b>19</b>
<i>Multiplier*</i>	<i>2.6</i>	<i>1.4</i>	<i>1.6</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 50: Summary of Procurement Component of NASA Impacts by Types of Impact, Idaho.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	75	7,435	10,309	13,373	255
Indirect	22	846	1,639	3,624	101
Induced	76	3,350	5,738	11,441	624
<b>Total</b>	<b>173</b>	<b>11,630</b>	<b>17,686</b>	<b>28,438</b>	<b>980</b>
<i>Multiplier</i>	<i>2.3</i>	<i>1.6</i>	<i>1.7</i>	<i>2.1</i>	<i>n.a.</i>

<sup>23</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 51: Summary of Employment Component of M2M Program Impacts by Types of Impact, Idaho.**

Impact Type	Employment <sup>24</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	19	21	44	1
Indirect	0	0	0	0	0
Induced	<1	8	13	25	1
<b>Total</b>	<b>&lt;1</b>	<b>26</b>	<b>34</b>	<b>69</b>	<b>2</b>
<i>Multiplier*</i>	2.6	1.4	1.6	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 52: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Idaho.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	49	5,353	8,574	8,574	188
Indirect	-3	294	-1	-1	0
Induced	47	2,220	3,812	7,347	401
<b>Total</b>	<b>93</b>	<b>7,866</b>	<b>12,385</b>	<b>15,920</b>	<b>588</b>
<i>Multiplier</i>	1.9	1.5	1.4	1.9	n.a.

### 15. Illinois

#### NASA

**Table 53: Summary of Employment Component of NASA Impacts by Types of Impact, Illinois.**

Impact Type	Employment <sup>25</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	15	1,466	3,047	6,370	35
Indirect	0	0	0	0	0
Induced	15	889	1,562	2,720	168
<b>Total</b>	<b>30</b>	<b>2,354</b>	<b>4,608</b>	<b>9,091</b>	<b>203</b>
<i>Multiplier*</i>	2.0	1.6	1.5	1.4	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>24</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>25</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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**Table 54: Summary of Procurement Component of NASA Impacts by Types of Impact, Illinois.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	127	13,863	16,732	33,554	404
Indirect	142	11,023	18,445	30,494	1,090
Induced	220	13,069	22,942	39,967	2,464
<b>Total</b>	<b>489</b>	<b>37,955</b>	<b>58,119</b>	<b>104,015</b>	<b>3,959</b>
<i>Multiplier</i>	<i>3.8</i>	<i>2.7</i>	<i>3.5</i>	<i>3.1</i>	<i>n.a.</i>

### **M2M Program**

**Table 55: Summary of Employment Component of M2M Program Impacts by Types of Impact, Illinois.**

Impact Type	Employment <sup>26</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	326	755	1,578	8
Indirect	0	0	0	0	0
Induced	3	213	372	630	39
<b>Total</b>	<b>7</b>	<b>538</b>	<b>1,127</b>	<b>2,208</b>	<b>47</b>
<i>Multiplier*</i>	<i>1.9</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 56: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Illinois.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	12	1,353	2,055	3,840	92
Indirect	12	1,308	2,049	3,257	115
Induced	21	1,380	2,412	4,081	252
<b>Total</b>	<b>46</b>	<b>4,042</b>	<b>6,516</b>	<b>11,178</b>	<b>459</b>
<i>Multiplier</i>	<i>3.7</i>	<i>3.0</i>	<i>3.2</i>	<i>2.9</i>	<i>n.a.</i>

<sup>26</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### 16. Indiana

#### NASA

**Table 57: Summary of Employment Component of NASA Impacts by Types of Impact, Indiana.**

Impact Type	Employment <sup>27</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	867	1,757	3,674	35
Indirect	0	0	0	0	0
Induced	9	440	737	1,394	74
<b>Total</b>	<b>17</b>	<b>1,307</b>	<b>2,494</b>	<b>5,068</b>	<b>109</b>
<i>Multiplier*</i>	<i>2.0</i>	<i>1.5</i>	<i>1.4</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 58: Summary of Procurement Component of NASA Impacts by Types of Impact, Indiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	603	47,525	72,434	131,879	1,391
Indirect	468	30,118	48,472	84,963	2,638
Induced	690	35,042	58,667	110,986	5,848
<b>Total</b>	<b>1,761</b>	<b>112,685</b>	<b>179,573</b>	<b>327,827</b>	<b>9,877</b>
<i>Multiplier</i>	<i>2.9</i>	<i>2.4</i>	<i>2.5</i>	<i>2.5</i>	<i>n.a.</i>

#### M2M Program

**Table 59: Summary of Employment Component of M2M Program Impacts by Types of Impact, Indiana.**

Impact Type	Employment <sup>28</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	53	158	330	2
Indirect	0	0	0	0	0
Induced	<1	28	48	87	5
<b>Total</b>	<b>1</b>	<b>81</b>	<b>205</b>	<b>417</b>	<b>7</b>
<i>Multiplier*</i>	<i>1.7</i>	<i>1.5</i>	<i>1.3</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>27</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>28</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 60: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Indiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	15	1,258	284	3,982	40
Indirect	24	1,759	3,205	4,923	154
Induced	24	1,320	2,213	4,062	214
<b>Total</b>	<b>63</b>	<b>4,337</b>	<b>5,703</b>	<b>12,967</b>	<b>408</b>
<i>Multiplier</i>	4.2	3.4	20.0	3.3	<i>n.a.</i>

### 17. Iowa

#### NASA

**Table 61: Summary of Employment Component of NASA Impacts by Types of Impact, Iowa.**

Impact Type	Employment <sup>29</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	270	415	867	8
Indirect	0	0	0	0	0
Induced	2	109	196	380	21
<b>Total</b>	<b>4</b>	<b>379</b>	<b>610</b>	<b>1,247</b>	<b>29</b>
<i>Multiplier*</i>	2.2	1.4	1.5	1.4	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 62: Summary of Procurement Component of NASA Impacts by Types of Impact, Iowa.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	57	4,087	5,865	12,216	253
Indirect	45	2,561	3,870	7,950	245
Induced	52	2,346	4,213	8,181	456
<b>Total</b>	<b>154</b>	<b>8,994</b>	<b>13,948</b>	<b>28,347</b>	<b>954</b>
<i>Multiplier</i>	2.7	2.2	2.4	2.3	<i>n.a.</i>

<sup>29</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 63: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Iowa.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	508	605	1,363	52
Indirect	7	500	671	1,261	54
Induced	6	280	500	950	53
<b>Total</b>	<b>21</b>	<b>1,288</b>	<b>1,776</b>	<b>3,574</b>	<b>159</b>
<i>Multiplier</i>	2.5	2.5	2.9	2.6	<i>n.a.</i>

### 18. Kansas

#### NASA

**Table 64: Summary of Employment Component of NASA Impacts by Types of Impact, Kansas.**

Impact Type	Employment <sup>30</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	326	479	1,002	8
Indirect	0	0	0	0	0
Induced	3	136	237	460	27
<b>Total</b>	<b>5</b>	<b>462</b>	<b>717</b>	<b>1,462</b>	<b>35</b>
<i>Multiplier*</i>	2.2	1.4	1.5	1.5	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 65: Summary of Procurement Component of NASA Impacts by Types of Impact, Kansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	27	2,083	3,036	6,068	110
Indirect	22	1,224	1,902	3,882	106
Induced	26	1,251	2,186	4,233	249
<b>Total</b>	<b>75</b>	<b>4,558</b>	<b>7,125</b>	<b>14,182</b>	<b>466</b>
<i>Multiplier</i>	2.8	2.2	2.3	2.3	<i>n.a.</i>

<sup>30</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 66: Summary of Employment Component of M2M Program Impacts by Types of Impact, Kansas.**

Impact Type	Employment <sup>31</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	9	25	51	<1
Indirect	0	0	0	0	0
Induced	<1	4	7	13	<1
<b>Total</b>	<b>&lt;1</b>	<b>13</b>	<b>32</b>	<b>64</b>	<b>1</b>
<i>Multiplier*</i>	<i>1.7</i>	<i>1.4</i>	<i>1.3</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 67: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Kansas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	33	48	103	2
Indirect	<1	26	41	72	2
Induced	<1	22	38	72	4
<b>Total</b>	<b>1</b>	<b>81</b>	<b>126</b>	<b>246</b>	<b>8</b>
<i>Multiplier</i>	<i>2.7</i>	<i>2.5</i>	<i>2.7</i>	<i>2.4</i>	<i>n.a.</i>

### 19. Kentucky

#### NASA

**Table 68: Summary of Employment Component of NASA Impacts by Types of Impact, Kentucky.**

Impact Type	Employment <sup>32</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	11	1,087	2,187	4,574	32
Indirect	0	0	0	0	0
Induced	10	471	798	1,543	83
<b>Total</b>	<b>21</b>	<b>1,558</b>	<b>2,985</b>	<b>6,117</b>	<b>114</b>
<i>Multiplier*</i>	<i>2.0</i>	<i>1.4</i>	<i>1.4</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>31</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>32</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 69: Summary of Procurement Component of NASA Impacts by Types of Impact, Kentucky.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	114	6,935	6,416	13,755	262
Indirect	44	2,734	4,093	8,797	352
Induced	83	3,784	6,405	12,391	663
<b>Total</b>	<b>241</b>	<b>13,454</b>	<b>16,914</b>	<b>34,943</b>	<b>1,277</b>
<i>Multiplier</i>	<i>2.1</i>	<i>1.9</i>	<i>2.6</i>	<i>2.5</i>	<i>n.a.</i>

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**Table 70: Summary of Employment Component of M2M Program Impacts by Types of Impact, Kentucky.**

Impact Type	Employment <sup>33</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	242	534	1,117	7
Indirect	0	0	0	0	0
Induced	2	110	186	348	19
<b>Total</b>	<b>5</b>	<b>352</b>	<b>720</b>	<b>1,465</b>	<b>26</b>
<i>Multiplier*</i>	<i>1.9</i>	<i>1.5</i>	<i>1.3</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 71: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Kentucky.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	82	4,400	2,921	6,766	137
Indirect	21	2,079	1,905	4,149	224
Induced	49	2,393	4,041	7,572	405
<b>Total</b>	<b>151</b>	<b>8,872</b>	<b>8,867</b>	<b>18,487</b>	<b>766</b>
<i>Multiplier</i>	<i>1.9</i>	<i>2.0</i>	<i>3.0</i>	<i>2.7</i>	<i>n.a.</i>

<sup>33</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 20. Louisiana

#### NASA

**Table 72: Summary of Employment Component of NASA Impacts by Types of Impact, Louisiana.**

Impact Type	Employment <sup>34</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	182	29,616	37,654	78,732	600
Indirect	0	0	0	0	0
Induced	276	12,208	22,840	41,987	2,477
<b>Total</b>	<b>458</b>	<b>41,825</b>	<b>60,493</b>	<b>120,719</b>	<b>3,077</b>
<i>Multiplier*</i>	2.5	1.4	1.6	1.5	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 73: Summary of Procurement Component of NASA Impacts by Types of Impact, Louisiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	917	45,485	47,348	116,643	1,960
Indirect	508	27,962	48,266	97,670	3,558
Induced	591	26,196	48,978	90,044	5,309
<b>Total</b>	<b>2,016</b>	<b>99,642</b>	<b>144,592</b>	<b>304,357</b>	<b>10,827</b>
<i>Multiplier</i>	2.2	2.2	3.1	2.6	n.a.

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**Table 74: Summary of Employment Component of M2M Program Impacts by Types of Impact, Louisiana.**

Impact Type	Employment <sup>35</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	44	6,991	9,083	18,993	142
Indirect	0	0	0	0	0
Induced	64	3,012	5,600	9,998	590
<b>Total</b>	<b>108</b>	<b>10,004</b>	<b>14,684</b>	<b>28,991</b>	<b>732</b>
<i>Multiplier*</i>	2.5	1.4	1.6	1.5	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>34</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>35</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 75: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Louisiana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	526	24,181	30,187	71,840	1,319
Indirect	262	19,012	30,912	57,842	2,114
Induced	325	15,337	28,493	50,870	2,999
<b>Total</b>	<b>1,113</b>	<b>58,530</b>	<b>89,592</b>	<b>180,552</b>	<b>6,433</b>
<i>Multiplier</i>	<i>2.1</i>	<i>2.4</i>	<i>3.0</i>	<i>2.5</i>	<i>n.a.</i>

### 21. Maine

#### NASA

**Table 76: Summary of Employment Component of NASA Impacts by Types of Impact, Maine.**

Impact Type	Employment <sup>36</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	368	493	1,030	9
Indirect	0	0	0	0	0
Induced	4	186	318	586	38
<b>Total</b>	<b>6</b>	<b>553</b>	<b>810</b>	<b>1,616</b>	<b>47</b>
<i>Multiplier*</i>	<i>2.7</i>	<i>1.5</i>	<i>1.6</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 77: Summary of Procurement Component of NASA Impacts by Types of Impact, Maine.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	16	1,324	1,713	3,215	72
Indirect	13	629	959	2,025	72
Induced	20	929	1,590	2,936	189
<b>Total</b>	<b>49</b>	<b>2,882</b>	<b>4,262</b>	<b>8,177</b>	<b>333</b>
<i>Multiplier</i>	<i>3.1</i>	<i>2.2</i>	<i>2.5</i>	<i>2.5</i>	<i>n.a.</i>

<sup>36</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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**Table 78: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Maine.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	7	10	22	1
Indirect	<1	6	9	16	1
Induced	<1	6	10	19	1
<b>Total</b>	<b>&lt;1</b>	<b>19</b>	<b>29</b>	<b>57</b>	<b>2</b>
<i>Multiplier</i>	<i>3.1</i>	<i>2.7</i>	<i>3.0</i>	<i>2.5</i>	<i>n.a.</i>

### 22. Maryland

#### NASA

**Table 79: Summary of Employment Component of NASA Impacts by Types of Impact, Maryland.**

Impact Type	Employment <sup>37</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3,117	560,544	644,057	1,346,702	22,094
Indirect	0	0	0	0	0
Induced	4,606	266,378	466,842	770,006	52,299
<b>Total</b>	<b>7,723</b>	<b>826,922</b>	<b>1,110,899</b>	<b>2,116,709</b>	<b>74,394</b>
<i>Multiplier*</i>	<i>2.5</i>	<i>1.5</i>	<i>1.7</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 80: Summary of Procurement Component of NASA Impacts by Types of Impact, Maryland.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9,813	1,019,665	1,269,370	2,178,727	63,503
Indirect	6,649	511,273	736,825	1,263,470	54,959
Induced	11,379	658,218	1,152,240	1,900,793	128,989
<b>Total</b>	<b>27,841</b>	<b>2,189,155</b>	<b>3,158,436</b>	<b>5,342,989</b>	<b>247,451</b>
<i>Multiplier</i>	<i>2.8</i>	<i>2.1</i>	<i>2.5</i>	<i>2.5</i>	<i>n.a.</i>

<sup>37</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 81: Summary of Employment Component of M2M Program Impacts by Types of Impact, Maryland.**

Impact Type	Employment <sup>38</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	55	9,725	11,366	23,766	383
Indirect	0	0	0	0	0
Induced	80	5,097	8,647	13,852	941
<b>Total</b>	<b>135</b>	<b>14,821</b>	<b>20,013</b>	<b>37,618</b>	<b>1,324</b>
<i>Multiplier*</i>	2.5	1.5	1.8	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 82: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Maryland.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	92	8,538	11,031	18,656	583
Indirect	40	4,697	6,593	10,128	435
Induced	94	5,982	10,134	16,237	1,101
<b>Total</b>	<b>226</b>	<b>19,218</b>	<b>27,757</b>	<b>45,020</b>	<b>2,119</b>
<i>Multiplier</i>	2.5	2.3	2.5	2.4	n.a.

### 23. Massachusetts

#### NASA

**Table 83: Summary of Employment Component of NASA Impacts by Types of Impact, Massachusetts.**

Impact Type	Employment <sup>39</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	11	1,695	2,288	4,783	50
Indirect	0	0	0	0	0
Induced	15	1,024	1,644	2,685	139
<b>Total</b>	<b>26</b>	<b>2,719</b>	<b>3,932</b>	<b>7,468</b>	<b>189</b>
<i>Multiplier*</i>	2.4	1.6	1.7	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>38</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>39</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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*compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 84: Summary of Procurement Component of NASA Impacts by Types of Impact, Massachusetts.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	686	99,236	132,843	213,696	4,479
Indirect	647	55,162	73,407	140,363	4,823
Induced	1,242	84,193	135,106	220,587	11,403
<b>Total</b>	<b>2,574</b>	<b>238,590</b>	<b>341,356</b>	<b>574,646</b>	<b>20,704</b>
<i>Multiplier</i>	<i>3.8</i>	<i>2.4</i>	<i>2.6</i>	<i>2.7</i>	<i>n.a.</i>

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**Table 85: Summary of Employment Component of M2M Program Impacts by Types of Impact, Massachusetts.**

Impact Type	Employment <sup>40</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	202	430	900	6
Indirect	0	0	0	0	0
Induced	2	135	210	334	17
<b>Total</b>	<b>4</b>	<b>337</b>	<b>641</b>	<b>1,234</b>	<b>23</b>
<i>Multiplier*</i>	<i>1.9</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 86: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Massachusetts.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	31	4,211	5,616	8,072	225
Indirect	15	2,373	3,215	4,448	155
Induced	49	3,635	5,673	9,013	466
<b>Total</b>	<b>95</b>	<b>10,218</b>	<b>14,504</b>	<b>21,533</b>	<b>845</b>
<i>Multiplier</i>	<i>3.1</i>	<i>2.4</i>	<i>2.6</i>	<i>2.7</i>	<i>n.a.</i>

<sup>40</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 24. Michigan

#### NASA

**Table 87: Summary of Employment Component of NASA Impacts by Types of Impact, Michigan.**

Impact Type	Employment <sup>41</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	10	1,297	2,072	4,332	33
Indirect	0	0	0	0	0
Induced	14	728	1,217	2,318	130
<b>Total</b>	<b>24</b>	<b>2,025</b>	<b>3,288</b>	<b>6,650</b>	<b>163</b>
<i>Multiplier*</i>	2.4	1.6	1.6	1.5	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 88: Summary of Procurement Component of NASA Impacts by Types of Impact, Michigan.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	152	15,411	20,882	39,040	753
Indirect	172	11,322	15,930	31,558	922
Induced	262	13,330	22,269	42,434	2,380
<b>Total</b>	<b>585</b>	<b>40,063</b>	<b>59,081</b>	<b>113,031</b>	<b>4,055</b>
<i>Multiplier</i>	3.9	2.6	2.8	2.9	n.a.

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**Table 89: Summary of Employment Component of M2M Program Impacts by Types of Impact, Michigan.**

Impact Type	Employment <sup>42</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	212	469	980	5
Indirect	0	0	0	0	0
Induced	2	126	209	386	22
<b>Total</b>	<b>5</b>	<b>338</b>	<b>678</b>	<b>1,366</b>	<b>27</b>
<i>Multiplier*</i>	2.0	1.6	1.4	1.4	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>41</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>42</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 90: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Michigan.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	648	934	1,861	35
Indirect	6	627	876	1,530	45
Induced	11	593	984	1,817	102
<b>Total</b>	<b>24</b>	<b>1,868</b>	<b>2,794</b>	<b>5,208</b>	<b>182</b>
<i>Multiplier</i>	3.5	2.9	3.0	2.8	<i>n.a.</i>

### 25. Minnesota

#### NASA

**Table 91: Summary of Employment Component of NASA Impacts by Types of Impact, Minnesota.**

Impact Type	Employment <sup>43</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	491	1,039	2,172	15
Indirect	0	0	0	0	0
Induced	5	306	503	938	57
<b>Total</b>	<b>10</b>	<b>797</b>	<b>1,542</b>	<b>3,110</b>	<b>72</b>
<i>Multiplier*</i>	2.1	1.6	1.5	1.4	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 92: Summary of Procurement Component of NASA Impacts by Types of Impact, Minnesota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	58	5,395	7,609	14,179	339
Indirect	55	4,198	6,256	11,658	411
Induced	92	5,231	8,605	16,029	972
<b>Total</b>	<b>205</b>	<b>14,823</b>	<b>22,469</b>	<b>41,866</b>	<b>1,722</b>
<i>Multiplier</i>	3.5	2.7	3.0	3.0	<i>n.a.</i>

<sup>43</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 93: Summary of Employment Component of M2M Program Impacts by Types of Impact, Minnesota.**

Impact Type	Employment <sup>44</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	49	104	217	2
Indirect	0	0	0	0	0
Induced	1	32	53	96	6
<b>Total</b>	<b>1</b>	<b>82</b>	<b>157</b>	<b>313</b>	<b>7</b>
<i>Multiplier*</i>	<i>2.1</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 94: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Minnesota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	143	222	545	13
Indirect	2	296	514	990	38
Induced	3	156	254	462	28
<b>Total</b>	<b>6</b>	<b>595</b>	<b>990</b>	<b>1,996</b>	<b>78</b>
<i>Multiplier</i>	<i>4.1</i>	<i>4.2</i>	<i>4.5</i>	<i>3.7</i>	<i>n.a.</i>

### 26. Mississippi

#### NASA

**Table 95: Summary of Employment Component of NASA Impacts by Types of Impact, Mississippi.**

Impact Type	Employment <sup>45</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	248	37,204	51,199	107,054	785
Indirect	0	0	0	0	0
Induced	313	12,061	23,124	45,657	2,947
<b>Total</b>	<b>561</b>	<b>49,265</b>	<b>74,322</b>	<b>152,711</b>	<b>3,732</b>
<i>Multiplier*</i>	<i>2.3</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>44</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>45</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.

**Table 96: Summary of Procurement Component of NASA Impacts by Types of Impact, Mississippi.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,738	81,738	103,091	203,251	8,810
Indirect	505	27,154	45,830	93,680	3,727
Induced	830	31,929	61,183	120,823	7,786
<b>Total</b>	<b>3,072</b>	<b>140,821</b>	<b>210,105</b>	<b>417,754</b>	<b>20,323</b>
<i>Multiplier</i>	<i>1.8</i>	<i>1.7</i>	<i>2.0</i>	<i>2.1</i>	<i>n.a.</i>

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**Table 97: Summary of Employment Component of M2M Program Impacts by Types of Impact, Mississippi.**

Impact Type	Employment <sup>46</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	40	6,040	8,251	17,252	127
Indirect	0	0	0	0	0
Induced	50	2,018	3,876	7,437	480
<b>Total</b>	<b>89</b>	<b>8,058</b>	<b>12,127</b>	<b>24,689</b>	<b>607</b>
<i>Multiplier*</i>	<i>2.2</i>	<i>1.3</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 98: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Mississippi.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	256	11,610	13,923	26,211	1,244
Indirect	35	3,806	5,612	9,389	354
Induced	112	4,558	8,749	16,787	1,081
<b>Total</b>	<b>403</b>	<b>19,973</b>	<b>28,284</b>	<b>52,387</b>	<b>2,679</b>
<i>Multiplier</i>	<i>1.6</i>	<i>1.7</i>	<i>2.0</i>	<i>2.0</i>	<i>n.a.</i>

<sup>46</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 27. Missouri

#### NASA

**Table 99: Summary of Employment Component of NASA Impacts by Types of Impact, Missouri.**

Impact Type	Employment <sup>47</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	815	1,538	3,216	20
Indirect	0	0	0	0	0
Induced	9	436	743	1,394	68
<b>Total</b>	<b>16</b>	<b>1,250</b>	<b>2,281</b>	<b>4,610</b>	<b>88</b>
<i>Multiplier*</i>	2.2	1.5	1.5	1.4	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 100: Summary of Procurement Component of NASA Impacts by Types of Impact, Missouri.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	232	18,614	20,311	41,800	475
Indirect	193	12,287	18,994	34,472	928
Induced	293	14,423	24,583	46,119	2,262
<b>Total</b>	<b>718</b>	<b>45,323</b>	<b>63,888</b>	<b>122,391</b>	<b>3,664</b>
<i>Multiplier</i>	3.1	2.4	3.1	2.9	n.a.

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**Table 101: Summary of Employment Component of M2M Program Impacts by Types of Impact, Missouri.**

Impact Type	Employment <sup>48</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	201	326	682	5
Indirect	0	0	0	0	0
Induced	2	113	191	347	17
<b>Total</b>	<b>4</b>	<b>313</b>	<b>517</b>	<b>1,029</b>	<b>22</b>
<i>Multiplier*</i>	2.4	1.6	1.6	1.5	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>47</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>48</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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**Table 102: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Missouri.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	65	5,224	5,439	9,176	200
Indirect	27	2,741	3,758	5,829	165
Induced	72	3,800	6,421	11,670	572
<b>Total</b>	<b>164</b>	<b>11,765</b>	<b>15,619</b>	<b>26,675</b>	<b>937</b>
<i>Multiplier</i>	2.5	2.3	2.9	2.9	<i>n.a.</i>

## 28. Montana

### NASA

**Table 103: Summary of Employment Component of NASA Impacts by Types of Impact, Montana.**

Impact Type	Employment <sup>49</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	0	10	0	0	0
Indirect	0	0	0	0	0
Induced	0	4	7	14	1
<b>Total</b>	<b>0</b>	<b>15</b>	<b>7</b>	<b>14</b>	<b>1</b>
<i>Multiplier*</i>	<i>n.a.</i>	1.4	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 104: Summary of Procurement Component of NASA Impacts by Types of Impact, Montana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	45	3,136	3,969	8,572	152
Indirect	31	1,402	2,245	4,979	121
Induced	42	1,794	2,953	5,907	254
<b>Total</b>	<b>118</b>	<b>6,332</b>	<b>9,167</b>	<b>19,459</b>	<b>527</b>
<i>Multiplier</i>	2.6	2.0	2.3	2.3	<i>n.a.</i>

<sup>49</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 105: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Montana.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	27	32	83	1
Indirect	<1	19	29	56	1
Induced	<1	18	29	55	2
<b>Total</b>	<b>1</b>	<b>63</b>	<b>90</b>	<b>195</b>	<b>5</b>
<i>Multiplier</i>	<i>2.7</i>	<i>2.4</i>	<i>2.8</i>	<i>2.3</i>	<i>n.a.</i>

### 29. Nebraska

#### NASA

**Table 106: Summary of Employment Component of NASA Impacts by Types of Impact, Nebraska.**

Impact Type	Employment <sup>50</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	53	211	442	1
Indirect	0	0	0	0	0
Induced	<1	23	41	77	4
<b>Total</b>	<b>2</b>	<b>76</b>	<b>253</b>	<b>520</b>	<b>5</b>
<i>Multiplier*</i>	<i>1.5</i>	<i>1.4</i>	<i>1.2</i>	<i>1.2</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 107: Summary of Procurement Component of NASA Impacts by Types of Impact, Nebraska.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	18	1,619	2,414	4,323	82
Indirect	9	675	1,124	2,112	64
Induced	19	902	1,624	3,031	152
<b>Total</b>	<b>46</b>	<b>3,197</b>	<b>5,161</b>	<b>9,465</b>	<b>298</b>
<i>Multiplier</i>	<i>2.6</i>	<i>2.0</i>	<i>2.1</i>	<i>2.2</i>	<i>n.a.</i>

<sup>50</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 108: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Nebraska.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	94	154	350	7
Indirect	1	78	128	210	6
Induced	1	63	113	205	10
<b>Total</b>	<b>3</b>	<b>236</b>	<b>396</b>	<b>765</b>	<b>23</b>
<i>Multiplier</i>	<i>2.9</i>	<i>2.5</i>	<i>2.6</i>	<i>2.2</i>	<i>n.a.</i>

### 30. Nevada

#### NASA

**Table 109: Summary of Employment Component of NASA Impacts by Types of Impact, Nevada.**

Impact Type	Employment <sup>51</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	405	579	1,210	2
Indirect	0	0	0	0	0
Induced	3	163	317	543	35
<b>Total</b>	<b>6</b>	<b>568</b>	<b>896</b>	<b>1,753</b>	<b>37</b>
<i>Multiplier*</i>	<i>2.2</i>	<i>1.4</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 110: Summary of Procurement Component of NASA Impacts by Types of Impact, Nevada.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	96	8,912	12,261	23,260	260
Indirect	94	5,075	8,174	15,616	405
Induced	104	5,155	10,020	17,167	1,093
<b>Total</b>	<b>294</b>	<b>19,142</b>	<b>30,456</b>	<b>56,043</b>	<b>1,758</b>
<i>Multiplier</i>	<i>3.1</i>	<i>2.1</i>	<i>2.5</i>	<i>2.4</i>	<i>n.a.</i>

<sup>51</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 111: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Nevada.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	53	4,834	6,704	13,387	151
Indirect	46	3,354	5,462	8,834	228
Induced	58	3,065	5,944	9,854	627
<b>Total</b>	<b>156</b>	<b>11,253</b>	<b>18,111</b>	<b>32,074</b>	<b>1,006</b>
<i>Multiplier</i>	<i>3.0</i>	<i>2.3</i>	<i>2.7</i>	<i>2.4</i>	<i>n.a.</i>

### 31. New Hampshire

#### NASA

**Table 112: Summary of Employment Component of NASA Impacts by Types of Impact, New Hampshire.**

Impact Type	Employment <sup>52</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	352	617	1,291	1
Indirect	0	0	0	0	0
Induced	3	182	306	511	27
<b>Total</b>	<b>6</b>	<b>534</b>	<b>924</b>	<b>1,801</b>	<b>28</b>
<i>Multiplier*</i>	<i>2.1</i>	<i>1.5</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 113: Summary of Procurement Component of NASA Impacts by Types of Impact, New Hampshire.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	87	8,817	13,031	23,024	529
Indirect	78	5,582	8,377	14,982	564
Induced	117	6,639	11,153	18,600	970
<b>Total</b>	<b>282</b>	<b>21,038</b>	<b>32,561</b>	<b>56,606</b>	<b>2,062</b>
<i>Multiplier</i>	<i>3.2</i>	<i>2.4</i>	<i>2.5</i>	<i>2.5</i>	<i>n.a.</i>

<sup>52</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 114: Summary of Procurement Component of M2M Program Impacts by Types of Impact, New Hampshire.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	16	1,578	2,150	4,186	93
Indirect	13	1,164	1,768	2,776	106
Induced	22	1,327	2,217	3,566	186
<b>Total</b>	<b>51</b>	<b>4,069</b>	<b>6,135</b>	<b>10,528</b>	<b>385</b>
<i>Multiplier</i>	<i>3.1</i>	<i>2.6</i>	<i>2.9</i>	<i>2.5</i>	<i>n.a.</i>

### 32. New Jersey

#### NASA

**Table 115: Summary of Employment Component of NASA Impacts by Types of Impact, New Jersey.**

Impact Type	Employment <sup>53</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	1,804	2,954	6,177	51
Indirect	0	0	0	0	0
Induced	15	1,005	1,659	2,777	188
<b>Total</b>	<b>30</b>	<b>2,809</b>	<b>4,613</b>	<b>8,954</b>	<b>239</b>
<i>Multiplier*</i>	<i>2.1</i>	<i>1.6</i>	<i>1.6</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 116: Summary of Procurement Component of NASA Impacts by Types of Impact, New Jersey.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	87	11,991	17,606	30,162	866
Indirect	95	8,739	11,804	21,972	1,002
Induced	147	9,725	16,046	26,857	1,811
<b>Total</b>	<b>329</b>	<b>30,455</b>	<b>45,455</b>	<b>78,992</b>	<b>3,679</b>
<i>Multiplier</i>	<i>3.8</i>	<i>2.5</i>	<i>2.6</i>	<i>2.6</i>	<i>n.a.</i>

<sup>53</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 117: Summary of Employment Component of M2M Program Impacts by Types of Impact, New Jersey.**

Impact Type	Employment <sup>54</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	186	505	1,055	5
Indirect	0	0	0	0	0
Induced	2	113	181	298	20
<b>Total</b>	<b>4</b>	<b>299</b>	<b>686</b>	<b>1,353</b>	<b>25</b>
<i>Multiplier*</i>	<i>1.6</i>	<i>1.6</i>	<i>1.4</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 118: Summary of Procurement Component of M2M Program Impacts by Types of Impact, New Jersey.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	569	1,757	3,336	59
Indirect	7	834	1,297	2,419	150
Induced	8	603	963	1,587	107
<b>Total</b>	<b>18</b>	<b>2,005</b>	<b>4,018</b>	<b>7,341</b>	<b>316</b>
<i>Multiplier</i>	<i>5.7</i>	<i>3.5</i>	<i>2.3</i>	<i>2.2</i>	<i>n.a.</i>

### 33. New Mexico

#### NASA

**Table 119: Summary of Employment Component of NASA Impacts by Types of Impact, New Mexico.**

Impact Type	Employment <sup>55</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	78	12,202	16,033	33,525	202
Indirect	0	0	0	0	0
Induced	106	4,425	8,293	15,481	885
<b>Total</b>	<b>183</b>	<b>16,627</b>	<b>24,326</b>	<b>49,005</b>	<b>1,087</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.4</i>	<i>1.5</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>54</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>55</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.

**Table 120: Summary of Procurement Component of NASA Impacts by Types of Impact, New Mexico.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	442	23,498	30,330	82,166	452
Indirect	398	16,258	20,051	57,055	2,161
Induced	296	12,351	23,136	43,187	2,469
<b>Total</b>	<b>1,135</b>	<b>52,106</b>	<b>73,517</b>	<b>182,409</b>	<b>5,082</b>
<i>Multiplier</i>	2.6	2.2	2.4	2.2	<i>n.a.</i>

### **M2M Program**

**Table 121: Summary of Employment Component of M2M Program Impacts by Types of Impact, New Mexico.**

Impact Type	Employment <sup>56</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	1,004	1,451	3,033	17
Indirect	0	0	0	0	0
Induced	9	382	708	1,282	73
<b>Total</b>	<b>16</b>	<b>1,385</b>	<b>2,159</b>	<b>4,316</b>	<b>90</b>
<i>Multiplier*</i>	2.2	1.4	1.5	1.4	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 122: Summary of Procurement Component of M2M Program Impacts by Types of Impact, New Mexico.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	102	3,793	5,770	21,834	85
Indirect	82	4,964	5,789	14,545	581
Induced	59	2,606	4,833	8,754	501
<b>Total</b>	<b>242</b>	<b>11,364</b>	<b>16,392</b>	<b>45,133</b>	<b>1,166</b>
<i>Multiplier</i>	2.4	3.0	2.8	2.1	<i>n.a.</i>

<sup>56</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 34. New York

#### NASA

**Table 123: Summary of Employment Component of NASA Impacts by Types of Impact, New York.**

Impact Type	Employment <sup>57</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	44	6,892	9,030	18,881	309
Indirect	0	0	0	0	0
Induced	51	3,609	6,182	9,679	749
<b>Total</b>	<b>95</b>	<b>10,501</b>	<b>15,211</b>	<b>28,560</b>	<b>1,058</b>
<i>Multiplier*</i>	<i>2.2</i>	<i>1.5</i>	<i>1.7</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 124: Summary of Procurement Component of NASA Impacts by Types of Impact, New York.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	580	60,121	80,430	152,067	4,847
Indirect	532	48,813	72,855	122,451	6,160
Induced	725	50,994	87,250	136,591	10,558
<b>Total</b>	<b>1,837</b>	<b>159,929</b>	<b>240,535</b>	<b>411,108</b>	<b>21,565</b>
<i>Multiplier</i>	<i>3.2</i>	<i>2.7</i>	<i>3.0</i>	<i>2.7</i>	<i>n.a.</i>

#### M2M Program

**Table 125: Summary of Employment Component of M2M Program Impacts by Types of Impact, New York.**

Impact Type	Employment <sup>58</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	397	754	1,576	18
Indirect	0	0	0	0	0
Induced	3	229	387	588	45
<b>Total</b>	<b>7</b>	<b>626</b>	<b>1,140</b>	<b>2,164</b>	<b>63</b>
<i>Multiplier*</i>	<i>1.8</i>	<i>1.6</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>57</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>58</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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*compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 126: Summary of Procurement Component of M2M Program Impacts by Types of Impact, New York.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	61	5,483	6,417	15,322	279
Indirect	51	6,533	8,657	14,163	749
Induced	70	5,377	9,067	13,788	1,066
<b>Total</b>	<b>182</b>	<b>17,393</b>	<b>24,141</b>	<b>43,273</b>	<b>2,095</b>
<i>Multiplier</i>	<i>3.0</i>	<i>3.2</i>	<i>3.8</i>	<i>2.8</i>	<i>n.a.</i>

### 35. North Carolina

#### NASA

**Table 127: Summary of Employment Component of NASA Impacts by Types of Impact, North Carolina.**

Impact Type	Employment <sup>59</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	20	2,851	4,207	8,797	79
Indirect	0	0	0	0	0
Induced	28	1,421	2,551	4,741	244
<b>Total</b>	<b>49</b>	<b>4,272</b>	<b>6,758</b>	<b>13,538</b>	<b>324</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.5</i>	<i>1.6</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 128: Summary of Procurement Component of NASA Impacts by Types of Impact, North Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	113	10,088	16,055	27,023	647
Indirect	101	6,272	10,054	19,150	594
Induced	146	7,282	13,062	24,279	1,251
<b>Total</b>	<b>360</b>	<b>23,642</b>	<b>39,171</b>	<b>70,453</b>	<b>2,492</b>
<i>Multiplier</i>	<i>3.2</i>	<i>2.3</i>	<i>2.4</i>	<i>2.6</i>	<i>n.a.</i>

<sup>59</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 129: Summary of Employment Component of M2M Program Impacts by Types of Impact, North Carolina.**

Impact Type	Employment <sup>60</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	381	537	1,123	11
Indirect	0	0	0	0	0
Induced	4	200	364	654	34
<b>Total</b>	<b>6</b>	<b>582</b>	<b>901</b>	<b>1,777</b>	<b>44</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.5</i>	<i>1.7</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 130: Summary of Procurement Component of M2M Program Impacts by Types of Impact, North Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	14	1,379	2,321	4,052	96
Indirect	12	1,012	1,688	2,704	84
Induced	20	1,092	1,981	3,561	183
<b>Total</b>	<b>47</b>	<b>3,483</b>	<b>5,990</b>	<b>10,317</b>	<b>363</b>
<i>Multiplier</i>	<i>3.3</i>	<i>2.5</i>	<i>2.6</i>	<i>2.5</i>	<i>n.a.</i>

### 36. North Dakota

#### NASA

**Table 131: Summary of Procurement Component of NASA Impacts by Types of Impact, North Dakota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	745	1,001	1,582	24
Indirect	3	143	207	493	10
Induced	7	327	549	1,096	45
<b>Total</b>	<b>18</b>	<b>1,214</b>	<b>1,758</b>	<b>3,170</b>	<b>78</b>
<i>Multiplier</i>	<i>2.1</i>	<i>1.6</i>	<i>1.8</i>	<i>2.0</i>	<i>n.a.</i>

<sup>60</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 132: Summary of Procurement Component of M2M Program Impacts by Types of Impact, North Dakota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	745	1,001	1,582	24
Indirect	2	132	183	385	8
Induced	4	184	305	573	23
<b>Total</b>	<b>15</b>	<b>1,061</b>	<b>1,489</b>	<b>2,540</b>	<b>55</b>
<i>Multiplier</i>	<i>1.7</i>	<i>1.4</i>	<i>1.5</i>	<i>1.6</i>	<i>n.a.</i>

### 37. Ohio

#### NASA

**Table 133: Summary of Employment Component of NASA Impacts by Types of Impact, Ohio.**

Impact Type	Employment <sup>61</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,509	238,477	311,800	651,964	3,786
Indirect	0	0	0	0	0
Induced	2,688	135,634	244,417	453,558	25,379
<b>Total</b>	<b>4,197</b>	<b>374,111</b>	<b>556,218</b>	<b>1,105,523</b>	<b>29,165</b>
<i>Multiplier*</i>	<i>2.8</i>	<i>1.6</i>	<i>1.8</i>	<i>1.7</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 134: Summary of Procurement Component of NASA Impacts by Types of Impact, Ohio.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,642	186,229	211,743	406,358	9,735
Indirect	1,468	102,131	163,344	311,211	11,073
Induced	2,832	142,864	257,138	477,237	26,664
<b>Total</b>	<b>6,942</b>	<b>431,225</b>	<b>632,225</b>	<b>1,194,807</b>	<b>47,472</b>
<i>Multiplier</i>	<i>2.6</i>	<i>2.3</i>	<i>3.0</i>	<i>2.9</i>	<i>n.a.</i>

<sup>61</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 135: Summary of Employment Component of M2M Program Impacts by Types of Impact, Ohio.**

Impact Type	Employment <sup>62</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	282	44,317	58,350	122,007	704
Indirect	0	0	0	0	0
Induced	493	26,621	47,487	85,981	4,811
<b>Total</b>	<b>776</b>	<b>70,937</b>	<b>105,836</b>	<b>207,988</b>	<b>5,515</b>
<i>Multiplier*</i>	<i>2.7</i>	<i>1.6</i>	<i>1.8</i>	<i>1.7</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 136: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Ohio.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	160	12,604	15,985	32,659	423
Indirect	112	9,516	14,740	25,068	744
Induced	210	11,311	20,163	36,511	2,041
<b>Total</b>	<b>482</b>	<b>33,432</b>	<b>50,888</b>	<b>94,238</b>	<b>3,208</b>
<i>Multiplier</i>	<i>3.0</i>	<i>2.7</i>	<i>3.2</i>	<i>2.9</i>	<i>n.a.</i>

### 38. Oklahoma

#### NASA

**Table 137: Summary of Employment Component of NASA Impacts by Types of Impact, Oklahoma.**

Impact Type	Employment <sup>63</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	587	1,017	2,126	15
Indirect	0	0	0	0	0
Induced	5	232	405	793	38
<b>Total</b>	<b>10</b>	<b>819</b>	<b>1,421</b>	<b>2,919</b>	<b>54</b>
<i>Multiplier*</i>	<i>2.0</i>	<i>1.4</i>	<i>1.4</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>62</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>63</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.

**Table 138: Summary of Procurement Component of NASA Impacts by Types of Impact, Oklahoma.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	231	15,527	18,514	43,820	562
Indirect	190	10,206	15,079	33,003	869
Induced	195	8,930	15,565	30,503	1,479
<b>Total</b>	<b>615</b>	<b>34,663</b>	<b>49,158</b>	<b>107,326</b>	<b>2,910</b>
<i>Multiplier</i>	2.7	2.2	2.7	2.4	<i>n.a.</i>

### **M2M Program**

**Table 139: Summary of Employment Component of M2M Program Impacts by Types of Impact, Oklahoma.**

Impact Type	Employment <sup>64</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	144	207	432	4
Indirect	0	0	0	0	0
Induced	1	60	103	199	10
<b>Total</b>	<b>2</b>	<b>204</b>	<b>310</b>	<b>631</b>	<b>13</b>
<i>Multiplier*</i>	2.2	1.4	1.5	1.5	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 140: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Oklahoma.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	70	95	238	4
Indirect	1	104	116	287	8
Induced	1	43	75	144	7
<b>Total</b>	<b>3</b>	<b>217</b>	<b>286</b>	<b>669</b>	<b>19</b>
<i>Multiplier</i>	2.7	3.1	3.0	2.8	<i>n.a.</i>

<sup>64</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 39. Oregon

#### NASA

**Table 141: Summary of Employment Component of NASA Impacts by Types of Impact, Oregon.**

Impact Type	Employment <sup>65</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	777	1,031	2,155	35
Indirect	0	0	0	0	0
Induced	8	401	677	1,216	62
<b>Total</b>	<b>13</b>	<b>1,178</b>	<b>1,708</b>	<b>3,371</b>	<b>97</b>
<i>Multiplier*</i>	2.5	1.5	1.7	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 142: Summary of Procurement Component of NASA Impacts by Types of Impact, Oregon.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	60	5,864	10,096	16,305	471
Indirect	52	3,710	5,821	10,599	354
Induced	82	4,311	7,276	13,069	666
<b>Total</b>	<b>194</b>	<b>13,886</b>	<b>23,193</b>	<b>39,974</b>	<b>1,491</b>
<i>Multiplier</i>	3.2	2.4	2.3	2.5	n.a.

#### M2M Program

**Table 143: Summary of Employment Component of M2M Program Impacts by Types of Impact, Oregon.**

Impact Type	Employment <sup>66</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	109	142	298	5
Indirect	0	0	0	0	0
Induced	1	60	100	174	9
<b>Total</b>	<b>2</b>	<b>169</b>	<b>243</b>	<b>472</b>	<b>14</b>
<i>Multiplier*</i>	2.5	1.5	1.7	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>65</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>66</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 144: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Oregon.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	283	550	801	26
Indirect	1	226	325	467	16
Induced	4	200	336	583	30
<b>Total</b>	<b>7</b>	<b>709</b>	<b>1,211</b>	<b>1,851</b>	<b>72</b>
<i>Multiplier</i>	2.7	2.5	2.2	2.3	<i>n.a.</i>

### 40. Pennsylvania

#### NASA

**Table 145: Summary of Employment Component of NASA Impacts by Types of Impact, Pennsylvania.**

Impact Type	Employment <sup>67</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	28	4,546	5,776	12,078	114
Indirect	0	0	0	0	0
Induced	48	2,791	4,585	8,098	441
<b>Total</b>	<b>76</b>	<b>7,337</b>	<b>10,361</b>	<b>20,176</b>	<b>555</b>
<i>Multiplier*</i>	2.7	1.6	1.8	1.7	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 146: Summary of Procurement Component of NASA Impacts by Types of Impact, Pennsylvania.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	277	30,456	42,747	75,399	1,622
Indirect	256	21,135	30,731	56,708	2,007
Induced	471	27,317	44,847	79,212	4,311
<b>Total</b>	<b>1,004</b>	<b>78,907</b>	<b>118,324</b>	<b>211,319</b>	<b>7,940</b>
<i>Multiplier</i>	3.6	2.6	2.8	2.8	<i>n.a.</i>

<sup>67</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 147: Summary of Employment Component of M2M Program Impacts by Types of Impact, Pennsylvania.**

Impact Type	Employment <sup>68</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	290	599	1,252	7
Indirect	0	0	0	0	0
Induced	3	194	313	533	29
<b>Total</b>	<b>6</b>	<b>484</b>	<b>912</b>	<b>1,785</b>	<b>36</b>
<i>Multiplier*</i>	<i>2.1</i>	<i>1.7</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 148: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Pennsylvania.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	115	12,811	17,797	32,196	680
Indirect	91	10,004	14,351	22,316	779
Induced	204	12,903	20,800	35,431	1,928
<b>Total</b>	<b>409</b>	<b>35,718</b>	<b>52,948</b>	<b>89,944</b>	<b>3,387</b>
<i>Multiplier</i>	<i>3.6</i>	<i>2.8</i>	<i>3.0</i>	<i>2.8</i>	<i>n.a.</i>

### 41. Rhode Island

#### NASA

**Table 149: Summary of Employment Component of NASA Impacts by Types of Impact, Rhode Island.**

Impact Type	Employment <sup>69</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	51	140	293	2
Indirect	0	0	0	0	0
Induced	<1	25	43	73	5
<b>Total</b>	<b>1</b>	<b>75</b>	<b>183</b>	<b>366</b>	<b>6</b>
<i>Multiplier*</i>	<i>1.7</i>	<i>1.5</i>	<i>1.3</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>68</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>69</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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*compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 150: Summary of Procurement Component of NASA Impacts by Types of Impact, Rhode Island.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	620	863	1,762	47
Indirect	7	427	680	1,262	50
Induced	9	461	810	1,377	92
<b>Total</b>	<b>24</b>	<b>1,508</b>	<b>2,353</b>	<b>4,401</b>	<b>188</b>
<i>Multiplier</i>	3.2	2.4	2.7	2.5	<i>n.a.</i>

### **M2M Program**

**Table 151: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Rhode Island.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	21	36	88	2
Indirect	<1	17	32	48	2
Induced	<1	15	25	42	3
<b>Total</b>	<b>1</b>	<b>53</b>	<b>93</b>	<b>178</b>	<b>8</b>
<i>Multiplier</i>	3.8	2.5	2.6	2.0	<i>n.a.</i>

## **42. South Carolina**

### **NASA**

**Table 152: Summary of Employment Component of NASA Impacts by Types of Impact, South Carolina.**

Impact Type	Employment <sup>70</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9	1,331	1,826	3,818	32
Indirect	0	0	0	0	0
Induced	12	543	956	1,849	106
<b>Total</b>	<b>21</b>	<b>1,874</b>	<b>2,782</b>	<b>5,667</b>	<b>138</b>
<i>Multiplier*</i>	2.4	1.4	1.5	1.5	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>70</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 153: Summary of Procurement Component of NASA Impacts by Types of Impact, South Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	67	5,141	7,045	12,483	393
Indirect	50	2,695	3,934	8,141	238
Induced	66	2,867	5,043	9,758	558
<b>Total</b>	<b>182</b>	<b>10,703</b>	<b>16,023</b>	<b>30,382</b>	<b>1,188</b>
<i>Multiplier</i>	<i>2.7</i>	<i>2.1</i>	<i>2.3</i>	<i>2.4</i>	<i>n.a.</i>

### **M2M Program**

**Table 154: Summary of Employment Component of M2M Program Impacts by Types of Impact, South Carolina.**

Impact Type	Employment <sup>71</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	246	374	782	6
Indirect	0	0	0	0	0
Induced	2	111	195	373	21
<b>Total</b>	<b>4</b>	<b>357</b>	<b>568</b>	<b>1,154</b>	<b>27</b>
<i>Multiplier*</i>	<i>2.3</i>	<i>1.5</i>	<i>1.5</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 155: Summary of Procurement Component of M2M Program Impacts by Types of Impact, South Carolina.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	3	257	304	842	13
Indirect	1	68	155	302	11
Induced	3	139	243	465	27
<b>Total</b>	<b>7</b>	<b>464</b>	<b>702</b>	<b>1,609</b>	<b>50</b>
<i>Multiplier</i>	<i>2.4</i>	<i>1.8</i>	<i>2.3</i>	<i>1.9</i>	<i>n.a.</i>

<sup>71</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 43. South Dakota

#### NASA

**Table 156: Summary of Employment Component of NASA Impacts by Types of Impact, South Dakota.**

Impact Type	Employment <sup>72</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	186	370	773	1
Indirect	0	0	0	0	0
Induced	2	79	137	261	11
<b>Total</b>	<b>3</b>	<b>265</b>	<b>507</b>	<b>1,034</b>	<b>12</b>
<i>Multiplier*</i>	<i>1.9</i>	<i>1.4</i>	<i>1.4</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 157: Summary of Procurement Component of NASA Impacts by Types of Impact, South Dakota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	90	8,485	11,195	13,371	99
Indirect	-2	2	255	1,067	49
Induced	79	3,740	6,544	12,406	102
<b>Total</b>	<b>168</b>	<b>12,226</b>	<b>17,994</b>	<b>26,844</b>	<b>250</b>
<i>Multiplier</i>	<i>1.9</i>	<i>1.4</i>	<i>1.6</i>	<i>2.0</i>	<i>n.a.</i>

#### M2M Program

**Table 158: Summary of Employment Component of M2M Program Impacts by Types of Impact, South Dakota.**

Impact Type	Employment <sup>73</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	<1	17	22	45	0
Indirect	0	0	0	0	0
Induced	<1	7	13	24	1
<b>Total</b>	<b>&lt;1</b>	<b>24</b>	<b>34</b>	<b>69</b>	<b>1</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.4</i>	<i>1.6</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>72</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>73</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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*compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 159: Summary of Procurement Component of M2M Program Impacts by Types of Impact, South Dakota.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	85	118	370	4
Indirect	0	62	94	118	3
Induced	1	55	95	176	7
<b>Total</b>	<b>4</b>	<b>202</b>	<b>307</b>	<b>665</b>	<b>14</b>
<i>Multiplier</i>	<i>1.5</i>	<i>2.4</i>	<i>2.6</i>	<i>1.8</i>	<i>n.a.</i>

### 44. Tennessee

#### NASA

**Table 160: Summary of Employment Component of NASA Impacts by Types of Impact, Tennessee.**

Impact Type	Employment <sup>74</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	52	8,573	10,743	22,464	45
Indirect	0	0	0	0	0
Induced	82	4,681	7,638	13,836	761
<b>Total</b>	<b>134</b>	<b>13,254</b>	<b>18,382</b>	<b>36,300</b>	<b>806</b>
<i>Multiplier*</i>	<i>2.6</i>	<i>1.5</i>	<i>1.7</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 161: Summary of Procurement Component of NASA Impacts by Types of Impact, Tennessee.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	178	14,176	7,475	29,902	132
Indirect	201	10,957	19,524	33,769	1,018
Induced	212	12,049	19,651	35,596	1,957
<b>Total</b>	<b>591</b>	<b>37,182</b>	<b>46,650</b>	<b>99,267</b>	<b>3,107</b>
<i>Multiplier</i>	<i>3.3</i>	<i>2.6</i>	<i>6.2</i>	<i>3.3</i>	<i>n.a.</i>

<sup>74</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 162: Summary of Employment Component of M2M Program Impacts by Types of Impact, Tennessee.**

Impact Type	Employment <sup>75</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	18	3,150	3,787	7,919	17
Indirect	0	0	0	0	0
Induced	30	1,806	2,929	5,126	282
<b>Total</b>	<b>48</b>	<b>4,956</b>	<b>6,716</b>	<b>13,044</b>	<b>299</b>
<i>Multiplier*</i>	2.6	1.6	1.8	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 163: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Tennessee.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	4	313	416	762	5
Indirect	2	215	305	487	14
Induced	4	253	410	718	39
<b>Total</b>	<b>10</b>	<b>781</b>	<b>1,131</b>	<b>1,966</b>	<b>58</b>
<i>Multiplier</i>	2.5	2.5	2.7	2.6	n.a.

### 45. Texas

#### NASA

**Table 164: Summary of Employment Component of NASA Impacts by Types of Impact, Texas.**

Impact Type	Employment <sup>76</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,843	511,093	587,522	1,228,489	4,211
Indirect	0	0	0	0	0
Induced	5,509	295,433	513,233	981,764	48,349
<b>Total</b>	<b>8,353</b>	<b>806,526</b>	<b>1,100,755</b>	<b>2,210,253</b>	<b>52,561</b>
<i>Multiplier*</i>	2.9	1.6	1.9	1.8	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>75</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>76</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 165: Summary of Procurement Component of NASA Impacts by Types of Impact, Texas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	9,509	825,976	1,227,133	2,226,193	34,830
Indirect	8,905	617,482	994,270	1,867,484	48,233
Induced	13,555	726,743	1,261,677	2,413,634	118,723
<b>Total</b>	<b>31,969</b>	<b>2,170,201</b>	<b>3,483,080</b>	<b>6,507,311</b>	<b>201,786</b>
<i>Multiplier</i>	3.4	2.6	2.8	2.9	<i>n.a.</i>

### **M2M Program**

**Table 166: Summary of Employment Component of M2M Program Impacts by Types of Impact, Texas.**

Impact Type	Employment <sup>77</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	793	140,430	163,887	342,683	1,157
Indirect	0	0	0	0	0
Induced	1,483	85,076	146,918	272,666	13,428
<b>Total</b>	<b>2,276</b>	<b>225,507</b>	<b>310,805</b>	<b>615,349</b>	<b>14,585</b>
<i>Multiplier*</i>	2.9	1.6	1.9	1.8	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 167: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Texas.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,274	211,063	325,510	599,039	7,944
Indirect	2,009	178,341	270,989	452,420	10,065
Induced	3,549	203,575	351,364	652,138	32,085
<b>Total</b>	<b>7,832</b>	<b>592,979</b>	<b>947,864</b>	<b>1,703,597</b>	<b>50,094</b>
<i>Multiplier</i>	3.4	2.8	2.9	2.8	<i>n.a.</i>

<sup>77</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 46. Utah

#### NASA

**Table 168: Summary of Employment Component of NASA Impacts by Types of Impact, Utah.**

Impact Type	Employment <sup>78</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	6	908	1,237	2,586	26
Indirect	0	0	0	0	0
Induced	9	443	827	1,578	81
<b>Total</b>	<b>15</b>	<b>1,352</b>	<b>2,063</b>	<b>4,164</b>	<b>108</b>
<i>Multiplier*</i>	2.6	1.5	1.7	1.6	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 169: Summary of Procurement Component of NASA Impacts by Types of Impact, Utah.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,323	102,940	147,897	310,754	5,982
Indirect	1,704	92,002	144,264	298,753	7,180
Induced	1,789	84,632	157,734	301,044	15,510
<b>Total</b>	<b>4,816</b>	<b>279,574</b>	<b>449,894</b>	<b>910,551</b>	<b>28,672</b>
<i>Multiplier</i>	3.6	2.7	3.0	2.9	n.a.

#### M2M Program

**Table 170: Summary of Employment Component of M2M Program Impacts by Types of Impact, Utah.**

Impact Type	Employment <sup>79</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	850	1,033	2,161	25
Indirect	0	0	0	0	0
Induced	9	437	807	1,493	77
<b>Total</b>	<b>14</b>	<b>1,287</b>	<b>1,840</b>	<b>3,653</b>	<b>102</b>
<i>Multiplier*</i>	2.7	1.5	1.8	1.7	n.a.

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

<sup>78</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>79</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 171: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Utah.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1,209	93,989	135,689	288,222	5,213
Indirect	1,285	90,381	143,615	257,580	6,162
Induced	1,614	82,580	152,360	281,977	14,528
<b>Total</b>	<b>4,107</b>	<b>266,950</b>	<b>431,663</b>	<b>827,779</b>	<b>25,903</b>
<i>Multiplier</i>	3.4	2.8	3.2	2.9	<i>n.a.</i>

### 47. Vermont

#### NASA

**Table 172: Summary of Employment Component of NASA Impacts by Types of Impact, Vermont.**

Impact Type	Employment <sup>80</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	212	247	517	5
Indirect	0	0	0	0	0
Induced	2	99	168	302	20
<b>Total</b>	<b>3</b>	<b>311</b>	<b>415</b>	<b>819</b>	<b>25</b>
<i>Multiplier*</i>	2.7	1.5	1.7	1.6	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 173: Summary of Procurement Component of NASA Impacts by Types of Impact, Vermont.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	10	869	1,188	1,904	41
Indirect	5	257	403	817	35
Induced	11	505	858	1,543	101
<b>Total</b>	<b>25</b>	<b>1,631</b>	<b>2,449</b>	<b>4,264</b>	<b>177</b>
<i>Multiplier</i>	2.5	1.9	2.1	2.2	<i>n.a.</i>

<sup>80</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.



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**Table 174: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Vermont.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	84	140	257	6
Indirect	1	63	88	143	6
Induced	1	60	101	177	12
<b>Total</b>	<b>3</b>	<b>207</b>	<b>330</b>	<b>576</b>	<b>23</b>
<i>Multiplier</i>	2.7	2.5	2.4	2.2	<i>n.a.</i>

### 48. Virginia

#### NASA

**Table 175: Summary of Employment Component of NASA Impacts by Types of Impact, Virginia.**

Impact Type	Employment <sup>81</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2,429	412,227	501,871	1,049,396	12,517
Indirect	0	0	0	0	0
Induced	3,526	180,670	330,791	577,378	33,555
<b>Total</b>	<b>5,955</b>	<b>592,897</b>	<b>832,662</b>	<b>1,626,774</b>	<b>46,072</b>
<i>Multiplier*</i>	2.5	1.4	1.7	1.6	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 176: Summary of Procurement Component of NASA Impacts by Types of Impact, Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	8,487	707,706	936,684	1,656,259	48,800
Indirect	4,669	321,560	505,019	915,376	49,139
Induced	7,986	409,116	748,246	1,306,180	75,839
<b>Total</b>	<b>21,142</b>	<b>1,438,382</b>	<b>2,189,948</b>	<b>3,877,816</b>	<b>173,777</b>
<i>Multiplier</i>	2.5	2.0	2.3	2.3	<i>n.a.</i>

<sup>81</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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**Table 177: Summary of Employment Component of M2M Program Impacts by Types of Impact, Virginia.**

Impact Type	Employment <sup>82</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	213	33,331	43,932	91,860	1,012
Indirect	0	0	0	0	0
Induced	280	15,489	28,331	47,746	2,775
<b>Total</b>	<b>493</b>	<b>48,820</b>	<b>72,263</b>	<b>139,606</b>	<b>3,787</b>
<i>Multiplier*</i>	<i>2.3</i>	<i>1.5</i>	<i>1.6</i>	<i>1.5</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 178: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	260	24,256	36,683	68,318	1,088
Indirect	171	18,015	23,556	40,152	1,360
Induced	297	16,412	29,998	50,559	2,937
<b>Total</b>	<b>728</b>	<b>58,682</b>	<b>90,236</b>	<b>159,030</b>	<b>5,384</b>
<i>Multiplier</i>	<i>2.8</i>	<i>2.4</i>	<i>2.5</i>	<i>2.3</i>	<i>n.a.</i>

### 49. Washington

#### NASA

**Table 179: Summary of Employment Component of NASA Impacts by Types of Impact, Washington.**

Impact Type	Employment <sup>83</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	7	1,237	1,383	2,892	16
Indirect	0	0	0	0	0
Induced	10	593	1,072	1,845	126
<b>Total</b>	<b>16</b>	<b>1,830</b>	<b>2,455</b>	<b>4,737</b>	<b>142</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.5</i>	<i>1.8</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>82</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>83</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.

**Table 180: Summary of Procurement Component of NASA Impacts by Types of Impact, Washington.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	249	34,596	57,967	87,989	1,040
Indirect	236	18,478	30,148	52,674	1,915
Induced	372	23,155	41,857	72,027	4,931
<b>Total</b>	<b>858</b>	<b>76,229</b>	<b>129,971</b>	<b>212,690</b>	<b>7,886</b>
<i>Multiplier</i>	3.4	2.2	2.2	2.4	<i>n.a.</i>

### **M2M Program**

**Table 181: Summary of Employment Component of M2M Program Impacts by Types of Impact, Washington.**

Impact Type	Employment <sup>84</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	391	403	843	5
Indirect	0	0	0	0	0
Induced	3	200	359	596	41
<b>Total</b>	<b>5</b>	<b>591</b>	<b>762</b>	<b>1,439</b>	<b>46</b>
<i>Multiplier*</i>	2.5	1.5	1.9	1.7	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 182: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Washington.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	20	2,804	4,771	7,409	103
Indirect	19	2,042	3,334	5,175	189
Induced	30	2,033	3,650	6,067	415
<b>Total</b>	<b>69</b>	<b>6,880</b>	<b>11,755</b>	<b>18,651</b>	<b>707</b>
<i>Multiplier</i>	3.5	2.5	2.5	2.5	<i>n.a.</i>

<sup>84</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 50. West Virginia

#### NASA

**Table 183: Summary of Employment Component of NASA Impacts by Types of Impact, West Virginia.**

Impact Type	Employment <sup>85</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	53	8,403	10,876	22,742	224
Indirect	0	0	0	0	0
Induced	71	3,126	5,272	9,794	584
<b>Total</b>	<b>124</b>	<b>11,529</b>	<b>16,148</b>	<b>32,535</b>	<b>808</b>
<i>Multiplier*</i>	<i>2.4</i>	<i>1.4</i>	<i>1.5</i>	<i>1.4</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 184: Summary of Procurement Component of NASA Impacts by Types of Impact, West Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	240	18,174	24,763	50,383	1,066
Indirect	151	9,099	13,211	25,318	701
Induced	213	9,342	15,750	29,260	1,743
<b>Total</b>	<b>604</b>	<b>36,616</b>	<b>53,724</b>	<b>104,961</b>	<b>3,511</b>
<i>Multiplier</i>	<i>2.5</i>	<i>2.0</i>	<i>2.2</i>	<i>2.1</i>	<i>n.a.</i>

#### M2M Program

**Table 185: Summary of Procurement Component of M2M Program Impacts by Types of Impact, West Virginia.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	12	808	1,205	2,663	54
Indirect	6	530	800	1,298	35
Induced	10	465	780	1,410	84
<b>Total</b>	<b>28</b>	<b>1,803</b>	<b>2,786</b>	<b>5,370</b>	<b>173</b>
<i>Multiplier</i>	<i>2.4</i>	<i>2.2</i>	<i>2.3</i>	<i>2.0</i>	<i>n.a.</i>

<sup>85</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### 51. Wisconsin

#### NASA

**Table 186: Summary of Employment Component of NASA Impacts by Types of Impact, Wisconsin.**

Impact Type	Employment <sup>86</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	11	1,155	2,206	4,613	10
Indirect	0	0	0	0	0
Induced	4	201	344	646	36
<b>Total</b>	<b>15</b>	<b>1,356</b>	<b>2,550</b>	<b>5,259</b>	<b>46</b>
<i>Multiplier*</i>	<i>1.4</i>	<i>1.2</i>	<i>1.2</i>	<i>1.1</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 187: Summary of Procurement Component of NASA Impacts by Types of Impact, Wisconsin.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	68	5,734	6,862	15,838	180
Indirect	75	4,462	7,447	13,534	443
Induced	95	4,748	8,132	15,258	858
<b>Total</b>	<b>238</b>	<b>14,944</b>	<b>22,442</b>	<b>44,630</b>	<b>1,481</b>
<i>Multiplier</i>	<i>3.5</i>	<i>2.6</i>	<i>3.3</i>	<i>2.8</i>	<i>n.a.</i>

#### M2M Program

**Table 188: Summary of Employment Component of M2M Program Impacts by Types of Impact, Wisconsin.**

Impact Type	Employment <sup>87</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	230	332	694	6
Indirect	0	0	0	0	0
Induced	2	129	220	401	23
<b>Total</b>	<b>4</b>	<b>359</b>	<b>552</b>	<b>1,095</b>	<b>29</b>
<i>Multiplier*</i>	<i>2.5</i>	<i>1.6</i>	<i>1.7</i>	<i>1.6</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be*

<sup>86</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

<sup>87</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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*compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 189: Summary of Procurement Component of M2M Program Impacts by Types of Impact, Wisconsin.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	5	498	-990	818	15
Indirect	12	879	1,590	2,478	89
Induced	11	589	1,001	1,827	103
<b>Total</b>	<b>29</b>	<b>1,966</b>	<b>1,601</b>	<b>5,124</b>	<b>207</b>
<i>Multiplier</i>	<i>5.3</i>	<i>3.9</i>	<i>-1.6</i>	<i>6.3</i>	<i>n.a.</i>

## 52. Wyoming

### NASA

**Table 190: Summary of Employment Component of NASA Impacts by Types of Impact, Wyoming.**

Impact Type	Employment <sup>88</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	2	378	453	947	18
Indirect	0	0	0	0	0
Induced	5	204	401	778	48
<b>Total</b>	<b>7</b>	<b>582</b>	<b>854</b>	<b>1,725</b>	<b>66</b>
<i>Multiplier*</i>	<i>3.3</i>	<i>1.5</i>	<i>1.9</i>	<i>1.8</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

**Table 191: Summary of Procurement Component of NASA Impacts by Types of Impact, Wyoming.**

Impact Type	Employment	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	18	1,452	1,857	3,210	56
Indirect	7	298	398	1,200	24
Induced	9	365	719	1,394	87
<b>Total</b>	<b>35</b>	<b>2,116</b>	<b>2,974</b>	<b>5,804</b>	<b>167</b>
<i>Multiplier</i>	<i>1.9</i>	<i>1.5</i>	<i>1.6</i>	<i>1.8</i>	<i>n.a.</i>

<sup>88</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

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### M2M Program

**Table 192: Summary of Employment Component of M2M Program Impacts by Types of Impact, Wyoming.**

Impact Type	Employment <sup>89</sup>	Labor Income (\$ thousands)	Value Added (\$ thousands)	Output (\$ thousands)	Tax (\$ thousands)
Direct	1	160	207	432	3
Indirect	0	0	0	0	0
Induced	1	35	69	129	8
<b>Total</b>	<b>2</b>	<b>195</b>	<b>275</b>	<b>561</b>	<b>11</b>
<i>Multiplier*</i>	<i>1.8</i>	<i>1.2</i>	<i>1.3</i>	<i>1.3</i>	<i>n.a.</i>

*\*Note that the multipliers here are calculated only using induced effects, not indirect effects, because of how government procurement is analyzed independently in this report. Therefore, the multipliers in this table should not be compared to studies of other industries that do have indirect effects attributed to employment levels, but rather only across the geographies in this study.*

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<sup>89</sup> While direct employment refers to full-time equivalent (FTE) positions at NASA centers, induced employment refers to a combination of full-time and part-time positions.

## APPENDIX

### C. LABOR INCOME AND VALUE ADDED IMPACTS BY SOURCES OF IMPACT

In this section, for labor income and value added the results are examined by NASA employment and procurement components. The disaggregation of economic impacts by their sources highlights the relative contributions of NASA's employment and procurement activities to the overall NASA impacts (the equivalent tables for employment and output categories are provided in the text).

#### 1. The United States

##### NASA

**Table 193: NASA Labor Income Impacts by Sources of Impact, U.S.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,904,480	67.9	0	0.0	2,904,480	12.3	100.0	0.0
Indirect*	0	0.0	13,156,644	67.9	13,156,644	55.6	0.0	100.0
Induced	1,372,187	32.1	6,219,206	32.1	7,591,393	32.1	18.1	81.9
<b>Total</b>	<b>4,276,667</b>	<b>100.0</b>	<b>19,375,850</b>	<b>100.0</b>	<b>23,652,518</b>	<b>100.0</b>	<b>18.1</b>	<b>81.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 194: NASA Value Added Impacts by Sources of Impact, U.S.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	3,517,219	59.2	0	0.0	3,517,219	10.0	100.0	0.0
Indirect*	0	0.0	18,394,936	62.6	18,394,936	52.1	0.0	100.0
Induced	2,425,828	40.8	10,986,438	37.4	13,412,267	38.0	18.1	81.9
<b>Total</b>	<b>5,943,047</b>	<b>100.0</b>	<b>29,381,375</b>	<b>100.0</b>	<b>35,324,422</b>	<b>100.0</b>	<b>16.8</b>	<b>83.2</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.



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### M2M Program

**Table 195: M2M Program Labor Income Impacts by Sources of Impact, U.S.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	520,785	67.9	0	0.0	520,785	10.0	100.0	0.0
Indirect*	0	0.0	3,026,066	67.9	3,026,066	57.9	0.0	100.0
Induced	246,039	32.1	1,430,485	32.1	1,676,524	32.1	14.7	85.3
<b>Total</b>	<b>766,824</b>	<b>100.0</b>	<b>4,456,551</b>	<b>100.0</b>	<b>5,223,376</b>	<b>100.0</b>	<b>14.7</b>	<b>85.3</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 196: M2M Program Value Added Impacts by Sources of Impact, U.S.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	651,896	60.0	0	0.0	651,896	8.3	100.0	0.0
Indirect*	0	0.0	4,236,120	62.6	4,236,120	54.0	0.0	100.0
Induced	434,961	40.0	2,526,860	37.4	2,961,822	37.7	14.7	85.3
<b>Total</b>	<b>1,086,857</b>	<b>100.0</b>	<b>6,762,981</b>	<b>100.0</b>	<b>7,849,838</b>	<b>100.0</b>	<b>13.8</b>	<b>86.2</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 2. Alabama

### NASA

**Table 197: NASA Labor Income Impacts by Sources of Impact, Alabama.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	365,050	72.1	0	0.0	365,050	16.2	100.0	0.0
Indirect*	0	0.0	1,303,329	74.4	1,303,329	57.7	0.0	100.0
Induced	140,976	27.9	448,204	25.6	589,180	26.1	23.9	76.1
<b>Total</b>	<b>506,026</b>	<b>100.0</b>	<b>1,751,533</b>	<b>100.0</b>	<b>2,257,559</b>	<b>100.0</b>	<b>22.4</b>	<b>77.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 198: NASA Value Added Impacts by Sources of Impact, Alabama.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	457,537	64.4	0	0.0	457,537	14.6	100.0	0.0
Indirect*	0	0.0	1,616,519	66.8	1,616,519	51.6	0.0	100.0
Induced	253,229	35.6	804,464	33.2	1,057,693	33.8	23.9	76.1
<b>Total</b>	<b>710,766</b>	<b>100.0</b>	<b>2,420,984</b>	<b>100.0</b>	<b>3,131,750</b>	<b>100.0</b>	<b>22.7</b>	<b>77.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 199: M2M Program Labor Income Impacts by Sources of Impact, Alabama.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	138,436	71.6	0	0.0	138,436	11.2	100.0	0.0
Indirect*	0	0.0	775,884	74.3	775,884	62.7	0.0	100.0
Induced	54,788	28.4	268,664	25.7	323,452	26.1	16.9	83.1
<b>Total</b>	<b>193,224</b>	<b>100.0</b>	<b>1,044,548</b>	<b>100.0</b>	<b>1,237,772</b>	<b>100.0</b>	<b>15.6</b>	<b>84.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 200: M2M Program Value Added Impacts by Sources of Impact, Alabama.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	178,589	64.4	0	0.0	178,589	10.1	100.0	0.0
Indirect*	0	0.0	1,009,103	67.6	1,009,103	57.0	0.0	100.0
Induced	98,599	35.6	483,096	32.4	581,695	32.9	17.0	83.0
<b>Total</b>	<b>277,188</b>	<b>100.0</b>	<b>1,492,199</b>	<b>100.0</b>	<b>1,769,387</b>	<b>100.0</b>	<b>15.7</b>	<b>84.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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### 3. Alaska

#### NASA

**Table 201: NASA Labor Income Impacts by Sources of Impact, Alaska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	131	71.9	0	0.0	131	1.0	100.0	0.0
Indirect*	0	0.0	9,714	73.2	9,714	72.2	0.0	100.0
Induced	51	28.1	3,563	26.8	3,614	26.9	1.4	98.6
<b>Total</b>	<b>183</b>	<b>100.0</b>	<b>13,278</b>	<b>100.0</b>	<b>13,460</b>	<b>100.0</b>	<b>1.4</b>	<b>98.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 202: NASA Value Added Impacts by Sources of Impact, Alaska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	352	79.4	0	0.0	352	1.9	100.0	0.0
Indirect*	0	0.0	12,055	65.5	12,055	64.0	0.0	100.0
Induced	91	20.6	6,342	34.5	6,433	34.1	1.4	98.6
<b>Total</b>	<b>444</b>	<b>100.0</b>	<b>18,397</b>	<b>100.0</b>	<b>18,841</b>	<b>100.0</b>	<b>2.4</b>	<b>97.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

Because there was not M2M Program specific NASA labor force in Alaska in FY 2019, no differentiation is made between employment and procurement components.

### 4. Arizona

#### NASA

**Table 203: NASA Labor Income Impacts by Sources of Impact, Arizona.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,538	64.1	0	0.0	2,538	0.8	100.0	0.0
Indirect*	0	0.0	213,924	66.6	213,924	65.8	0.0	100.0
Induced	1,422	35.9	107,437	33.4	108,859	33.5	1.3	98.7
<b>Total</b>	<b>3,960</b>	<b>100.0</b>	<b>321,361</b>	<b>100.0</b>	<b>325,320</b>	<b>100.0</b>	<b>1.2</b>	<b>98.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 204: NASA Value Added Impacts by Sources of Impact, Arizona.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,948	54.5	0	0.0	2,948	0.6	100.0	0.0
Indirect*	0	0.0	321,520	63.3	321,520	62.7	0.0	100.0
Induced	2,466	45.5	186,266	36.7	188,732	36.8	1.3	98.7
<b>Total</b>	<b>5,414</b>	<b>100.0</b>	<b>507,786</b>	<b>100.0</b>	<b>513,200</b>	<b>100.0</b>	<b>1.1</b>	<b>98.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 205: M2M Program Labor Income Impacts by Sources of Impact, Arizona.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	147	62.8	0	0.0	147	1.1	100.0	0.0
Indirect*	0	0.0	8,404	66.9	8,404	65.6	0.0	100.0
Induced	87	37.2	4,166	33.1	4,253	33.2	2.0	98.0
<b>Total</b>	<b>234</b>	<b>100.0</b>	<b>12,570</b>	<b>100.0</b>	<b>12,804</b>	<b>100.0</b>	<b>1.8</b>	<b>98.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 206: M2M Program Value Added Impacts by Sources of Impact, Arizona.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	139	48.0	0	0.0	139	0.7	100.0	0.0
Indirect*	0	0.0	12,954	64.4	12,954	63.5	0.0	100.0
Induced	150	52.0	7,171	35.6	7,321	35.9	2.0	98.0
<b>Total</b>	<b>289</b>	<b>100.0</b>	<b>20,125</b>	<b>100.0</b>	<b>20,413</b>	<b>100.0</b>	<b>1.4</b>	<b>98.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 5. Arkansas

#### NASA

**Table 207: NASA Labor Income Impacts by Sources of Impact, Arkansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	158	72.8	0	0.0	158	8.2	100.0	0.0
Indirect*	0	0.0	1,265	73.8	1,265	65.5	0.0	100.0
Induced	59	27.2	449	26.2	508	26.3	11.6	88.4
<b>Total</b>	<b>217</b>	<b>100.0</b>	<b>1,714</b>	<b>100.0</b>	<b>1,931</b>	<b>100.0</b>	<b>11.3</b>	<b>88.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 208: NASA Value Added Impacts by Sources of Impact, Arkansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	207	65.9	0	0.0	207	7.3	100.0	0.0
Indirect*	0	0.0	1,722	67.9	1,722	60.4	0.0	100.0
Induced	107	34.1	813	32.1	920	32.3	11.6	88.4
<b>Total</b>	<b>314</b>	<b>100.0</b>	<b>2,535</b>	<b>100.0</b>	<b>2,849</b>	<b>100.0</b>	<b>11.0</b>	<b>89.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### **M2M Program**

Because there was not M2M Program specific NASA labor force in Arkansas in FY 2019, no differentiation is made between employment and procurement components.

### 6. California

#### NASA

**Table 209: NASA Labor Income Impacts by Sources of Impact, California.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	308,027	62.4	0	0.0	308,027	4.9	100.0	0.0
Indirect*	0	0.0	3,773,669	65.0	3,773,669	59.9	0.0	100.0
Induced	185,625	37.6	2,028,321	35.0	2,213,946	35.2	8.4	91.6
<b>Total</b>	<b>493,652</b>	<b>100.0</b>	<b>5,801,990</b>	<b>100.0</b>	<b>6,295,641</b>	<b>100.0</b>	<b>7.8</b>	<b>92.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 210: NASA Value Added Impacts by Sources of Impact, California.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	346,867	51.3	0	0.0	346,867	3.5	100.0	0.0
Indirect*	0	0.0	5,532,601	60.6	5,532,601	56.4	0.0	100.0
Induced	329,937	48.7	3,601,879	39.4	3,931,815	40.1	8.4	91.6
<b>Total</b>	<b>676,804</b>	<b>100.0</b>	<b>9,134,479</b>	<b>100.0</b>	<b>9,811,283</b>	<b>100.0</b>	<b>6.9</b>	<b>93.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 211: M2M Program Labor Income Impacts by Sources of Impact, California.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	31,400	59.8	0	0.0	31,400	4.9	100.0	0.0
Indirect*	0	0.0	372,690	63.4	372,690	58.2	0.0	100.0
Induced	21,091	40.2	215,582	36.6	236,673	36.9	8.9	91.1
<b>Total</b>	<b>52,491</b>	<b>100.0</b>	<b>588,272</b>	<b>100.0</b>	<b>640,762</b>	<b>100.0</b>	<b>8.2</b>	<b>91.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 212: M2M Program Value Added Impacts by Sources of Impact, California.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	33,377	47.1	0	0.0	33,377	3.3	100.0	0.0
Indirect*	0	0.0	561,941	59.5	561,941	55.3	0.0	100.0
Induced	37,445	52.9	382,525	40.5	419,971	41.4	8.9	91.1
<b>Total</b>	<b>70,822</b>	<b>100.0</b>	<b>944,467</b>	<b>100.0</b>	<b>1,015,289</b>	<b>100.0</b>	<b>7.0</b>	<b>93.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 7. Colorado

#### NASA

**Table 213: NASA Labor Income Impacts by Sources of Impact, Colorado.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	5,589	64.9	0	0.0	5,589	0.4	100.0	0.0
Indirect*	0	0.0	1,069,493	67.4	1,069,493	67.1	0.0	100.0
Induced	3,022	35.1	516,951	32.6	519,973	32.6	0.6	99.4
<b>Total</b>	<b>8,611</b>	<b>100.0</b>	<b>1,586,444</b>	<b>100.0</b>	<b>1,595,055</b>	<b>100.0</b>	<b>0.5</b>	<b>99.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 214: NASA Value Added Impacts by Sources of Impact, Colorado.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	6,697	56.0	0	0.0	6,697	0.3	100.0	0.0
Indirect*	0	0.0	1,504,364	62.6	1,504,364	62.3	0.0	100.0
Induced	5,252	44.0	898,037	37.4	903,290	37.4	0.6	99.4
<b>Total</b>	<b>11,949</b>	<b>100.0</b>	<b>2,402,401</b>	<b>100.0</b>	<b>2,414,351</b>	<b>100.0</b>	<b>0.5</b>	<b>99.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 215: M2M Program Labor Income Impacts by Sources of Impact, Colorado.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	966	63.9	0	0.0	966	0.1	100.0	0.0
Indirect*	0	0.0	649,933	66.8	649,933	66.7	0.0	100.0
Induced	547	36.1	322,458	33.2	323,005	33.2	0.2	99.8
<b>Total</b>	<b>1,513</b>	<b>100.0</b>	<b>972,391</b>	<b>100.0</b>	<b>973,904</b>	<b>100.0</b>	<b>0.2</b>	<b>99.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 216: M2M Program Value Added Impacts by Sources of Impact, Colorado.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,255	56.9	0	0.0	1,255	0.1	100.0	0.0
Indirect*	0	0.0	921,568	62.2	921,568	62.1	0.0	100.0
Induced	950	43.1	559,741	37.8	560,691	37.8	0.2	99.8
<b>Total</b>	<b>2,205</b>	<b>100.0</b>	<b>1,481,309</b>	<b>100.0</b>	<b>1,483,514</b>	<b>100.0</b>	<b>0.1</b>	<b>99.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 8. Connecticut

### NASA

**Table 217: NASA Labor Income Impacts by Sources of Impact, Connecticut.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	604	65.7	0	0.0	604	2.1	100.0	0.0
Indirect*	0	0.0	18,832	69.2	18,832	66.9	0.0	100.0
Induced	316	34.3	8,396	30.8	8,712	31.0	3.6	96.4
<b>Total</b>	<b>920</b>	<b>100.0</b>	<b>27,228</b>	<b>100.0</b>	<b>28,148</b>	<b>100.0</b>	<b>3.3</b>	<b>96.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 218: NASA Value Added Impacts by Sources of Impact, Connecticut.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	928	63.4	0	0.0	928	2.1	100.0	0.0
Indirect*	0	0.0	28,787	66.9	28,787	64.7	0.0	100.0
Induced	536	36.6	14,239	33.1	14,776	33.2	3.6	96.4
<b>Total</b>	<b>1,464</b>	<b>100.0</b>	<b>43,026</b>	<b>100.0</b>	<b>44,490</b>	<b>100.0</b>	<b>3.3</b>	<b>96.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.



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### M2M Program

**Table 219: M2M Program Labor Income Impacts by Sources of Impact, Connecticut.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	62	64.0	0	0.0	62	0.8	100.0	0.0
Indirect*	0	0.0	5,512	68.2	5,512	67.4	0.0	100.0
Induced	35	36.0	2,564	31.8	2,599	31.8	1.3	98.7
<b>Total</b>	<b>97</b>	<b>100.0</b>	<b>8,076</b>	<b>100.0</b>	<b>8,173</b>	<b>100.0</b>	<b>1.2</b>	<b>98.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 220: M2M Program Value Added Impacts by Sources of Impact, Connecticut.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	144	71.0	0	0.0	144	1.1	100.0	0.0
Indirect*	0	0.0	8,394	66.1	8,394	65.0	0.0	100.0
Induced	59	29.0	4,313	33.9	4,372	33.9	1.3	98.7
<b>Total</b>	<b>203</b>	<b>100.0</b>	<b>12,707</b>	<b>100.0</b>	<b>12,910</b>	<b>100.0</b>	<b>1.6</b>	<b>98.4</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 9. District of Columbia (D.C.)

### NASA

**Table 221: NASA Labor Income Impacts by Sources of Impact, D.C.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	50,301	84.6	0	0.0	50,301	16.3	100.0	0.0
Indirect*	0	0.0	206,747	83.0	206,747	67.0	0.0	100.0
Induced	9,138	15.4	42,267	17.0	51,406	16.7	17.8	82.2
<b>Total</b>	<b>59,440</b>	<b>100.0</b>	<b>249,014</b>	<b>100.0</b>	<b>308,454</b>	<b>100.0</b>	<b>19.3</b>	<b>80.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 222: NASA Value Added Impacts by Sources of Impact, D.C.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	58,153	81.1	0	0.0	58,153	16.0	100.0	0.0
Indirect*	0	0.0	229,251	78.6	229,251	63.1	0.0	100.0
Induced	13,570	18.9	62,422	21.4	75,991	20.9	17.9	82.1
<b>Total</b>	<b>71,722</b>	<b>100.0</b>	<b>291,673</b>	<b>100.0</b>	<b>363,395</b>	<b>100.0</b>	<b>19.7</b>	<b>80.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 223: M2M Program Labor Income Impacts by Sources of Impact, D.C.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	772	83.2	0	0.0	772	6.6	100.0	0.0
Indirect*	0	0.0	8,850	82.4	8,850	75.9	0.0	100.0
Induced	156	16.8	1,886	17.6	2,042	17.5	7.6	92.4
<b>Total</b>	<b>928</b>	<b>100.0</b>	<b>10,737</b>	<b>100.0</b>	<b>11,665</b>	<b>100.0</b>	<b>8.0</b>	<b>92.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 224: M2M Program Value Added Impacts by Sources of Impact, D.C.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,017	81.7	0	0.0	1,017	6.9	100.0	0.0
Indirect*	0	0.0	10,643	79.5	10,643	72.7	0.0	100.0
Induced	228	18.3	2,746	20.5	2,974	20.3	7.7	92.3
<b>Total</b>	<b>1,244</b>	<b>100.0</b>	<b>13,389</b>	<b>100.0</b>	<b>14,634</b>	<b>100.0</b>	<b>8.5</b>	<b>91.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 10. Delaware

#### NASA

**Table 225: NASA Labor Income Impacts by Sources of Impact, Delaware.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	819	70.0	0	0.0	819	9.3	100.0	0.0
Indirect*	0	0.0	5,410	71.3	5,410	61.8	0.0	100.0
Induced	351	30.0	2,176	28.7	2,527	28.9	13.9	86.1
<b>Total</b>	<b>1,170</b>	<b>100.0</b>	<b>7,586</b>	<b>100.0</b>	<b>8,756</b>	<b>100.0</b>	<b>13.4</b>	<b>86.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 226: NASA Value Added Impacts by Sources of Impact, Delaware.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,043	62.1	0	0.0	1,043	8.0	100.0	0.0
Indirect*	0	0.0	7,387	65.2	7,387	56.8	0.0	100.0
Induced	636	37.9	3,937	34.8	4,572	35.2	13.9	86.1
<b>Total</b>	<b>1,679</b>	<b>100.0</b>	<b>11,323</b>	<b>100.0</b>	<b>13,002</b>	<b>100.0</b>	<b>12.9</b>	<b>87.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

Because there was not M2M Program specific NASA labor force in Delaware in FY 2019, no differentiation is made between employment and procurement components.

### 11. Florida

#### NASA

**Table 227: NASA Labor Income Impacts by Sources of Impact, Florida.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	317,406	63.8	0	0.0	317,406	15.4	100.0	0.0
Indirect*	0	0.0	1,051,051	67.1	1,051,051	50.9	0.0	100.0
Induced	180,146	36.2	515,293	32.9	695,439	33.7	25.9	74.1
<b>Total</b>	<b>497,552</b>	<b>100.0</b>	<b>1,566,344</b>	<b>100.0</b>	<b>2,063,896</b>	<b>100.0</b>	<b>24.1</b>	<b>75.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 228: NASA Value Added Impacts by Sources of Impact, Florida.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	417,526	56.6	0	0.0	417,526	13.7	100.0	0.0
Indirect*	0	0.0	1,389,450	60.3	1,389,450	45.7	0.0	100.0
Induced	320,125	43.4	914,987	39.7	1,235,112	40.6	25.9	74.1
<b>Total</b>	<b>737,651</b>	<b>100.0</b>	<b>2,304,437</b>	<b>100.0</b>	<b>3,042,088</b>	<b>100.0</b>	<b>24.2</b>	<b>75.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 229: M2M Program Labor Income Impacts by Sources of Impact, Florida.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	98,998	62.5	0	0.0	98,998	13.3	100.0	0.0
Indirect*	0	0.0	390,218	66.6	390,218	52.4	0.0	100.0
Induced	59,272	37.5	195,863	33.4	255,135	34.3	23.2	76.8
<b>Total</b>	<b>158,269</b>	<b>100.0</b>	<b>586,081</b>	<b>100.0</b>	<b>744,350</b>	<b>100.0</b>	<b>21.3</b>	<b>78.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 230: M2M Program Value Added Impacts by Sources of Impact, Florida.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	128,981	55.0	0	0.0	128,981	11.8	100.0	0.0
Indirect*	0	0.0	505,598	59.2	505,598	46.4	0.0	100.0
Induced	105,549	45.0	348,533	40.8	454,082	41.7	23.2	76.8
<b>Total</b>	<b>234,531</b>	<b>100.0</b>	<b>854,131</b>	<b>100.0</b>	<b>1,088,662</b>	<b>100.0</b>	<b>21.5</b>	<b>78.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 12. Georgia

#### NASA

**Table 231: NASA Labor Income Impacts by Sources of Impact, Georgia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,885	64.9	0	0.0	1,885	7.1	100.0	0.0
Indirect*	0	0.0	16,062	68.2	16,062	60.7	0.0	100.0
Induced	1,021	35.1	7,503	31.8	8,524	32.2	12.0	88.0
<b>Total</b>	<b>2,906</b>	<b>100.0</b>	<b>23,565</b>	<b>100.0</b>	<b>26,471</b>	<b>100.0</b>	<b>11.0</b>	<b>89.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 232: NASA Value Added Impacts by Sources of Impact, Georgia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,957	61.6	0	0.0	2,957	7.0	100.0	0.0
Indirect*	0	0.0	23,912	63.8	23,912	56.6	0.0	100.0
Induced	1,846	38.4	13,548	36.2	15,394	36.4	12.0	88.0
<b>Total</b>	<b>4,803</b>	<b>100.0</b>	<b>37,460</b>	<b>100.0</b>	<b>42,263</b>	<b>100.0</b>	<b>11.4</b>	<b>88.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 233: M2M Program Labor Income Impacts by Sources of Impact, Georgia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	305	62.7	0	0.0	305	14.3	100.0	0.0
Indirect*	0	0.0	1,106	67.5	1,106	52.0	0.0	100.0
Induced	181	37.3	533	32.5	714	33.6	25.4	74.6
<b>Total</b>	<b>486</b>	<b>100.0</b>	<b>1,639</b>	<b>100.0</b>	<b>2,125</b>	<b>100.0</b>	<b>22.9</b>	<b>77.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 234: M2M Program Value Added Impacts by Sources of Impact, Georgia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	353	51.9	0	0.0	353	10.6	100.0	0.0
Indirect*	0	0.0	1,701	63.9	1,701	50.9	0.0	100.0
Induced	327	48.1	962	36.1	1,289	38.6	25.4	74.6
<b>Total</b>	<b>680</b>	<b>100.0</b>	<b>2,663</b>	<b>100.0</b>	<b>3,343</b>	<b>100.0</b>	<b>20.3</b>	<b>79.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 13. Hawaii

#### NASA

**Table 235: NASA Labor Income Impacts by Sources of Impact, Hawaii.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	63	69.8	0	0.0	63	0.2	100.0	0.0
Indirect*	0	0.0	19,131	71.5	19,131	71.2	0.0	100.0
Induced	27	30.2	7,636	28.5	7,664	28.5	0.4	99.6
<b>Total</b>	<b>91</b>	<b>100.0</b>	<b>26,768</b>	<b>100.0</b>	<b>26,858</b>	<b>100.0</b>	<b>0.3</b>	<b>99.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 236: NASA Value Added Impacts by Sources of Impact, Hawaii.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	76	60.3	0	0.0	76	0.2	100.0	0.0
Indirect*	0	0.0	23,978	63.2	23,978	63.0	0.0	100.0
Induced	50	39.7	13,932	36.8	13,982	36.8	0.4	99.6
<b>Total</b>	<b>126</b>	<b>100.0</b>	<b>37,910</b>	<b>100.0</b>	<b>38,036</b>	<b>100.0</b>	<b>0.3</b>	<b>99.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

Because there was not M2M Program specific NASA labor force in Hawaii in FY 2019, no differentiation is made between employment and procurement components.

## APPENDIX

### 14. Idaho

#### NASA

**Table 237: NASA Labor Income Impacts by Sources of Impact, Idaho.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	185	71.5	0	0.0	185	1.6	100.0	0.0
Indirect*	0	0.0	8,281	71.2	8,281	69.6	0.0	100.0
Induced	74	28.5	3,350	28.8	3,424	28.8	2.2	97.8
<b>Total</b>	<b>259</b>	<b>100.0</b>	<b>11,630</b>	<b>100.0</b>	<b>11,889</b>	<b>100.0</b>	<b>2.2</b>	<b>97.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 238: NASA Value Added Impacts by Sources of Impact, Idaho.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	215	63.0	0	0.0	215	1.2	100.0	0.0
Indirect*	0	0.0	11,948	67.6	11,948	66.3	0.0	100.0
Induced	127	37.0	5,738	32.4	5,865	32.5	2.2	97.8
<b>Total</b>	<b>342</b>	<b>100.0</b>	<b>17,686</b>	<b>100.0</b>	<b>18,028</b>	<b>100.0</b>	<b>1.9</b>	<b>98.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 239: M2M Program Labor Income Impacts by Sources of Impact, Idaho.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	19	70.7	0	0.0	19	0.2	100.0	0.0
Indirect*	0	0.0	5,646	71.8	5,646	71.5	0.0	100.0
Induced	8	29.3	2,220	28.2	2,227	28.2	0.3	99.7
<b>Total</b>	<b>26</b>	<b>100.0</b>	<b>7,866</b>	<b>100.0</b>	<b>7,892</b>	<b>100.0</b>	<b>0.3</b>	<b>99.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 240: M2M Program Value Added Impacts by Sources of Impact, Idaho.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	21	61.3	0	0.0	21	0.2	100.0	0.0
Indirect*	0	0.0	8,573	69.2	8,573	69.0	0.0	100.0
Induced	13	38.7	3,812	30.8	3,825	30.8	0.3	99.7
<b>Total</b>	<b>34</b>	<b>100.0</b>	<b>12,385</b>	<b>100.0</b>	<b>12,419</b>	<b>100.0</b>	<b>0.3</b>	<b>99.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 15. Illinois

#### NASA

**Table 241: NASA Labor Income Impacts by Sources of Impact, Illinois.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,466	62.2	0	0.0	1,466	3.6	100.0	0.0
Indirect*	0	0.0	24,886	65.6	24,886	61.7	0.0	100.0
Induced	889	37.8	13,069	34.4	13,958	34.6	6.4	93.6
<b>Total</b>	<b>2,354</b>	<b>100.0</b>	<b>37,955</b>	<b>100.0</b>	<b>40,310</b>	<b>100.0</b>	<b>5.8</b>	<b>94.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 242: NASA Value Added Impacts by Sources of Impact, Illinois.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	3,047	66.1	0	0.0	3,047	4.9	100.0	0.0
Indirect*	0	0.0	35,177	60.5	35,177	56.1	0.0	100.0
Induced	1,562	33.9	22,942	39.5	24,504	39.1	6.4	93.6
<b>Total</b>	<b>4,608</b>	<b>100.0</b>	<b>58,119</b>	<b>100.0</b>	<b>62,727</b>	<b>100.0</b>	<b>7.3</b>	<b>92.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.



## APPENDIX

### M2M Program

**Table 243: M2M Program Labor Income Impacts by Sources of Impact, Illinois.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	326	60.5	0	0.0	326	7.1	100.0	0.0
Indirect*	0	0.0	2,662	65.9	2,662	58.1	0.0	100.0
Induced	213	39.5	1,380	34.1	1,593	34.8	13.4	86.6
<b>Total</b>	<b>538</b>	<b>100.0</b>	<b>4,042</b>	<b>100.0</b>	<b>4,580</b>	<b>100.0</b>	<b>11.8</b>	<b>88.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 244: M2M Program Value Added Impacts by Sources of Impact, Illinois.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	755	67.0	0	0.0	755	9.9	100.0	0.0
Indirect*	0	0.0	4,103	63.0	4,103	53.7	0.0	100.0
Induced	372	33.0	2,412	37.0	2,785	36.4	13.4	86.6
<b>Total</b>	<b>1,127</b>	<b>100.0</b>	<b>6,516</b>	<b>100.0</b>	<b>7,643</b>	<b>100.0</b>	<b>14.7</b>	<b>85.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 16. Indiana

### NASA

**Table 245: NASA Labor Income Impacts by Sources of Impact, Indiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	867	66.3	0	0.0	867	0.8	100.0	0.0
Indirect*	0	0.0	77,643	68.9	77,643	68.1	0.0	100.0
Induced	440	33.7	35,042	31.1	35,482	31.1	1.2	98.8
<b>Total</b>	<b>1,307</b>	<b>100.0</b>	<b>112,685</b>	<b>100.0</b>	<b>113,991</b>	<b>100.0</b>	<b>1.1</b>	<b>98.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 246: NASA Value Added Impacts by Sources of Impact, Indiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,757	70.4	0	0.0	1,757	1.0	100.0	0.0
Indirect*	0	0.0	120,906	67.3	120,906	66.4	0.0	100.0
Induced	737	29.6	58,667	32.7	59,404	32.6	1.2	98.8
<b>Total</b>	<b>2,494</b>	<b>100.0</b>	<b>179,573</b>	<b>100.0</b>	<b>182,067</b>	<b>100.0</b>	<b>1.4</b>	<b>98.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 247: M2M Program Labor Income Impacts by Sources of Impact, Indiana.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	53	64.9	0	0.0	53	1.2	100.0	0.0
Indirect*	0	0.0	3,018	69.6	3,018	68.3	0.0	100.0
Induced	28	35.1	1,320	30.4	1,348	30.5	2.1	97.9
<b>Total</b>	<b>81</b>	<b>100.0</b>	<b>4,337</b>	<b>100.0</b>	<b>4,418</b>	<b>100.0</b>	<b>1.8</b>	<b>98.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 248: M2M Program Value Added Impacts by Sources of Impact, Indiana.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	158	76.8	0	0.0	158	2.7	100.0	0.0
Indirect*	0	0.0	3,490	61.2	3,490	59.1	0.0	100.0
Induced	48	23.2	2,213	38.8	2,261	38.3	2.1	97.9
<b>Total</b>	<b>205</b>	<b>100.0</b>	<b>5,703</b>	<b>100.0</b>	<b>5,908</b>	<b>100.0</b>	<b>3.5</b>	<b>96.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 17. Iowa

#### NASA

**Table 249: NASA Labor Income Impacts by Sources of Impact, Iowa.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	270	71.3	0	0.0	270	2.9	100.0	0.0
Indirect*	0	0.0	6,648	73.9	6,648	70.9	0.0	100.0
Induced	109	28.7	2,346	26.1	2,455	26.2	4.4	95.6
<b>Total</b>	<b>379</b>	<b>100.0</b>	<b>8,994</b>	<b>100.0</b>	<b>9,373</b>	<b>100.0</b>	<b>4.0</b>	<b>96.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 250: NASA Value Added Impacts by Sources of Impact, Iowa.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	415	68.0	0	0.0	415	2.8	100.0	0.0
Indirect*	0	0.0	9,735	69.8	9,735	66.9	0.0	100.0
Induced	196	32.0	4,213	30.2	4,408	30.3	4.4	95.6
<b>Total</b>	<b>610</b>	<b>100.0</b>	<b>13,948</b>	<b>100.0</b>	<b>14,558</b>	<b>100.0</b>	<b>4.2</b>	<b>95.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### **M2M Program**

Because there was not M2M Program specific NASA labor force in Iowa in FY 2019, no differentiation is made between employment and procurement components.

### 18. Kansas

#### NASA

**Table 251: NASA Labor Income Impacts by Sources of Impact, Kansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	326	70.6	0	0.0	326	6.5	100.0	0.0
Indirect*	0	0.0	3,307	72.6	3,307	65.9	0.0	100.0
Induced	136	29.4	1,251	27.4	1,386	27.6	9.8	90.2
<b>Total</b>	<b>462</b>	<b>100.0</b>	<b>4,558</b>	<b>100.0</b>	<b>5,020</b>	<b>100.0</b>	<b>9.2</b>	<b>90.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 252: NASA Value Added Impacts by Sources of Impact, Kansas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	479	66.9	0	0.0	479	6.1	100.0	0.0
Indirect*	0	0.0	4,939	69.3	4,939	63.0	0.0	100.0
Induced	237	33.1	2,186	30.7	2,424	30.9	9.8	90.2
<b>Total</b>	<b>717</b>	<b>100.0</b>	<b>7,125</b>	<b>100.0</b>	<b>7,841</b>	<b>100.0</b>	<b>9.1</b>	<b>90.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 253: M2M Program Labor Income Impacts by Sources of Impact, Kansas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	9	69.6	0	0.0	9	9.8	100.0	0.0
Indirect*	0	0.0	59	72.8	59	62.5	0.0	100.0
Induced	4	30.4	22	27.2	26	27.7	15.5	84.5
<b>Total</b>	<b>13</b>	<b>100.0</b>	<b>81</b>	<b>100.0</b>	<b>94</b>	<b>100.0</b>	<b>14.1</b>	<b>85.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 254: M2M Program Value Added Impacts by Sources of Impact, Kansas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	25	77.7	0	0.0	25	15.5	100.0	0.0
Indirect*	0	0.0	88	69.8	88	55.8	0.0	100.0
Induced	7	22.3	38	30.2	45	28.6	15.5	84.5
<b>Total</b>	<b>32</b>	<b>100.0</b>	<b>126</b>	<b>100.0</b>	<b>158</b>	<b>100.0</b>	<b>20.0</b>	<b>80.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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### 19. Kentucky

#### NASA

**Table 255: NASA Labor Income Impacts by Sources of Impact, Kentucky.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,087	69.8	0	0.0	1,087	7.2	100.0	0.0
Indirect*	0	0.0	9,670	71.9	9,670	64.4	0.0	100.0
Induced	471	30.2	3,784	28.1	4,255	28.3	11.1	88.9
<b>Total</b>	<b>1,558</b>	<b>100.0</b>	<b>13,454</b>	<b>100.0</b>	<b>15,012</b>	<b>100.0</b>	<b>10.4</b>	<b>89.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 256: NASA Value Added Impacts by Sources of Impact, Kentucky.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,187	73.3	0	0.0	2,187	11.0	100.0	0.0
Indirect*	0	0.0	10,508	62.1	10,508	52.8	0.0	100.0
Induced	798	26.7	6,405	37.9	7,203	36.2	11.1	88.9
<b>Total</b>	<b>2,985</b>	<b>100.0</b>	<b>16,914</b>	<b>100.0</b>	<b>19,899</b>	<b>100.0</b>	<b>15.0</b>	<b>85.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 257: M2M Program Labor Income Impacts by Sources of Impact, Kentucky.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	242	68.8	0	0.0	242	2.6	100.0	0.0
Indirect*	0	0.0	6,479	73.0	6,479	70.2	0.0	100.0
Induced	110	31.2	2,393	27.0	2,503	27.1	4.4	95.6
<b>Total</b>	<b>352</b>	<b>100.0</b>	<b>8,872</b>	<b>100.0</b>	<b>9,224</b>	<b>100.0</b>	<b>3.8</b>	<b>96.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 258: M2M Program Value Added Impacts by Sources of Impact, Kentucky.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	534	74.2	0	0.0	534	5.6	100.0	0.0
Indirect*	0	0.0	4,826	54.4	4,826	50.3	0.0	100.0
Induced	186	25.8	4,041	45.6	4,227	44.1	4.4	95.6
<b>Total</b>	<b>720</b>	<b>100.0</b>	<b>8,867</b>	<b>100.0</b>	<b>9,587</b>	<b>100.0</b>	<b>7.5</b>	<b>92.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 20. Louisiana

### NASA

**Table 259: NASA Labor Income Impacts by Sources of Impact, Louisiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	29,616	70.8	0	0.0	29,616	20.9	100.0	0.0
Indirect*	0	0.0	73,446	73.7	73,446	51.9	0.0	100.0
Induced	12,208	29.2	26,196	26.3	38,404	27.1	31.8	68.2
<b>Total</b>	<b>41,825</b>	<b>100.0</b>	<b>99,642</b>	<b>100.0</b>	<b>141,467</b>	<b>100.0</b>	<b>29.6</b>	<b>70.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 260: NASA Value Added Impacts by Sources of Impact, Louisiana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	37,654	62.2	0	0.0	37,654	18.4	100.0	0.0
Indirect*	0	0.0	95,614	66.1	95,614	46.6	0.0	100.0
Induced	22,840	37.8	48,978	33.9	71,818	35.0	31.8	68.2
<b>Total</b>	<b>60,493</b>	<b>100.0</b>	<b>144,592</b>	<b>100.0</b>	<b>205,085</b>	<b>100.0</b>	<b>29.5</b>	<b>70.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### M2M Program

**Table 261: M2M Program Labor Income Impacts by Sources of Impact, Louisiana.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	6,991	69.9	0	0.0	6,991	10.2	100.0	0.0
Indirect*	0	0.0	43,193	73.8	43,193	63.0	0.0	100.0
Induced	3,012	30.1	15,337	26.2	18,349	26.8	16.4	83.6
<b>Total</b>	<b>10,004</b>	<b>100.0</b>	<b>58,530</b>	<b>100.0</b>	<b>68,533</b>	<b>100.0</b>	<b>14.6</b>	<b>85.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 262: M2M Program Value Added Impacts by Sources of Impact, Louisiana.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	9,083	61.9	0	0.0	9,083	8.7	100.0	0.0
Indirect*	0	0.0	61,099	68.2	61,099	58.6	0.0	100.0
Induced	5,600	38.1	28,493	31.8	34,093	32.7	16.4	83.6
<b>Total</b>	<b>14,684</b>	<b>100.0</b>	<b>89,592</b>	<b>100.0</b>	<b>104,275</b>	<b>100.0</b>	<b>14.1</b>	<b>85.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 21. Maine

### NASA

**Table 263: NASA Labor Income Impacts by Sources of Impact, Maine.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	368	66.5	0	0.0	368	10.7	100.0	0.0
Indirect*	0	0.0	1,953	67.8	1,953	56.8	0.0	100.0
Induced	186	33.5	929	32.2	1,115	32.5	16.6	83.4
<b>Total</b>	<b>553</b>	<b>100.0</b>	<b>2,882</b>	<b>100.0</b>	<b>3,436</b>	<b>100.0</b>	<b>16.1</b>	<b>83.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 264: NASA Value Added Impacts by Sources of Impact, Maine.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	493	60.8	0	0.0	493	9.7	100.0	0.0
Indirect*	0	0.0	2,672	62.7	2,672	52.7	0.0	100.0
Induced	318	39.2	1,590	37.3	1,908	37.6	16.6	83.4
<b>Total</b>	<b>810</b>	<b>100.0</b>	<b>4,262</b>	<b>100.0</b>	<b>5,072</b>	<b>100.0</b>	<b>16.0</b>	<b>84.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

Because there was not M2M Program specific NASA labor force in Maine in FY 2019, no differentiation is made between employment and procurement components.

## **22. Maryland**

### **NASA**

**Table 265: NASA Labor Income Impacts by Sources of Impact, Maryland.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	560,544	67.8	0	0.0	560,544	18.6	100.0	0.0
Indirect*	0	0.0	1,530,938	69.9	1,530,938	50.8	0.0	100.0
Induced	266,378	32.2	658,218	30.1	924,595	30.7	28.8	71.2
<b>Total</b>	<b>826,922</b>	<b>100.0</b>	<b>2,189,155</b>	<b>100.0</b>	<b>3,016,078</b>	<b>100.0</b>	<b>27.4</b>	<b>72.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 266: NASA Value Added Impacts by Sources of Impact, Maryland.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	644,057	58.0	0	0.0	644,057	15.1	100.0	0.0
Indirect*	0	0.0	2,006,195	63.5	2,006,195	47.0	0.0	100.0
Induced	466,842	42.0	1,152,240	36.5	1,619,082	37.9	28.8	71.2
<b>Total</b>	<b>1,110,899</b>	<b>100.0</b>	<b>3,158,436</b>	<b>100.0</b>	<b>4,269,335</b>	<b>100.0</b>	<b>26.0</b>	<b>74.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.



## APPENDIX

### M2M Program

**Table 267: M2M Program Labor Income Impacts by Sources of Impact, Maryland.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	9,725	65.6	0	0.0	9,725	28.6	100.0	0.0
Indirect*	0	0.0	13,236	68.9	13,236	38.9	0.0	100.0
Induced	5,097	34.4	5,982	31.1	11,079	32.5	46.0	54.0
<b>Total</b>	<b>14,821</b>	<b>100.0</b>	<b>19,218</b>	<b>100.0</b>	<b>34,039</b>	<b>100.0</b>	<b>43.5</b>	<b>56.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 268: M2M Program Value Added Impacts by Sources of Impact, Maryland.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	11,366	56.8	0	0.0	11,366	23.8	100.0	0.0
Indirect*	0	0.0	17,623	63.5	17,623	36.9	0.0	100.0
Induced	8,647	43.2	10,134	36.5	18,781	39.3	46.0	54.0
<b>Total</b>	<b>20,013</b>	<b>100.0</b>	<b>27,757</b>	<b>100.0</b>	<b>47,770</b>	<b>100.0</b>	<b>41.9</b>	<b>58.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 23. Massachusetts

### NASA

**Table 269: NASA Labor Income Impacts by Sources of Impact, Massachusetts.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,695	62.3	0	0.0	1,695	0.7	100.0	0.0
Indirect*	0	0.0	154,397	64.7	154,397	64.0	0.0	100.0
Induced	1,024	37.7	84,193	35.3	85,217	35.3	1.2	98.8
<b>Total</b>	<b>2,719</b>	<b>100.0</b>	<b>238,590</b>	<b>100.0</b>	<b>241,310</b>	<b>100.0</b>	<b>1.1</b>	<b>98.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 270: NASA Value Added Impacts by Sources of Impact, Massachusetts.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,288	58.2	0	0.0	2,288	0.7	100.0	0.0
Indirect*	0	0.0	206,250	60.4	206,250	59.7	0.0	100.0
Induced	1,644	41.8	135,106	39.6	136,750	39.6	1.2	98.8
<b>Total</b>	<b>3,932</b>	<b>100.0</b>	<b>341,356</b>	<b>100.0</b>	<b>345,288</b>	<b>100.0</b>	<b>1.1</b>	<b>98.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 271: M2M Program Labor Income Impacts by Sources of Impact, Massachusetts.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	202	60.1	0	0.0	202	1.9	100.0	0.0
Indirect*	0	0.0	6,584	64.4	6,584	62.4	0.0	100.0
Induced	135	39.9	3,635	35.6	3,769	35.7	3.6	96.4
<b>Total</b>	<b>337</b>	<b>100.0</b>	<b>10,218</b>	<b>100.0</b>	<b>10,555</b>	<b>100.0</b>	<b>3.2</b>	<b>96.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 272: M2M Program Value Added Impacts by Sources of Impact, Massachusetts.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	430	67.2	0	0.0	430	2.8	100.0	0.0
Indirect*	0	0.0	8,830	60.9	8,830	58.3	0.0	100.0
Induced	210	32.8	5,673	39.1	5,883	38.8	3.6	96.4
<b>Total</b>	<b>641</b>	<b>100.0</b>	<b>14,504</b>	<b>100.0</b>	<b>15,144</b>	<b>100.0</b>	<b>4.2</b>	<b>95.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 24. Michigan

#### NASA

**Table 273: NASA Labor Income Impacts by Sources of Impact, Michigan.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,297	64.0	0	0.0	1,297	3.1	100.0	0.0
Indirect*	0	0.0	26,732	66.7	26,732	63.5	0.0	100.0
Induced	728	36.0	13,330	33.3	14,058	33.4	5.2	94.8
<b>Total</b>	<b>2,025</b>	<b>100.0</b>	<b>40,063</b>	<b>100.0</b>	<b>42,087</b>	<b>100.0</b>	<b>4.8</b>	<b>95.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 274: NASA Value Added Impacts by Sources of Impact, Michigan.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,072	63.0	0	0.0	2,072	3.3	100.0	0.0
Indirect*	0	0.0	36,813	62.3	36,813	59.0	0.0	100.0
Induced	1,217	37.0	22,269	37.7	23,485	37.7	5.2	94.8
<b>Total</b>	<b>3,288</b>	<b>100.0</b>	<b>59,081</b>	<b>100.0</b>	<b>62,369</b>	<b>100.0</b>	<b>5.3</b>	<b>94.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 275: M2M Program Labor Income Impacts by Sources of Impact, Michigan.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	212	62.7	0	0.0	212	9.6	100.0	0.0
Indirect*	0	0.0	1,275	68.3	1,275	57.8	0.0	100.0
Induced	126	37.3	593	31.7	719	32.6	17.5	82.5
<b>Total</b>	<b>338</b>	<b>100.0</b>	<b>1,868</b>	<b>100.0</b>	<b>2,206</b>	<b>100.0</b>	<b>15.3</b>	<b>84.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 276: M2M Program Value Added Impacts by Sources of Impact, Michigan.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	469	69.2	0	0.0	469	13.5	100.0	0.0
Indirect*	0	0.0	1,811	64.8	1,811	52.1	0.0	100.0
Induced	209	30.8	984	35.2	1,193	34.4	17.5	82.5
<b>Total</b>	<b>678</b>	<b>100.0</b>	<b>2,794</b>	<b>100.0</b>	<b>3,472</b>	<b>100.0</b>	<b>19.5</b>	<b>80.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 25. Minnesota

### NASA

**Table 277: NASA Labor Income Impacts by Sources of Impact, Minnesota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	491	61.6	0	0.0	491	3.1	100.0	0.0
Indirect*	0	0.0	9,593	64.7	9,593	61.4	0.0	100.0
Induced	306	38.4	5,231	35.3	5,537	35.4	5.5	94.5
<b>Total</b>	<b>797</b>	<b>100.0</b>	<b>14,823</b>	<b>100.0</b>	<b>15,620</b>	<b>100.0</b>	<b>5.1</b>	<b>94.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 278: NASA Value Added Impacts by Sources of Impact, Minnesota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,039	67.4	0	0.0	1,039	4.3	100.0	0.0
Indirect*	0	0.0	13,864	61.7	13,864	57.7	0.0	100.0
Induced	503	32.6	8,605	38.3	9,108	37.9	5.5	94.5
<b>Total</b>	<b>1,542</b>	<b>100.0</b>	<b>22,469</b>	<b>100.0</b>	<b>24,011</b>	<b>100.0</b>	<b>6.4</b>	<b>93.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### M2M Program

**Table 279: M2M Program Labor Income Impacts by Sources of Impact, Minnesota.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	49	60.3	0	0.0	49	7.3	100.0	0.0
Indirect*	0	0.0	439	73.7	439	64.8	0.0	100.0
Induced	32	39.7	156	26.3	189	27.9	17.2	82.8
<b>Total</b>	<b>82</b>	<b>100.0</b>	<b>595</b>	<b>100.0</b>	<b>677</b>	<b>100.0</b>	<b>12.1</b>	<b>87.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 280: M2M Program Value Added Impacts by Sources of Impact, Minnesota.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	104	66.2	0	0.0	104	9.0	100.0	0.0
Indirect*	0	0.0	736	74.3	736	64.2	0.0	100.0
Induced	53	33.8	254	25.7	307	26.8	17.2	82.8
<b>Total</b>	<b>157</b>	<b>100.0</b>	<b>990</b>	<b>100.0</b>	<b>1,147</b>	<b>100.0</b>	<b>13.7</b>	<b>86.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 26. Mississippi

### NASA

**Table 281: NASA Labor Income Impacts by Sources of Impact, Mississippi.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	37,204	75.5	0	0.0	37,204	19.6	100.0	0.0
Indirect*	0	0.0	108,892	77.3	108,892	57.3	0.0	100.0
Induced	12,061	24.5	31,929	22.7	43,990	23.1	27.4	72.6
<b>Total</b>	<b>49,265</b>	<b>100.0</b>	<b>140,821</b>	<b>100.0</b>	<b>190,086</b>	<b>100.0</b>	<b>25.9</b>	<b>74.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 282: NASA Value Added Impacts by Sources of Impact, Mississippi.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	51,199	68.9	0	0.0	51,199	18.0	100.0	0.0
Indirect*	0	0.0	148,922	70.9	148,922	52.4	0.0	100.0
Induced	23,124	31.1	61,183	29.1	84,307	29.6	27.4	72.6
<b>Total</b>	<b>74,322</b>	<b>100.0</b>	<b>210,105</b>	<b>100.0</b>	<b>284,427</b>	<b>100.0</b>	<b>26.1</b>	<b>73.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 283: M2M Program Labor Income Impacts by Sources of Impact, Mississippi.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	6,040	75.0	0	0.0	6,040	21.5	100.0	0.0
Indirect*	0	0.0	15,415	77.2	15,415	55.0	0.0	100.0
Induced	2,018	25.0	4,558	22.8	6,576	23.5	30.7	69.3
<b>Total</b>	<b>8,058</b>	<b>100.0</b>	<b>19,973</b>	<b>100.0</b>	<b>28,031</b>	<b>100.0</b>	<b>28.7</b>	<b>71.3</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 284: M2M Program Value Added Impacts by Sources of Impact, Mississippi.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	8,251	68.0	0	0.0	8,251	20.4	100.0	0.0
Indirect*	0	0.0	19,535	69.1	19,535	48.3	0.0	100.0
Induced	3,876	32.0	8,749	30.9	12,625	31.2	30.7	69.3
<b>Total</b>	<b>12,127</b>	<b>100.0</b>	<b>28,284</b>	<b>100.0</b>	<b>40,411</b>	<b>100.0</b>	<b>30.0</b>	<b>70.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 27. Missouri

#### NASA

**Table 285: NASA Labor Income Impacts by Sources of Impact, Missouri.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	815	65.2	0	0.0	815	1.7	100.0	0.0
Indirect*	0	0.0	30,900	68.2	30,900	66.3	0.0	100.0
Induced	436	34.8	14,423	31.8	14,858	31.9	2.9	97.1
<b>Total</b>	<b>1,250</b>	<b>100.0</b>	<b>45,323</b>	<b>100.0</b>	<b>46,573</b>	<b>100.0</b>	<b>2.7</b>	<b>97.3</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 286: NASA Value Added Impacts by Sources of Impact, Missouri.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,538	67.4	0	0.0	1,538	2.3	100.0	0.0
Indirect*	0	0.0	39,305	61.5	39,305	59.4	0.0	100.0
Induced	743	32.6	24,583	38.5	25,325	38.3	2.9	97.1
<b>Total</b>	<b>2,281</b>	<b>100.0</b>	<b>63,888</b>	<b>100.0</b>	<b>66,169</b>	<b>100.0</b>	<b>3.4</b>	<b>96.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 287: M2M Program Labor Income Impacts by Sources of Impact, Missouri.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	201	64.0	0	0.0	201	1.7	100.0	0.0
Indirect*	0	0.0	7,965	67.7	7,965	65.9	0.0	100.0
Induced	113	36.0	3,800	32.3	3,912	32.4	2.9	97.1
<b>Total</b>	<b>313</b>	<b>100.0</b>	<b>11,765</b>	<b>100.0</b>	<b>12,078</b>	<b>100.0</b>	<b>2.6</b>	<b>97.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 288: M2M Program Value Added Impacts by Sources of Impact, Missouri.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	326	63.1	0	0.0	326	2.0	100.0	0.0
Indirect*	0	0.0	9,198	58.9	9,198	57.0	0.0	100.0
Induced	191	36.9	6,421	41.1	6,612	41.0	2.9	97.1
<b>Total</b>	<b>517</b>	<b>100.0</b>	<b>15,619</b>	<b>100.0</b>	<b>16,136</b>	<b>100.0</b>	<b>3.2</b>	<b>96.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 28. Montana

### NASA

**Table 289: NASA Labor Income Impacts by Sources of Impact, Montana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	10	70.5	0	0.0	10	0.2	100.0	0.0
Indirect*	0	0.0	4,538	71.7	4,538	71.5	0.0	100.0
Induced	4	29.5	1,794	28.3	1,799	28.3	0.2	99.8
<b>Total</b>	<b>15</b>	<b>100.0</b>	<b>6,332</b>	<b>100.0</b>	<b>6,347</b>	<b>100.0</b>	<b>0.2</b>	<b>99.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 290: NASA Value Added Impacts by Sources of Impact, Montana.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	0	0.0	0	0.0	0	0.0	0	0.0
Indirect*	0	0.0	6,214	67.8	6,214	67.7	0.0	100.0
Induced	7	100.0	2,953	32.2	2,960	32.3	0.2	99.8
<b>Total</b>	<b>7</b>	<b>100.0</b>	<b>9,167</b>	<b>100.0</b>	<b>9,174</b>	<b>100.0</b>	<b>0.1</b>	<b>99.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### M2M Program

Because there was not M2M Program specific NASA labor force in Montana in FY 2019, no differentiation is made between employment and procurement components.



## APPENDIX

### 29. Nebraska

#### NASA

**Table 291: NASA Labor Income Impacts by Sources of Impact, Nebraska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	53	69.6	0	0.0	53	1.6	100.0	0.0
Indirect*	0	0.0	2,294	71.8	2,294	70.1	0.0	100.0
Induced	23	30.4	902	28.2	925	28.3	2.5	97.5
<b>Total</b>	<b>76</b>	<b>100.0</b>	<b>3,197</b>	<b>100.0</b>	<b>3,272</b>	<b>100.0</b>	<b>2.3</b>	<b>97.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 292: NASA Value Added Impacts by Sources of Impact, Nebraska.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	211	83.6	0	0.0	211	3.9	100.0	0.0
Indirect*	0	0.0	3,538	68.5	3,538	65.3	0.0	100.0
Induced	41	16.4	1,624	31.5	1,665	30.8	2.5	97.5
<b>Total</b>	<b>253</b>	<b>100.0</b>	<b>5,161</b>	<b>100.0</b>	<b>5,414</b>	<b>100.0</b>	<b>4.7</b>	<b>95.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

Because there was not M2M Program specific NASA labor force in Nebraska in FY 2019, no differentiation is made between employment and procurement components.

### 30. Nevada

#### NASA

**Table 293: NASA Labor Income Impacts by Sources of Impact, Nevada.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	405	71.3	0	0.0	405	2.1	100.0	0.0
Indirect*	0	0.0	13,987	73.1	13,987	71.0	0.0	100.0
Induced	163	28.7	5,155	26.9	5,318	27.0	3.1	96.9
<b>Total</b>	<b>568</b>	<b>100.0</b>	<b>19,142</b>	<b>100.0</b>	<b>19,710</b>	<b>100.0</b>	<b>2.9</b>	<b>97.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

**Table 294: NASA Value Added Impacts by Sources of Impact, Nevada.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	579	64.6	0	0.0	579	1.8	100.0	0.0
Indirect*	0	0.0	20,436	67.1	20,436	65.2	0.0	100.0
Induced	317	35.4	10,020	32.9	10,337	33.0	3.1	96.9
<b>Total</b>	<b>896</b>	<b>100.0</b>	<b>30,456</b>	<b>100.0</b>	<b>31,352</b>	<b>100.0</b>	<b>2.9</b>	<b>97.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

Because there was not M2M Program specific NASA labor force in Nevada in FY 2019, no differentiation is made between employment and procurement components.

### **31. New Hampshire**

#### **NASA**

**Table 295: NASA Labor Income Impacts by Sources of Impact, New Hampshire.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	352	65.9	0	0.0	352	1.6	100.0	0.0
Indirect*	0	0.0	14,399	68.4	14,399	66.7	0.0	100.0
Induced	182	34.1	6,639	31.6	6,821	31.6	2.7	97.3
<b>Total</b>	<b>534</b>	<b>100.0</b>	<b>21,038</b>	<b>100.0</b>	<b>21,572</b>	<b>100.0</b>	<b>2.5</b>	<b>97.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 296: NASA Value Added Impacts by Sources of Impact, New Hampshire.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	617	66.8	0	0.0	617	1.8	100.0	0.0
Indirect*	0	0.0	21,408	65.7	21,408	63.9	0.0	100.0
Induced	306	33.2	11,153	34.3	11,460	34.2	2.7	97.3
<b>Total</b>	<b>924</b>	<b>100.0</b>	<b>32,561</b>	<b>100.0</b>	<b>33,485</b>	<b>100.0</b>	<b>2.8</b>	<b>97.2</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### M2M Program

Because there was not M2M Program specific NASA labor force in New Hampshire in FY 2019, no differentiation is made between employment and procurement components.

### 32. New Jersey

#### NASA

**Table 297: NASA Labor Income Impacts by Sources of Impact, New Jersey.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,804	64.2	0	0.0	1,804	5.4	100.0	0.0
Indirect*	0	0.0	20,730	68.1	20,730	62.3	0.0	100.0
Induced	1,005	35.8	9,725	31.9	10,730	32.3	9.4	90.6
<b>Total</b>	<b>2,809</b>	<b>100.0</b>	<b>30,455</b>	<b>100.0</b>	<b>33,264</b>	<b>100.0</b>	<b>8.4</b>	<b>91.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 298: NASA Value Added Impacts by Sources of Impact, New Jersey.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,954	64.0	0	0.0	2,954	5.9	100.0	0.0
Indirect*	0	0.0	29,410	64.7	29,410	58.7	0.0	100.0
Induced	1,659	36.0	16,046	35.3	17,705	35.4	9.4	90.6
<b>Total</b>	<b>4,613</b>	<b>100.0</b>	<b>45,455</b>	<b>100.0</b>	<b>50,069</b>	<b>100.0</b>	<b>9.2</b>	<b>90.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### M2M Program

**Table 299: M2M Program Labor Income Impacts by Sources of Impact, New Jersey.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	186	62.2	0	0.0	186	8.1	100.0	0.0
Indirect*	0	0.0	1,402	69.9	1,402	60.9	0.0	100.0
Induced	113	37.8	603	30.1	716	31.1	15.8	84.2
<b>Total</b>	<b>299</b>	<b>100.0</b>	<b>2,005</b>	<b>100.0</b>	<b>2,304</b>	<b>100.0</b>	<b>13.0</b>	<b>87.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 300: M2M Program Value Added Impacts by Sources of Impact, New Jersey.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	505	73.6	0	0.0	505	10.7	100.0	0.0
Indirect*	0	0.0	3,054	76.0	3,054	64.9	0.0	100.0
Induced	181	26.4	963	24.0	1,144	24.3	15.8	84.2
<b>Total</b>	<b>686</b>	<b>100.0</b>	<b>4,018</b>	<b>100.0</b>	<b>4,703</b>	<b>100.0</b>	<b>14.6</b>	<b>85.4</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 33. New Mexico

#### NASA

**Table 301: NASA Labor Income Impacts by Sources of Impact, New Mexico.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	12,202	73.4	0	0.0	12,202	17.8	100.0	0.0
Indirect*	0	0.0	39,755	76.3	39,755	57.8	0.0	100.0
Induced	4,425	26.6	12,351	23.7	16,776	24.4	26.4	73.6
<b>Total</b>	<b>16,627</b>	<b>100.0</b>	<b>52,106</b>	<b>100.0</b>	<b>68,733</b>	<b>100.0</b>	<b>24.2</b>	<b>75.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 302: NASA Value Added Impacts by Sources of Impact, New Mexico.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	16,033	65.9	0	0.0	16,033	16.4	100.0	0.0
Indirect*	0	0.0	50,381	68.5	50,381	51.5	0.0	100.0
Induced	8,293	34.1	23,136	31.5	31,428	32.1	26.4	73.6
<b>Total</b>	<b>24,326</b>	<b>100.0</b>	<b>73,517</b>	<b>100.0</b>	<b>97,843</b>	<b>100.0</b>	<b>24.9</b>	<b>75.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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### M2M Program

**Table 303: M2M Program Labor Income Impacts by Sources of Impact, New Mexico.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,004	72.4	0	0.0	1,004	7.9	100.0	0.0
Indirect*	0	0.0	8,757	77.1	8,757	68.7	0.0	100.0
Induced	382	27.6	2,606	22.9	2,988	23.4	12.8	87.2
<b>Total</b>	<b>1,385</b>	<b>100.0</b>	<b>11,364</b>	<b>100.0</b>	<b>12,749</b>	<b>100.0</b>	<b>10.9</b>	<b>89.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 304: M2M Program Value Added Impacts by Sources of Impact, New Mexico.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,451	67.2	0	0.0	1,451	7.8	100.0	0.0
Indirect*	0	0.0	11,559	70.5	11,559	62.3	0.0	100.0
Induced	708	32.8	4,833	29.5	5,541	29.9	12.8	87.2
<b>Total</b>	<b>2,159</b>	<b>100.0</b>	<b>16,392</b>	<b>100.0</b>	<b>18,551</b>	<b>100.0</b>	<b>11.6</b>	<b>88.4</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 34. New York

#### NASA

**Table 305: NASA Labor Income Impacts by Sources of Impact, New York.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	6,892	65.6	0	0.0	6,892	4.0	100.0	0.0
Indirect*	0	0.0	108,935	68.1	108,935	63.9	0.0	100.0
Induced	3,609	34.4	50,994	31.9	54,603	32.0	6.6	93.4
<b>Total</b>	<b>10,501</b>	<b>100.0</b>	<b>159,929</b>	<b>100.0</b>	<b>170,430</b>	<b>100.0</b>	<b>6.2</b>	<b>93.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 306: NASA Value Added Impacts by Sources of Impact, New York.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	9,030	59.4	0	0.0	9,030	3.5	100.0	0.0
Indirect*	0	0.0	153,285	63.7	153,285	59.9	0.0	100.0
Induced	6,182	40.6	87,250	36.3	93,432	36.5	6.6	93.4
<b>Total</b>	<b>15,211</b>	<b>100.0</b>	<b>240,535</b>	<b>100.0</b>	<b>255,746</b>	<b>100.0</b>	<b>5.9</b>	<b>94.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 307: M2M Program Labor Income Impacts by Sources of Impact, New York.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	397	63.4	0	0.0	397	2.2	100.0	0.0
Indirect*	0	0.0	12,016	69.1	12,016	66.7	0.0	100.0
Induced	229	36.6	5,377	30.9	5,606	31.1	4.1	95.9
<b>Total</b>	<b>626</b>	<b>100.0</b>	<b>17,393</b>	<b>100.0</b>	<b>18,019</b>	<b>100.0</b>	<b>3.5</b>	<b>96.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 308: M2M Program Value Added Impacts by Sources of Impact, New York.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	754	66.1	0	0.0	754	3.0	100.0	0.0
Indirect*	0	0.0	15,073	62.4	15,073	59.6	0.0	100.0
Induced	387	33.9	9,067	37.6	9,454	37.4	4.1	95.9
<b>Total</b>	<b>1,140</b>	<b>100.0</b>	<b>24,141</b>	<b>100.0</b>	<b>25,281</b>	<b>100.0</b>	<b>4.5</b>	<b>95.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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### 35. North Carolina

#### NASA

**Table 309: NASA Labor Income Impacts by Sources of Impact, North Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,851	66.7	0	0.0	2,851	10.2	100.0	0.0
Indirect*	0	0.0	16,360	69.2	16,360	58.6	0.0	100.0
Induced	1,421	33.3	7,282	30.8	8,704	31.2	16.3	83.7
<b>Total</b>	<b>4,272</b>	<b>100.0</b>	<b>23,642</b>	<b>100.0</b>	<b>27,915</b>	<b>100.0</b>	<b>15.3</b>	<b>84.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 310: NASA Value Added Impacts by Sources of Impact, North Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	4,207	62.3	0	0.0	4,207	9.2	100.0	0.0
Indirect*	0	0.0	26,108	66.7	26,108	56.8	0.0	100.0
Induced	2,551	37.7	13,062	33.3	15,613	34.0	16.3	83.7
<b>Total</b>	<b>6,758</b>	<b>100.0</b>	<b>39,171</b>	<b>100.0</b>	<b>45,928</b>	<b>100.0</b>	<b>14.7</b>	<b>85.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 311: M2M Program Labor Income Impacts by Sources of Impact, North Carolina.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	381	65.6	0	0.0	381	9.4	100.0	0.0
Indirect*	0	0.0	2,391	68.7	2,391	58.8	0.0	100.0
Induced	200	34.4	1,092	31.3	1,292	31.8	15.5	84.5
<b>Total</b>	<b>582</b>	<b>100.0</b>	<b>3,483</b>	<b>100.0</b>	<b>4,065</b>	<b>100.0</b>	<b>14.3</b>	<b>85.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 312: M2M Program Value Added Impacts by Sources of Impact, North Carolina.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	537	59.6	0	0.0	537	7.8	100.0	0.0
Indirect*	0	0.0	4,009	66.9	4,009	58.2	0.0	100.0
Induced	364	40.4	1,981	33.1	2,345	34.0	15.5	84.5
<b>Total</b>	<b>901</b>	<b>100.0</b>	<b>5,990</b>	<b>100.0</b>	<b>6,891</b>	<b>100.0</b>	<b>13.1</b>	<b>86.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 36. North Dakota

Because there was not NASA employment in North Dakota in FY 2019, no differentiation is made between NASA employment and NASA procurement components.

### 37. Ohio

#### NASA

**Table 313: NASA Labor Income Impacts by Sources of Impact, Ohio.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	238,477	63.7	0	0.0	238,477	29.6	100.0	0.0
Indirect*	0	0.0	288,360	66.9	288,360	35.8	0.0	100.0
Induced	135,634	36.3	142,864	33.1	278,498	34.6	48.7	51.3
<b>Total</b>	<b>374,111</b>	<b>100.0</b>	<b>431,225</b>	<b>100.0</b>	<b>805,335</b>	<b>100.0</b>	<b>46.5</b>	<b>53.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 314: NASA Value Added Impacts by Sources of Impact, Ohio.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	311,800	56.1	0	0.0	311,800	26.2	100.0	0.0
Indirect*	0	0.0	375,087	59.3	375,087	31.6	0.0	100.0
Induced	244,417	43.9	257,138	40.7	501,555	42.2	48.7	51.3
<b>Total</b>	<b>556,218</b>	<b>100.0</b>	<b>632,225</b>	<b>100.0</b>	<b>1,188,443</b>	<b>100.0</b>	<b>46.8</b>	<b>53.2</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.



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### M2M Program

**Table 315: M2M Program Labor Income Impacts by Sources of Impact, Ohio.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	44,317	62.5	0	0.0	44,317	42.5	100.0	0.0
Indirect*	0	0.0	22,121	66.2	22,121	21.2	0.0	100.0
Induced	26,621	37.5	11,311	33.8	37,932	36.3	70.2	29.8
<b>Total</b>	<b>70,937</b>	<b>100.0</b>	<b>33,432</b>	<b>100.0</b>	<b>104,369</b>	<b>100.0</b>	<b>68.0</b>	<b>32.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 316: M2M Program Value Added Impacts by Sources of Impact, Ohio.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	58,350	55.1	0	0.0	58,350	37.2	100.0	0.0
Indirect*	0	0.0	30,724	60.4	30,724	19.6	0.0	100.0
Induced	47,487	44.9	20,163	39.6	67,650	43.2	70.2	29.8
<b>Total</b>	<b>105,836</b>	<b>100.0</b>	<b>50,888</b>	<b>100.0</b>	<b>156,724</b>	<b>100.0</b>	<b>67.5</b>	<b>32.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 38. Oklahoma

#### NASA

**Table 317: NASA Labor Income Impacts by Sources of Impact, Oklahoma.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	587	71.7	0	0.0	587	1.7	100.0	0.0
Indirect*	0	0.0	25,733	74.2	25,733	72.5	0.0	100.0
Induced	232	28.3	8,930	25.8	9,162	25.8	2.5	97.5
<b>Total</b>	<b>819</b>	<b>100.0</b>	<b>34,663</b>	<b>100.0</b>	<b>35,482</b>	<b>100.0</b>	<b>2.3</b>	<b>97.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

**Table 318: NASA Value Added Impacts by Sources of Impact, Oklahoma.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,017	71.5	0	0.0	1,017	2.0	100.0	0.0
Indirect*	0	0.0	33,593	68.3	33,593	66.4	0.0	100.0
Induced	405	28.5	15,565	31.7	15,970	31.6	2.5	97.5
<b>Total</b>	<b>1,421</b>	<b>100.0</b>	<b>49,158</b>	<b>100.0</b>	<b>50,579</b>	<b>100.0</b>	<b>2.8</b>	<b>97.2</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 319: M2M Program Labor Income Impacts by Sources of Impact, Oklahoma.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	144	70.7	0	0.0	144	34.2	100.0	0.0
Indirect*	0	0.0	174	80.0	174	41.3	0.0	100.0
Induced	60	29.3	43	20.0	103	24.5	58.0	42.0
<b>Total</b>	<b>204</b>	<b>100.0</b>	<b>217</b>	<b>100.0</b>	<b>421</b>	<b>100.0</b>	<b>48.4</b>	<b>51.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 320: M2M Program Value Added Impacts by Sources of Impact, Oklahoma.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	207	66.6	0	0.0	207	34.6	100.0	0.0
Indirect*	0	0.0	212	73.9	212	35.5	0.0	100.0
Induced	103	33.4	75	26.1	178	29.9	58.0	42.0
<b>Total</b>	<b>310</b>	<b>100.0</b>	<b>286</b>	<b>100.0</b>	<b>597</b>	<b>100.0</b>	<b>52.0</b>	<b>48.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### 39. Oregon

#### NASA

**Table 321: NASA Labor Income Impacts by Sources of Impact, Oregon.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	777	66.0	0	0.0	777	5.2	100.0	0.0
Indirect*	0	0.0	9,575	69.0	9,575	63.6	0.0	100.0
Induced	401	34.0	4,311	31.0	4,712	31.3	8.5	91.5
<b>Total</b>	<b>1,178</b>	<b>100.0</b>	<b>13,886</b>	<b>100.0</b>	<b>15,064</b>	<b>100.0</b>	<b>7.8</b>	<b>92.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 322: NASA Value Added Impacts by Sources of Impact, Oregon.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,031	60.4	0	0.0	1,031	4.1	100.0	0.0
Indirect*	0	0.0	15,917	68.6	15,917	63.9	0.0	100.0
Induced	677	39.6	7,276	31.4	7,953	31.9	8.5	91.5
<b>Total</b>	<b>1,708</b>	<b>100.0</b>	<b>23,193</b>	<b>100.0</b>	<b>24,901</b>	<b>100.0</b>	<b>6.9</b>	<b>93.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 323: M2M Program Labor Income Impacts by Sources of Impact, Oregon.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	109	64.7	0	0.0	109	12.4	100.0	0.0
Indirect*	0	0.0	509	71.8	509	58.0	0.0	100.0
Induced	60	35.3	200	28.2	259	29.6	23.0	77.0
<b>Total</b>	<b>169</b>	<b>100.0</b>	<b>709</b>	<b>100.0</b>	<b>878</b>	<b>100.0</b>	<b>19.2</b>	<b>80.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 324: M2M Program Value Added Impacts by Sources of Impact, Oregon.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	142	58.7	0	0.0	142	9.8	100.0	0.0
Indirect*	0	0.0	875	72.3	875	60.2	0.0	100.0
Induced	100	41.3	336	27.7	436	30.0	23.0	77.0
<b>Total</b>	<b>243</b>	<b>100.0</b>	<b>1,211</b>	<b>100.0</b>	<b>1,454</b>	<b>100.0</b>	<b>16.7</b>	<b>83.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 40. Pennsylvania

### NASA

**Table 325: NASA Labor Income Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	4,546	62.0	0	0.0	4,546	5.3	100.0	0.0
Indirect*	0	0.0	51,590	65.4	51,590	59.8	0.0	100.0
Induced	2,791	38.0	27,317	34.6	30,108	34.9	9.3	90.7
<b>Total</b>	<b>7,337</b>	<b>100.0</b>	<b>78,907</b>	<b>100.0</b>	<b>86,245</b>	<b>100.0</b>	<b>8.5</b>	<b>91.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 326: NASA Value Added Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	5,776	55.8	0	0.0	5,776	4.5	100.0	0.0
Indirect*	0	0.0	73,478	62.1	73,478	57.1	0.0	100.0
Induced	4,585	44.2	44,847	37.9	49,431	38.4	9.3	90.7
<b>Total</b>	<b>10,361</b>	<b>100.0</b>	<b>118,324</b>	<b>100.0</b>	<b>128,686</b>	<b>100.0</b>	<b>8.1</b>	<b>91.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### M2M Program

**Table 327: M2M Program Labor Income Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	290	59.9	0	0.0	290	0.8	100.0	0.0
Indirect*	0	0.0	22,815	63.9	22,815	63.0	0.0	100.0
Induced	194	40.1	12,903	36.1	13,097	36.2	1.5	98.5
<b>Total</b>	<b>484</b>	<b>100.0</b>	<b>35,718</b>	<b>100.0</b>	<b>36,202</b>	<b>100.0</b>	<b>1.3</b>	<b>98.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 328: M2M Program Value Added Impacts by Sources of Impact, Pennsylvania.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	599	65.7	0	0.0	599	1.1	100.0	0.0
Indirect*	0	0.0	32,149	60.7	32,149	59.7	0.0	100.0
Induced	313	34.3	20,800	39.3	21,113	39.2	1.5	98.5
<b>Total</b>	<b>912</b>	<b>100.0</b>	<b>52,948</b>	<b>100.0</b>	<b>53,860</b>	<b>100.0</b>	<b>1.7</b>	<b>98.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 41. Rhode Island

#### NASA

**Table 329: NASA Labor Income Impacts by Sources of Impact, Rhode Island.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	51	67.5	0	0.0	51	3.2	100.0	0.0
Indirect*	0	0.0	1,047	69.5	1,047	66.1	0.0	100.0
Induced	25	32.5	461	30.5	485	30.6	5.1	94.9
<b>Total</b>	<b>75</b>	<b>100.0</b>	<b>1,508</b>	<b>100.0</b>	<b>1,583</b>	<b>100.0</b>	<b>4.8</b>	<b>95.2</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 330: NASA Value Added Impacts by Sources of Impact, Rhode Island.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	140	76.5	0	0.0	140	5.5	100.0	0.0
Indirect*	0	0.0	1,543	65.6	1,543	60.8	0.0	100.0
Induced	43	23.5	810	34.4	853	33.6	5.1	94.9
<b>Total</b>	<b>183</b>	<b>100.0</b>	<b>2,353</b>	<b>100.0</b>	<b>2,536</b>	<b>100.0</b>	<b>7.2</b>	<b>92.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

Because there was not M2M Program specific NASA labor force in Rhode Island in FY 2019, no differentiation is made between employment and procurement components.

## **42. South Carolina**

### **NASA**

**Table 331: NASA Labor Income Impacts by Sources of Impact, South Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,331	71.0	0	0.0	1,331	10.6	100.0	0.0
Indirect*	0	0.0	7,836	73.2	7,836	62.3	0.0	100.0
Induced	543	29.0	2,867	26.8	3,410	27.1	15.9	84.1
<b>Total</b>	<b>1,874</b>	<b>100.0</b>	<b>10,703</b>	<b>100.0</b>	<b>12,578</b>	<b>100.0</b>	<b>14.9</b>	<b>85.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 332: NASA Value Added Impacts by Sources of Impact, South Carolina.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,826	65.6	0	0.0	1,826	9.7	100.0	0.0
Indirect*	0	0.0	10,979	68.5	10,979	58.4	0.0	100.0
Induced	956	34.4	5,043	31.5	5,999	31.9	15.9	84.1
<b>Total</b>	<b>2,782</b>	<b>100.0</b>	<b>16,023</b>	<b>100.0</b>	<b>18,804</b>	<b>100.0</b>	<b>14.8</b>	<b>85.2</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### M2M Program

**Table 333: M2M Program Labor Income Impacts by Sources of Impact, South Carolina.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	246	68.9	0	0.0	246	30.0	100.0	0.0
Indirect*	0	0.0	326	70.1	326	39.6	0.0	100.0
Induced	111	31.1	139	29.9	250	30.4	44.5	55.5
<b>Total</b>	<b>357</b>	<b>100.0</b>	<b>464</b>	<b>100.0</b>	<b>822</b>	<b>100.0</b>	<b>43.5</b>	<b>56.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 334: M2M Program Value Added Impacts by Sources of Impact, South Carolina.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	374	65.8	0	0.0	374	29.4	100.0	0.0
Indirect*	0	0.0	459	65.4	459	36.1	0.0	100.0
Induced	195	34.2	243	34.6	437	34.4	44.5	55.5
<b>Total</b>	<b>568</b>	<b>100.0</b>	<b>702</b>	<b>100.0</b>	<b>1,270</b>	<b>100.0</b>	<b>44.7</b>	<b>55.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 43. South Dakota

#### NASA

**Table 335: NASA Labor Income Impacts by Sources of Impact, South Dakota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	186	70.3	0	0.0	186	1.5	100.0	0.0
Indirect*	0	0.0	8,487	69.4	8,487	67.9	0.0	100.0
Induced	79	29.7	3,740	30.6	3,818	30.6	2.1	97.9
<b>Total</b>	<b>265</b>	<b>100.0</b>	<b>12,226</b>	<b>100.0</b>	<b>12,491</b>	<b>100.0</b>	<b>2.1</b>	<b>97.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 336: NASA Value Added Impacts by Sources of Impact, South Dakota.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	370	72.9	0	0.0	370	2.0	100.0	0.0
Indirect*	0	0.0	11,450	63.6	11,450	61.9	0.0	100.0
Induced	137	27.1	6,544	36.4	6,682	36.1	2.1	97.9
<b>Total</b>	<b>507</b>	<b>100.0</b>	<b>17,994</b>	<b>100.0</b>	<b>18,501</b>	<b>100.0</b>	<b>2.7</b>	<b>97.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 337: M2M Program Labor Income Impacts by Sources of Impact, South Dakota.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	17	69.4	0	0.0	17	7.4	100.0	0.0
Indirect*	0	0.0	147	72.9	147	65.1	0.0	100.0
Induced	7	30.6	55	27.1	62	27.5	11.8	88.2
<b>Total</b>	<b>24</b>	<b>100.0</b>	<b>202</b>	<b>100.0</b>	<b>225</b>	<b>100.0</b>	<b>10.6</b>	<b>89.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 338: M2M Program Value Added Impacts by Sources of Impact, South Dakota.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	22	62.9	0	0.0	22	6.3	100.0	0.0
Indirect*	0	0.0	212	69.0	212	62.1	0.0	100.0
Induced	13	37.1	95	31.0	108	31.6	11.9	88.1
<b>Total</b>	<b>34</b>	<b>100.0</b>	<b>307</b>	<b>100.0</b>	<b>341</b>	<b>100.0</b>	<b>10.1</b>	<b>89.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.



## APPENDIX

### 44. Tennessee

#### NASA

**Table 339: NASA Labor Income Impacts by Sources of Impact, Tennessee.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	8,573	64.7	0	0.0	8,573	17.0	100.0	0.0
Indirect*	0	0.0	25,133	67.6	25,133	49.8	0.0	100.0
Induced	4,681	35.3	12,049	32.4	16,731	33.2	28.0	72.0
<b>Total</b>	<b>13,254</b>	<b>100.0</b>	<b>37,182</b>	<b>100.0</b>	<b>50,436</b>	<b>100.0</b>	<b>26.3</b>	<b>73.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 340: NASA Value Added Impacts by Sources of Impact, Tennessee.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	10,743	58.4	0	0.0	10,743	16.5	100.0	0.0
Indirect*	0	0.0	26,999	57.9	26,999	41.5	0.0	100.0
Induced	7,638	41.6	19,651	42.1	27,289	42.0	28.0	72.0
<b>Total</b>	<b>18,382</b>	<b>100.0</b>	<b>46,650</b>	<b>100.0</b>	<b>65,031</b>	<b>100.0</b>	<b>28.3</b>	<b>71.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 341: M2M Program Labor Income Impacts by Sources of Impact, Tennessee.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	3,150	63.6	0	0.0	3,150	54.9	100.0	0.0
Indirect*	0	0.0	528	67.6	528	9.2	0.0	100.0
Induced	1,806	36.4	253	32.4	2,059	35.9	87.7	12.3
<b>Total</b>	<b>4,956</b>	<b>100.0</b>	<b>781</b>	<b>100.0</b>	<b>5,737</b>	<b>100.0</b>	<b>86.4</b>	<b>13.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 342: M2M Program Value Added Impacts by Sources of Impact, Tennessee.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	3,787	56.4	0	0.0	3,787	48.3	100.0	0.0
Indirect*	0	0.0	721	63.7	721	9.2	0.0	100.0
Induced	2,929	43.6	410	36.3	3,339	42.6	87.7	12.3
<b>Total</b>	<b>6,716</b>	<b>100.0</b>	<b>1,131</b>	<b>100.0</b>	<b>7,847</b>	<b>100.0</b>	<b>85.6</b>	<b>14.4</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 45. Texas

#### NASA

**Table 343: NASA Labor Income Impacts by Sources of Impact, Texas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	511,093	63.4	0	0.0	511,093	17.2	100.0	0.0
Indirect*	0	0.0	1,443,458	66.5	1,443,458	48.5	0.0	100.0
Induced	295,433	36.6	726,743	33.5	1,022,177	34.3	28.9	71.1
<b>Total</b>	<b>806,526</b>	<b>100.0</b>	<b>2,170,201</b>	<b>100.0</b>	<b>2,976,728</b>	<b>100.0</b>	<b>27.1</b>	<b>72.9</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 344: NASA Value Added Impacts by Sources of Impact, Texas.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	587,522	53.4	0	0.0	587,522	12.8	100.0	0.0
Indirect*	0	0.0	2,221,403	63.8	2,221,403	48.5	0.0	100.0
Induced	513,233	46.6	1,261,677	36.2	1,774,910	38.7	28.9	71.1
<b>Total</b>	<b>1,100,755</b>	<b>100.0</b>	<b>3,483,080</b>	<b>100.0</b>	<b>4,583,835</b>	<b>100.0</b>	<b>24.0</b>	<b>76.0</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## APPENDIX

### M2M Program

**Table 345: M2M Program Labor Income Impacts by Sources of Impact, Texas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	140,430	62.3	0	0.0	140,430	17.2	100.0	0.0
Indirect*	0	0.0	389,404	65.7	389,404	47.6	0.0	100.0
Induced	85,076	37.7	203,575	34.3	288,651	35.3	29.5	70.5
<b>Total</b>	<b>225,507</b>	<b>100.0</b>	<b>592,979</b>	<b>100.0</b>	<b>818,486</b>	<b>100.0</b>	<b>27.6</b>	<b>72.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 346: M2M Program Value Added Impacts by Sources of Impact, Texas.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	163,887	52.7	0	0.0	163,887	13.0	100.0	0.0
Indirect*	0	0.0	596,500	62.9	596,500	47.4	0.0	100.0
Induced	146,918	47.3	351,364	37.1	498,282	39.6	29.5	70.5
<b>Total</b>	<b>310,805</b>	<b>100.0</b>	<b>947,864</b>	<b>100.0</b>	<b>1,258,669</b>	<b>100.0</b>	<b>24.7</b>	<b>75.3</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 46. Utah

#### NASA

**Table 347: NASA Labor Income Impacts by Sources of Impact, Utah.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	908	67.2	0	0.0	908	0.3	100.0	0.0
Indirect*	0	0.0	194,942	69.7	194,942	69.4	0.0	100.0
Induced	443	32.8	84,632	30.3	85,076	30.3	0.5	99.5
<b>Total</b>	<b>1,352</b>	<b>100.0</b>	<b>279,574</b>	<b>100.0</b>	<b>280,926</b>	<b>100.0</b>	<b>0.5</b>	<b>99.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 348: NASA Value Added Impacts by Sources of Impact, Utah.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,237	59.9	0	0.0	1,237	0.3	100.0	0.0
Indirect*	0	0.0	292,161	64.9	292,161	64.6	0.0	100.0
Induced	827	40.1	157,734	35.1	158,560	35.1	0.5	99.5
<b>Total</b>	<b>2,063</b>	<b>100.0</b>	<b>449,894</b>	<b>100.0</b>	<b>451,958</b>	<b>100.0</b>	<b>0.5</b>	<b>99.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 349: M2M Program Labor Income Impacts by Sources of Impact, Utah.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	850	66.0	0	0.0	850	0.3	100.0	0.0
Indirect*	0	0.0	184,370	69.1	184,370	68.7	0.0	100.0
Induced	437	34.0	82,580	30.9	83,017	30.9	0.5	99.5
<b>Total</b>	<b>1,287</b>	<b>100.0</b>	<b>266,950</b>	<b>100.0</b>	<b>268,237</b>	<b>100.0</b>	<b>0.5</b>	<b>99.5</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 350: M2M Program Value Added Impacts by Sources of Impact, Utah.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	1,033	56.2	0	0.0	1,033	0.2	100.0	0.0
Indirect*	0	0.0	279,304	64.7	279,304	64.4	0.0	100.0
Induced	807	43.8	152,360	35.3	153,166	35.3	0.5	99.5
<b>Total</b>	<b>1,840</b>	<b>100.0</b>	<b>431,663</b>	<b>100.0</b>	<b>433,503</b>	<b>100.0</b>	<b>0.4</b>	<b>99.6</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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### 47. Vermont

#### NASA

**Table 351: NASA Labor Income Impacts by Sources of Impact, Vermont.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	212	68.2	0	0.0	212	10.9	100.0	0.0
Indirect*	0	0.0	1,126	69.0	1,126	58.0	0.0	100.0
Induced	99	31.8	505	31.0	604	31.1	16.4	83.6
<b>Total</b>	<b>311</b>	<b>100.0</b>	<b>1,631</b>	<b>100.0</b>	<b>1,942</b>	<b>100.0</b>	<b>16.0</b>	<b>84.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 352: NASA Value Added Impacts by Sources of Impact, Vermont.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	247	59.5	0	0.0	247	8.6	100.0	0.0
Indirect*	0	0.0	1,591	65.0	1,591	55.5	0.0	100.0
Induced	168	40.5	858	35.0	1,026	35.8	16.4	83.6
<b>Total</b>	<b>415</b>	<b>100.0</b>	<b>2,449</b>	<b>100.0</b>	<b>2,864</b>	<b>100.0</b>	<b>14.5</b>	<b>85.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

Because there was not M2M Program specific NASA labor force in Vermont in FY 2019, no differentiation is made between employment and procurement components.

### 48. Virginia

#### NASA

**Table 353: NASA Labor Income Impacts by Sources of Impact, Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	412,227	69.5	0	0.0	412,227	20.3	100.0	0.0
Indirect*	0	0.0	1,029,265	71.6	1,029,265	50.7	0.0	100.0
Induced	180,670	30.5	409,116	28.4	589,787	29.0	30.6	69.4
<b>Total</b>	<b>592,897</b>	<b>100.0</b>	<b>1,438,382</b>	<b>100.0</b>	<b>2,031,279</b>	<b>100.0</b>	<b>29.2</b>	<b>70.8</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 354: NASA Value Added Impacts by Sources of Impact, Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	501,871	60.3	0	0.0	501,871	16.6	100.0	0.0
Indirect*	0	0.0	1,441,702	65.8	1,441,702	47.7	0.0	100.0
Induced	330,791	39.7	748,246	34.2	1,079,037	35.7	30.7	69.3
<b>Total</b>	<b>832,662</b>	<b>100.0</b>	<b>2,189,948</b>	<b>100.0</b>	<b>3,022,610</b>	<b>100.0</b>	<b>27.5</b>	<b>72.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### **M2M Program**

**Table 355: M2M Program Labor Income Impacts by Sources of Impact, Virginia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	33,331	68.3	0	0.0	33,331	31.0	100.0	0.0
Indirect*	0	0.0	42,271	72.0	42,271	39.3	0.0	100.0
Induced	15,489	31.7	16,412	28.0	31,901	29.7	48.6	51.4
<b>Total</b>	<b>48,820</b>	<b>100.0</b>	<b>58,682</b>	<b>100.0</b>	<b>107,502</b>	<b>100.0</b>	<b>45.4</b>	<b>54.6</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 356: M2M Program Value Added Impacts by Sources of Impact, Virginia.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	43,932	60.8	0	0.0	43,932	27.0	100.0	0.0
Indirect*	0	0.0	60,239	66.8	60,239	37.1	0.0	100.0
Induced	28,331	39.2	29,998	33.2	58,329	35.9	48.6	51.4
<b>Total</b>	<b>72,263</b>	<b>100.0</b>	<b>90,236</b>	<b>100.0</b>	<b>162,499</b>	<b>100.0</b>	<b>44.5</b>	<b>55.5</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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### 49. Washington

#### NASA

**Table 357: NASA Labor Income Impacts by Sources of Impact, Washington.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,237	67.6	0	0.0	1,237	1.6	100.0	0.0
Indirect*	0	0.0	53,074	69.6	53,074	68.0	0.0	100.0
Induced	593	32.4	23,155	30.4	23,748	30.4	2.5	97.5
<b>Total</b>	<b>1,830</b>	<b>100.0</b>	<b>76,229</b>	<b>100.0</b>	<b>78,059</b>	<b>100.0</b>	<b>2.3</b>	<b>97.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 358: NASA Value Added Impacts by Sources of Impact, Washington.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,383	56.3	0	0.0	1,383	1.0	100.0	0.0
Indirect*	0	0.0	88,114	67.8	88,114	66.5	0.0	100.0
Induced	1,072	43.7	41,857	32.2	42,929	32.4	2.5	97.5
<b>Total</b>	<b>2,455</b>	<b>100.0</b>	<b>129,971</b>	<b>100.0</b>	<b>132,427</b>	<b>100.0</b>	<b>1.9</b>	<b>98.1</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 359: M2M Program Labor Income Impacts by Sources of Impact, Washington.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	391	66.2	0	0.0	391	5.2	100.0	0.0
Indirect*	0	0.0	4,846	70.4	4,846	64.9	0.0	100.0
Induced	200	33.8	2,033	29.6	2,233	29.9	8.9	91.1
<b>Total</b>	<b>591</b>	<b>100.0</b>	<b>6,880</b>	<b>100.0</b>	<b>7,470</b>	<b>100.0</b>	<b>7.9</b>	<b>92.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 360: M2M Program Value Added Impacts by Sources of Impact, Washington.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	403	52.9	0	0.0	403	3.2	100.0	0.0
Indirect*	0	0.0	8,105	69.0	8,105	64.8	0.0	100.0
Induced	359	47.1	3,650	31.0	4,009	32.0	9.0	91.0
<b>Total</b>	<b>762</b>	<b>100.0</b>	<b>11,755</b>	<b>100.0</b>	<b>12,517</b>	<b>100.0</b>	<b>6.1</b>	<b>93.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### 50. West Virginia

#### NASA

**Table 361: NASA Labor Income Impacts by Sources of Impact, West Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	8,403	72.9	0	0.0	8,403	17.5	100.0	0.0
Indirect*	0	0.0	27,273	74.5	27,273	56.6	0.0	100.0
Induced	3,126	27.1	9,342	25.5	12,469	25.9	25.1	74.9
<b>Total</b>	<b>11,529</b>	<b>100.0</b>	<b>36,616</b>	<b>100.0</b>	<b>48,144</b>	<b>100.0</b>	<b>23.9</b>	<b>76.1</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 362: NASA Value Added Impacts by Sources of Impact, West Virginia.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	10,876	67.4	0	0.0	10,876	15.6	100.0	0.0
Indirect*	0	0.0	37,974	70.7	37,974	54.3	0.0	100.0
Induced	5,272	32.6	15,750	29.3	21,022	30.1	25.1	74.9
<b>Total</b>	<b>16,148</b>	<b>100.0</b>	<b>53,724</b>	<b>100.0</b>	<b>69,872</b>	<b>100.0</b>	<b>23.1</b>	<b>76.9</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

Because there was not M2M Program specific NASA labor force in West Virginia in FY 2019, no differentiation is made between employment and procurement components.



## APPENDIX

### 51. Wisconsin

#### NASA

**Table 363: NASA Labor Income Impacts by Sources of Impact, Wisconsin.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	1,155	85.2	0	0.0	1,155	7.1	100.0	0.0
Indirect*	0	0.0	10,196	68.2	10,196	62.6	0.0	100.0
Induced	201	14.8	4,748	31.8	4,949	30.4	4.1	95.9
<b>Total</b>	<b>1,356</b>	<b>100.0</b>	<b>14,944</b>	<b>100.0</b>	<b>16,300</b>	<b>100.0</b>	<b>8.3</b>	<b>91.7</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 364: NASA Value Added Impacts by Sources of Impact, Wisconsin.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	2,206	86.5	0	0.0	2,206	8.8	100.0	0.0
Indirect*	0	0.0	14,310	63.8	14,310	57.3	0.0	100.0
Induced	344	13.5	8,132	36.2	8,476	33.9	4.1	95.9
<b>Total</b>	<b>2,550</b>	<b>100.0</b>	<b>22,442</b>	<b>100.0</b>	<b>24,992</b>	<b>100.0</b>	<b>10.2</b>	<b>89.8</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

#### M2M Program

**Table 365: M2M Program Labor Income Impacts by Sources of Impact, Wisconsin.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	230	64.0	0	0.0	230	9.9	100.0	0.0
Indirect*	0	0.0	1,377	70.1	1,377	59.2	0.0	100.0
Induced	129	36.0	589	29.9	718	30.9	18.0	82.0
<b>Total</b>	<b>295</b>	<b>100.0</b>	<b>1,342</b>	<b>100.0</b>	<b>1,637</b>	<b>100.0</b>	<b>18.0</b>	<b>82.0</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

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**Table 366: M2M Program Value Added Impacts by Sources of Impact, Wisconsin.**

Type of Impact	M2M Employment		M2M Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	M2M Emp.	M2M Proc.
Direct*	332	60.2	0	0.0	332	15.4	100.0	0.0
Indirect*	0	0.0	601	37.5	601	27.9	0.0	100.0
Induced	220	39.8	1,001	62.5	1,221	56.7	18.0	82.0
<b>Total</b>	<b>552</b>	<b>100.0</b>	<b>1,601</b>	<b>100.0</b>	<b>2,153</b>	<b>100.0</b>	<b>25.6</b>	<b>74.4</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

## 52. Wyoming

### NASA

**Table 367: NASA Labor Income Impacts by Sources of Impact, Wyoming.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Labor income (\$ 000)	%	Labor income (\$ 000)	%	Labor income (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	378	65.0	0	0.0	378	14.0	100.0	0.0
Indirect*	0	0.0	1,750	82.7	1,750	64.9	0.0	100.0
Induced	204	35.0	365	17.3	569	21.1	35.8	64.2
<b>Total</b>	<b>582</b>	<b>100.0</b>	<b>2,116</b>	<b>100.0</b>	<b>2,698</b>	<b>100.0</b>	<b>21.6</b>	<b>78.4</b>

\* Note that direct labor income impact is associated with NASA labor force while indirect labor income impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

**Table 368: NASA Value Added Impacts by Sources of Impact, Wyoming.**

Type of Impact	NASA Employment		NASA Procurement		Total		Shares (%)	
	Value added (\$ 000)	%	Value added (\$ 000)	%	Value added (\$ 000)	%	NASA Emp.	NASA Proc.
Direct*	453	53.0	0	0.0	453	11.8	100.0	0.0
Indirect*	0	0.0	2,255	75.8	2,255	58.9	0.0	100.0
Induced	401	47.0	719	24.2	1,120	29.3	35.8	64.2
<b>Total</b>	<b>854</b>	<b>100.0</b>	<b>2,974</b>	<b>100.0</b>	<b>3,829</b>	<b>100.0</b>	<b>22.3</b>	<b>77.7</b>

\* Note that direct value added impact is associated with NASA labor force while indirect value added impact is associated with NASA contractor employees and employees in the supply chain of those contractors.

### M2M Program

Because there was not M2M Program specific procurement in Wyoming in FY 2019, no differentiation is made between employment and procurement components.

## APPENDIX

### D. DETAILED IMPACTS

In this section, we present detailed industry level impacts, organized by four impact categories: employment, labor income, value added, and economic output. For each region, first, detailed NASA impacts are presented, and then detailed impacts for the M2M Program are provided.

#### 1. United States

**Table 369: Detailed NASA Impacts by Types of Impact, U.S.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>312,630</i>	<i>23,652,517,732</i>	<i>35,324,421,633</i>	<i>64,342,686,604</i>
Oilseed farming	51	5,209,449	10,920,726	25,172,416
Grain farming	219	8,470,133	16,478,900	54,885,631
Vegetable and melon farming	131	5,371,977	8,255,596	18,171,182
Fruit farming	139	5,329,988	9,245,212	15,834,929
Tree nut farming	84	3,606,223	3,814,832	5,704,994
Greenhouse, nursery, and floriculture production	150	5,337,211	7,176,311	15,144,687
Tobacco farming	7	165,748	214,676	471,591
Cotton farming	19	726,487	989,069	2,167,408
Sugarcane and sugar beet farming	14	715,307	1,040,864	2,346,462
All other crop farming	480	4,273,113	5,173,062	11,484,370
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	490	7,579,248	15,760,006	60,282,736
Dairy cattle and milk production	76	3,181,079	5,499,498	32,803,110
Poultry and egg production	94	2,405,159	3,400,269	44,435,587
Animal production, except cattle and poultry and eggs	315	9,950,547	18,944,241	33,505,747
Forestry, forest products, and timber tract production	18	1,185,480	1,266,595	1,623,590
Commercial logging	81	4,148,114	4,274,991	7,001,782
Commercial fishing	44	1,341,362	2,769,951	3,693,591
Commercial hunting and trapping	19	453,906	987,628	1,316,957
Support activities for agriculture and forestry	636	25,342,708	23,876,340	28,669,523
Oil and gas extraction	520	36,770,826	124,228,715	242,347,677
Coal mining	46	4,513,223	12,104,321	20,502,931
Copper, nickel, lead, and zinc mining	20	1,960,303	12,209,392	22,372,163
Iron ore mining	3	304,394	658,098	1,316,777
Gold ore mining	13	1,274,847	2,682,889	5,364,878

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Silver ore mining	2	198,309	415,712	831,206
Uranium-radium-vanadium ore mining	9	548,635	1,090,482	2,176,891
Other metal ore mining	2	183,507	392,957	786,000
Stone mining and quarrying	32	1,869,099	5,002,034	8,851,849
Sand and gravel mining	32	1,816,456	3,080,841	5,700,784
Other clay, ceramic, refractory minerals mining	3	188,432	333,016	617,022
Potash, soda, and borate mineral mining	1	147,751	227,725	420,621
Phosphate rock mining	1	70,439	116,427	215,398
Other chemical and fertilizer mineral mining	2	117,195	198,796	367,964
Other nonmetallic minerals	7	384,728	658,121	1,218,021
Drilling oil and gas wells	0	14,302	28,379	64,448
Support activities for oil and gas operations	5	396,300	628,731	1,407,622
Metal mining services	21	1,521,977	4,898,950	9,614,748
Other nonmetallic minerals services	1	65,679	204,713	405,154
Electric power generation - Hydroelectric	21	2,461,021	6,036,079	11,040,064
Electric power generation - Fossil fuel	148	22,855,051	89,749,773	212,863,037
Electric power generation - Nuclear	66	13,024,008	32,568,797	66,618,996
Electric power generation - Solar	19	1,633,537	3,251,626	5,766,948
Electric power generation - Wind	21	2,158,393	12,149,892	23,804,361
Electric power generation - Geothermal	3	333,195	796,124	1,451,960
Electric power generation - Biomass	12	1,008,545	2,243,458	5,413,771
Electric power generation - All other	6	685,115	425,814	1,101,902
Electric power transmission and distribution	410	59,543,175	229,826,697	551,529,637
Natural gas distribution	137	19,522,595	55,699,151	112,238,899
Water, sewage and other systems	111	8,855,748	16,870,379	29,525,773
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0

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Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	5,103	328,555,706	191,371,376	424,511,971
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1,178	76,215,168	102,927,613	237,910,854
Maintenance and repair construction of residential structures	493	30,118,269	44,799,572	103,761,659
Maintenance and repair construction of highways, streets, bridges, and tunnels	1	93,292	63,187	142,257
Dog and cat food manufacturing	28	2,400,367	9,614,575	39,738,364
Other animal food manufacturing	51	3,879,164	7,304,161	52,628,548
Flour milling	14	1,168,420	2,494,988	16,019,404
Rice milling	4	264,258	456,700	2,875,138
Malt manufacturing	1	101,106	269,232	1,756,858
Wet corn milling	13	1,550,827	3,951,897	24,663,486
Soybean and other oilseed processing	8	630,865	3,436,149	36,668,909
Fats and oils refining and blending	7	542,810	1,125,650	10,612,764
Breakfast cereal manufacturing	12	1,135,858	2,895,434	10,863,213
Beet sugar manufacturing	6	449,003	905,664	4,079,742
Sugar cane mills and refining	6	551,357	1,326,875	6,062,170
Nonchocolate confectionery manufacturing	22	1,432,256	2,097,387	9,130,563
Chocolate and confectionery manufacturing from cacao beans	9	694,200	1,429,467	6,449,577
Confectionery manufacturing from purchased chocolate	34	1,892,772	2,764,589	12,029,430
Frozen fruits, juices and vegetables manufacturing	29	1,758,900	3,081,523	12,954,889

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Frozen specialties manufacturing	64	3,807,172	5,855,660	24,264,564
Canned fruits and vegetables manufacturing	52	3,561,764	6,411,006	26,766,639
Canned specialties	10	763,796	2,011,564	8,665,107
Dehydrated food products manufacturing	11	694,556	1,212,470	5,046,288
Cheese manufacturing	53	3,666,540	5,370,037	47,910,594
Dry, condensed, and evaporated dairy product manufacturing	15	1,368,626	3,972,418	20,871,472
Fluid milk manufacturing	48	3,834,810	6,415,483	35,614,607
Creamery butter manufacturing	2	180,419	764,741	4,523,282
Ice cream and frozen dessert manufacturing	18	1,102,428	1,754,676	7,827,999
Frozen cakes and other pastries manufacturing	171	5,915,204	8,727,985	15,555,806
Poultry processing	231	10,432,035	14,205,483	69,956,104
Animal, except poultry, slaughtering	126	7,418,963	10,934,975	87,146,934
Meat processed from carcasses	120	7,249,522	8,218,956	62,173,457
Rendering and meat byproduct processing	11	829,635	891,296	4,240,583
Seafood product preparation and packaging	33	2,042,928	2,569,891	13,481,398
Bread and bakery product, except frozen, manufacturing	403	17,360,065	23,501,600	57,151,276
Cookie and cracker manufacturing	36	2,427,742	3,617,123	13,010,315
Dry pasta, mixes, and dough manufacturing	22	1,453,103	3,432,536	12,908,219
Tortilla manufacturing	20	1,066,644	1,301,206	4,551,290
Roasted nuts and peanut butter manufacturing	28	1,936,370	4,101,777	13,427,175
Other snack food manufacturing	56	3,899,823	8,360,028	29,875,322
Coffee and tea manufacturing	21	1,433,076	2,675,210	13,979,481
Flavoring syrup and concentrate manufacturing	15	2,906,553	19,858,744	49,413,485
Mayonnaise, dressing, and sauce manufacturing	17	1,195,620	2,236,174	9,650,280
Spice and extract manufacturing	24	2,089,657	3,289,060	13,938,589
All other food manufacturing	91	5,229,076	7,047,603	32,289,068
Bottled and canned soft drinks & water	97	7,721,950	16,584,524	74,065,809
Manufactured ice	7	436,815	245,947	1,061,919
Breweries	94	6,663,611	18,315,318	47,014,584
Wineries	84	6,122,833	10,113,723	30,479,423

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Distilleries	19	1,885,904	11,151,604	22,719,178
Tobacco product manufacturing	11	1,187,752	27,509,992	41,892,902
Fiber, yarn, and thread mills	17	828,563	1,226,901	5,683,223
Broadwoven fabric mills	18	994,686	1,425,832	4,478,427
Narrow fabric mills and schiffli machine embroidery	3	175,841	199,211	598,580
Nonwoven fabric mills	9	681,739	1,364,400	4,483,428
Knit fabric mills	3	171,898	237,918	742,900
Textile and fabric finishing mills	21	1,112,596	1,477,608	5,419,231
Fabric coating mills	5	386,018	523,852	1,928,922
Carpet and rug mills	19	1,074,190	1,895,591	6,654,734
Curtain and linen mills	19	875,716	1,322,519	4,136,739
Textile bag and canvas mills	25	1,274,175	1,628,064	4,371,665
Rope, cordage, twine, tire cord and tire fabric mills	7	439,637	740,568	2,078,394
Other textile product mills	30	1,331,878	1,683,536	4,510,701
Hosiery and sock mills	11	365,340	458,207	1,023,920
Other apparel knitting mills	7	253,563	339,718	780,275
Cut and sew apparel contractors	61	1,814,670	1,926,106	3,808,957
Mens and boys cut and sew apparel manufacturing	30	1,390,340	1,686,265	4,389,772
Womens and girls cut and sew apparel manufacturing	30	1,593,581	2,182,609	6,750,840
Other cut and sew apparel manufacturing	20	772,165	955,234	2,423,596
Apparel accessories and other apparel manufacturing	19	680,006	843,930	2,127,727
Leather and hide tanning and finishing	2	69,476	101,851	546,568
Footwear manufacturing	13	642,496	715,732	2,252,288
Other leather and allied product manufacturing	9	339,229	355,850	1,037,539
Sawmills	68	3,941,253	5,884,460	19,537,370
Wood preservation	8	492,828	1,558,541	4,962,002
Veneer and plywood manufacturing	18	1,145,507	1,773,731	5,195,276
Engineered wood member and truss manufacturing	25	1,391,201	1,916,546	5,664,739
Reconstituted wood product manufacturing	9	691,637	1,795,256	5,098,054
Wood windows and door manufacturing	63	3,870,869	5,465,406	14,867,233
Cut stock, resawing lumber, and planing	12	583,443	1,048,941	2,802,045
Other millwork, including flooring	42	2,188,575	3,192,909	8,657,801

## APPENDIX

Wood container and pallet manufacturing	50	2,370,818	2,853,003	7,730,825
Manufactured home (mobile home) manufacturing	1	47,653	83,919	220,733
Prefabricated wood building manufacturing	11	604,542	696,713	1,895,875
All other miscellaneous wood product manufacturing	30	1,519,957	1,965,454	5,287,757
Pulp mills	2	197,283	328,648	1,231,407
Paper mills	53	5,620,013	12,828,005	42,859,918
Paperboard mills	32	3,511,120	8,053,825	28,351,680
Paperboard container manufacturing	142	11,583,735	16,663,252	69,498,114
Paper bag and coated and treated paper manufacturing	50	4,120,806	6,757,808	23,650,126
Stationery product manufacturing	10	723,924	992,914	4,004,272
Sanitary paper product manufacturing	26	2,446,819	6,857,013	21,069,300
All other converted paper product manufacturing	14	1,032,983	1,452,428	4,579,282
Printing	629	34,695,071	49,160,461	103,685,346
Support activities for printing	31	1,860,374	2,622,156	4,184,464
Petroleum refineries	69	15,578,981	131,369,114	583,959,909
Asphalt paving mixture and block manufacturing	7	754,228	1,389,504	5,568,657
Asphalt shingle and coating materials manufacturing	5	638,297	2,472,859	5,434,759
Petroleum lubricating oil and grease manufacturing	62	7,682,980	32,278,280	79,653,356
All other petroleum and coal products manufacturing	5	522,608	1,747,787	4,366,471
Petrochemical manufacturing	20	3,526,599	29,615,936	121,193,143
Industrial gas manufacturing	26	3,951,120	10,222,444	28,936,168
Synthetic dye and pigment manufacturing	8	918,160	2,094,627	6,189,601
Other basic inorganic chemical manufacturing	23	3,101,177	6,901,681	19,535,957
Other basic organic chemical manufacturing	41	5,385,986	11,149,996	63,080,441
Plastics material and resin manufacturing	37	5,086,081	8,635,813	49,649,647
Synthetic rubber manufacturing	5	585,570	952,359	4,400,828
Artificial and synthetic fibers and filaments manufacturing	17	1,937,388	2,942,151	13,341,136



## APPENDIX

Nitrogenous fertilizer manufacturing	6	819,384	1,974,888	6,422,079
Phosphatic fertilizer manufacturing	4	498,412	1,334,572	4,412,944
Fertilizer mixing	6	687,016	1,275,386	3,939,990
Pesticide and other agricultural chemical manufacturing	10	1,313,714	4,481,481	16,934,730
Medicinal and botanical manufacturing	25	3,868,704	7,199,276	16,345,361
Pharmaceutical preparation manufacturing	159	25,905,459	111,383,464	246,262,539
In-vitro diagnostic substance manufacturing	14	2,035,141	3,452,229	7,220,004
Biological product (except diagnostic) manufacturing	16	2,284,973	6,183,630	11,736,696
Paint and coating manufacturing	30	3,379,703	6,687,987	23,634,877
Adhesive manufacturing	16	1,913,331	3,234,812	10,981,324
Soap and other detergent manufacturing	30	4,096,877	12,934,738	38,009,404
Polish and other sanitation good manufacturing	31	3,972,680	7,895,614	21,541,176
Surface active agent manufacturing	3	333,708	924,635	2,671,149
Toilet preparation manufacturing	54	5,589,314	18,571,221	46,723,109
Printing ink manufacturing	9	969,217	1,040,540	4,051,396
Explosives manufacturing	2	262,013	306,724	963,957
Custom compounding of purchased resins	19	1,744,785	3,035,154	10,817,009
Photographic film and chemical manufacturing	19	1,839,478	3,694,492	13,596,785
Other miscellaneous chemical product manufacturing	33	3,861,348	5,877,985	20,210,592
Plastics packaging materials and unlaminated film and sheet manufacturing	69	5,161,375	9,093,347	31,640,433
Unlaminated plastics profile shape manufacturing	26	1,878,215	4,262,272	11,811,430
Plastics pipe and pipe fitting manufacturing	27	1,878,898	4,925,776	13,680,573
Laminated plastics plate, sheet (except packaging), and shape manufacturing	16	1,142,478	2,236,851	5,541,843
Polystyrene foam product manufacturing	34	2,123,927	3,741,737	12,148,276

## APPENDIX

Urethane and other foam product (except polystyrene) manufacturing	37	2,327,842	3,941,968	13,808,680
Plastics bottle manufacturing	34	2,372,027	4,091,586	14,931,329
Other plastics product manufacturing	295	19,118,362	29,618,426	85,330,071
Tire manufacturing	41	3,319,180	4,854,453	16,763,863
Rubber and plastics hoses and belting manufacturing	12	798,843	1,340,409	3,578,503
Other rubber product manufacturing	80	5,465,833	8,416,256	26,495,555
Pottery, ceramics, and plumbing fixture manufacturing	12	717,724	937,533	2,038,951
Brick, tile, and other structural clay product manufacturing	17	1,147,944	2,080,085	4,742,551
Flat glass manufacturing	8	564,164	1,227,784	3,103,192
Other pressed and blown glass and glassware manufacturing	23	1,649,754	2,367,269	5,684,195
Glass container manufacturing	15	1,308,667	2,337,523	5,783,942
Glass product manufacturing made of purchased glass	43	2,762,469	4,583,639	11,235,558
Cement manufacturing	10	999,618	2,581,188	6,874,882
Ready-mix concrete manufacturing	69	5,000,092	8,945,053	28,300,090
Concrete block and brick manufacturing	21	1,407,319	2,780,654	6,942,164
Concrete pipe manufacturing	11	785,171	1,392,152	3,433,179
Other concrete product manufacturing	61	3,926,754	6,040,999	14,628,861
Lime manufacturing	4	324,597	836,260	2,137,971
Gypsum product manufacturing	23	1,955,758	5,592,267	14,410,422
Abrasive product manufacturing	6	431,003	1,361,604	2,508,170
Cut stone and stone product manufacturing	24	1,280,230	1,514,593	3,318,708
Ground or treated mineral and earth manufacturing	5	451,445	1,374,579	3,114,841
Mineral wool manufacturing	7	635,660	1,516,156	3,491,913
Miscellaneous nonmetallic mineral products manufacturing	11	820,162	2,166,665	4,858,565
Iron and steel mills and ferroalloy manufacturing	48	5,440,972	10,013,231	47,431,897
Iron, steel pipe and tube manufacturing from purchased steel	15	1,265,162	1,933,530	6,472,537
Rolled steel shape manufacturing	11	961,699	2,252,132	7,509,536

## APPENDIX

Steel wire drawing	7	430,021	742,508	2,478,252
Alumina refining and primary aluminum production	5	500,137	923,362	3,808,443
Secondary smelting and alloying of aluminum	3	236,197	439,050	3,193,663
Aluminum sheet, plate, and foil manufacturing	9	951,007	1,969,735	8,110,268
Other aluminum rolling, drawing and extruding	16	1,167,386	1,721,374	7,105,174
Nonferrous metal (exc aluminum) smelting and refining	2	151,834	771,215	1,874,094
Copper rolling, drawing, extruding and alloying	14	1,114,129	1,697,112	12,019,753
Nonferrous metal, except copper and aluminum, shaping	8	683,960	892,820	3,461,548
Secondary processing of other nonferrous metals	2	145,729	600,796	2,309,224
Ferrous metal foundries	29	2,196,899	4,268,803	8,871,434
Nonferrous metal foundries	30	1,979,683	2,979,502	7,186,092
Custom roll forming	3	261,012	420,497	1,766,924
Crown and closure manufacturing and metal stamping	37	2,476,785	3,716,195	9,979,041
Iron and steel forging	16	1,269,019	1,791,994	5,274,870
Nonferrous forging	7	547,241	710,107	2,077,415
Cutlery, utensil, pot, and pan manufacturing	7	630,214	2,216,408	4,509,179
Handtool manufacturing	18	1,321,223	2,263,090	4,473,558
Prefabricated metal buildings and components manufacturing	30	2,134,065	3,164,447	9,018,280
Fabricated structural metal manufacturing	91	6,639,289	10,387,452	29,705,288
Plate work manufacturing	25	1,851,216	1,932,837	5,354,806
Metal window and door manufacturing	44	2,747,411	4,369,225	10,958,356
Sheet metal work manufacturing	66	4,330,314	5,742,842	14,225,914
Ornamental and architectural metal work manufacturing	42	2,757,894	3,762,697	9,338,823
Power boiler and heat exchanger manufacturing	3	277,585	412,063	957,355
Metal tank (heavy gauge) manufacturing	13	974,200	1,223,689	3,308,684
Metal cans manufacturing	16	1,491,234	3,612,918	13,662,045
Metal barrels, drums and pails manufacturing	8	551,805	703,741	2,566,273
Hardware manufacturing	17	1,304,411	2,263,193	6,044,186

## APPENDIX

Spring and wire product manufacturing	31	2,094,454	2,941,863	8,101,065
Machine shops	247	16,543,411	19,391,272	37,401,341
Turned product and screw, nut, and bolt manufacturing	42	3,055,081	4,392,575	10,573,297
Metal heat treating	17	1,327,849	2,154,922	4,793,247
Metal coating and nonprecious engraving	50	3,016,309	5,571,159	12,481,295
Electroplating, anodizing, and coloring metal	54	3,238,074	3,673,131	7,957,536
Valve and fittings, other than plumbing, manufacturing	34	2,953,919	4,964,469	11,743,397
Plumbing fixture fitting and trim manufacturing	10	742,793	2,458,182	6,346,817
Ball and roller bearing manufacturing	14	1,136,918	2,250,354	4,854,345
Small arms ammunition manufacturing	7	516,388	1,237,007	2,465,739
Ammunition, except for small arms, manufacturing	1	116,548	147,772	284,102
Small arms, ordnance, and accessories manufacturing	10	796,240	2,110,865	4,223,719
Fabricated pipe and pipe fitting manufacturing	12	932,705	1,117,462	2,731,757
Other fabricated metal manufacturing	65	4,464,442	6,096,025	14,873,159
Farm machinery and equipment manufacturing	6	434,053	681,943	2,554,732
Lawn and garden equipment manufacturing	2	135,824	259,400	1,261,487
Construction machinery manufacturing	3	244,765	541,062	1,631,476
Mining machinery and equipment manufacturing	1	49,316	63,973	165,815
Oil and gas field machinery and equipment manufacturing	2	218,916	279,968	723,010
Semiconductor machinery manufacturing	0	96,455	112,433	262,193
Food product machinery manufacturing	1	48,465	62,292	187,816
Sawmill, woodworking, and paper machinery	2	147,008	164,326	476,304
Printing machinery and equipment manufacturing	1	58,577	68,146	199,907

## APPENDIX

All other industrial machinery manufacturing	4	329,287	452,565	1,126,159
Optical instrument and lens manufacturing	7	778,080	1,261,939	2,794,084
Photographic and photocopying equipment manufacturing	1	113,512	185,029	536,443
Other commercial service industry machinery manufacturing	14	1,144,582	2,064,368	5,391,327
Air purification and ventilation equipment manufacturing	8	555,955	819,994	2,206,827
Heating equipment (except warm air furnaces) manufacturing	10	688,700	1,098,715	2,856,004
Air conditioning, refrigeration, and warm air heating equipment manufacturing	28	2,004,856	4,052,929	11,789,258
Industrial mold manufacturing	3	243,358	284,316	598,125
Special tool, die, jig, and fixture manufacturing	3	217,952	289,677	534,393
Cutting tool and machine tool accessory manufacturing	3	238,488	268,884	623,803
Machine tool manufacturing	2	137,082	158,398	428,941
Rolling mill and other metalworking machinery manufacturing	2	178,790	232,064	559,970
Turbine and turbine generator set units manufacturing	2	187,978	269,787	805,598
Speed changer, industrial high-speed drive, and gear manufacturing	6	503,067	784,839	1,945,484
Mechanical power transmission equipment manufacturing	7	517,501	866,355	2,003,340
Other engine equipment manufacturing	18	2,090,603	4,308,131	17,451,099
Pump and pumping equipment manufacturing	3	238,998	439,533	1,184,031
Air and gas compressor manufacturing	4	372,846	652,600	1,859,872
Elevator and moving stairway manufacturing	0	31,837	53,656	167,390
Conveyor and conveying equipment manufacturing	1	112,489	118,311	327,876
Overhead cranes, hoists, and monorail systems manufacturing	2	158,687	306,788	979,837

## APPENDIX

Industrial truck, trailer, and stacker manufacturing	2	165,847	274,652	854,022
Power-driven handtool manufacturing	2	150,802	394,573	994,755
Welding and soldering equipment manufacturing	2	169,199	235,868	646,853
Packaging machinery manufacturing	3	300,903	476,407	1,172,943
Industrial process furnace and oven manufacturing	0	40,416	52,505	121,989
Fluid power cylinder and actuator manufacturing	4	315,520	461,384	1,144,743
Fluid power pump and motor manufacturing	3	322,822	537,192	1,368,368
Scales, balances, and miscellaneous general purpose machinery manufacturing	2	195,812	265,099	721,985
Electronic computer manufacturing	22	6,245,406	13,266,169	30,300,479
Computer storage device manufacturing	4	708,751	1,921,713	6,162,370
Computer terminals and other computer peripheral equipment manufacturing	75	10,266,379	19,830,038	49,789,010
Telephone apparatus manufacturing	6	881,851	1,815,366	4,505,453
Broadcast and wireless communications equipment manufacturing	3	411,079	599,475	1,303,637
Other communications equipment manufacturing	8	718,088	1,202,250	2,953,760
Audio and video equipment manufacturing	8	949,917	1,678,848	4,339,345
Printed circuit assembly (electronic assembly) manufacturing	87	6,170,566	9,667,795	30,343,164
Bare printed circuit board manufacturing	22	1,727,337	2,296,930	5,465,881
Semiconductor and related device manufacturing	276	55,099,889	101,325,894	216,395,542
Capacitor, resistor, coil, transformer, and other inductor manufacturing	10	659,581	952,275	2,411,532
Electronic connector manufacturing	100	8,459,858	12,840,787	33,655,206

## APPENDIX

Other electronic component manufacturing	82	6,767,859	7,836,669	21,447,359
Electromedical and electrotherapeutic apparatus manufacturing	5	715,962	1,471,294	2,895,445
Search, detection, and navigation instruments manufacturing	8	1,103,599	1,841,860	3,565,740
Automatic environmental control manufacturing	15	1,294,042	1,729,514	3,620,420
Industrial process variable instruments manufacturing	6	597,460	892,008	1,939,509
Totalizing fluid meter and counting device manufacturing	3	291,923	675,955	1,461,651
Electricity and signal testing instruments manufacturing	8	1,096,877	1,578,424	3,873,463
Analytical laboratory instrument manufacturing	86	10,240,870	18,060,100	38,879,760
Irradiation apparatus manufacturing	0	41,607	80,907	195,904
Watch, clock, and other measuring and controlling device manufacturing	9	968,818	1,665,459	3,364,355
Blank magnetic and optical recording media manufacturing	5	926,041	2,574,732	6,713,616
Software and other prerecorded and record reproducing	12	1,220,860	1,805,387	3,567,786
Electric lamp bulb and part manufacturing	5	529,723	813,737	2,001,934
Lighting fixture manufacturing	39	3,346,013	4,773,267	12,858,903
Small electrical appliance manufacturing	3	303,258	566,319	1,715,298
Household cooking appliance manufacturing	6	486,286	1,048,107	3,097,550
Household refrigerator and home freezer manufacturing	6	508,662	1,317,815	3,875,253
Household laundry equipment manufacturing	12	1,045,355	2,067,610	7,973,604
Other major household appliance manufacturing	3	212,929	505,466	1,343,194
Power, distribution, and specialty transformer manufacturing	3	266,123	380,081	1,046,642
Motor and generator manufacturing	10	920,487	1,367,671	3,898,882
Switchgear and switchboard apparatus manufacturing	15	1,444,311	2,195,638	5,941,592

## APPENDIX

Relay and industrial control manufacturing	13	1,455,660	1,880,466	4,593,948
Storage battery manufacturing	14	1,298,219	1,967,543	5,603,910
Primary battery manufacturing	12	1,086,637	1,906,513	5,537,285
Fiber optic cable manufacturing	16	1,687,950	2,493,043	9,635,431
Other communication and energy wire manufacturing	6	474,663	762,990	3,050,895
Wiring device manufacturing	21	1,888,905	3,321,459	8,357,288
Carbon and graphite product manufacturing	18	1,672,213	2,303,274	6,516,939
All other miscellaneous electrical equipment and component manufacturing	21	2,054,626	2,316,310	6,185,362
Automobile manufacturing	26	2,805,911	10,061,988	43,285,955
Light truck and utility vehicle manufacturing	13	1,302,091	4,499,126	27,857,367
Heavy duty truck manufacturing	1	124,156	254,335	1,486,297
Motor vehicle body manufacturing	3	213,155	276,137	1,040,852
Truck trailer manufacturing	0	15,983	20,882	83,055
Motor home manufacturing	17	1,236,399	1,989,801	8,197,994
Travel trailer and camper manufacturing	41	2,818,232	3,047,066	13,113,809
Motor vehicle gasoline engine and engine parts manufacturing	32	2,700,178	3,711,526	18,235,308
Motor vehicle electrical and electronic equipment manufacturing	49	3,884,386	5,397,719	24,609,799
Motor vehicle transmission and power train parts manufacturing	42	3,893,262	5,673,297	26,017,681
Motor vehicle seating and interior trim manufacturing	12	857,244	1,235,586	6,902,210
Motor vehicle metal stamping	38	3,037,512	3,915,261	15,414,116
Other motor vehicle parts manufacturing	95	6,881,975	10,952,241	53,005,544
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	33	2,598,203	3,893,137	17,438,936
Aircraft manufacturing	12	1,755,832	3,743,308	10,310,928
Aircraft engine and engine parts manufacturing	8	904,844	2,051,486	5,237,778
Other aircraft parts and auxiliary equipment manufacturing	37	3,519,283	5,437,259	12,529,698



## APPENDIX

Guided missile and space vehicle manufacturing	8	1,442,612	1,941,858	4,131,095
Propulsion units and parts for space vehicles and guided missiles manufacturing	1	178,533	242,050	493,989
Railroad rolling stock manufacturing	1	108,904	172,782	765,398
Ship building and repairing	7	613,652	779,697	1,800,131
Boat building	34	2,079,168	2,803,175	9,640,844
Motorcycle, bicycle, and parts manufacturing	9	644,832	2,241,113	6,031,655
Military armored vehicle, tank, and tank component manufacturing	15	1,519,187	3,291,504	9,707,340
All other transportation equipment manufacturing	10	690,292	1,358,355	5,716,220
Wood kitchen cabinet and countertop manufacturing	109	5,273,038	7,377,181	15,939,644
Upholstered household furniture manufacturing	51	2,463,909	3,196,861	10,246,424
Nonupholstered wood household furniture manufacturing	31	1,361,076	1,570,588	4,090,419
Other household nonupholstered furniture manufacturing	9	485,780	693,068	2,480,032
Institutional furniture manufacturing	5	287,589	312,731	938,928
Wood office furniture manufacturing	2	114,396	160,444	433,150
Custom architectural woodwork and millwork	2	120,339	116,936	319,942
Office furniture, except wood, manufacturing	32	2,444,654	4,206,200	11,210,367
Showcase, partition, shelving, and locker manufacturing	11	632,703	905,326	2,285,907
Mattress manufacturing	21	1,160,114	2,451,080	8,014,037
Blind and shade manufacturing	8	437,801	463,210	1,585,816
Surgical and medical instrument manufacturing	21	2,593,287	4,921,190	10,619,084
Surgical appliance and supplies manufacturing	40	4,264,792	7,812,908	17,943,868
Dental equipment and supplies manufacturing	4	362,650	570,663	1,308,208
Ophthalmic goods manufacturing	21	1,932,482	3,455,922	7,189,677
Dental laboratories	47	2,673,904	2,543,324	4,382,290

## APPENDIX

Jewelry and silverware manufacturing	46	2,189,243	3,168,114	7,943,825
Sporting and athletic goods manufacturing	36	2,380,871	3,119,310	9,098,390
Doll, toy, and game manufacturing	14	1,167,316	1,818,084	4,518,929
Office supplies (except paper) manufacturing	12	698,965	879,494	2,594,139
Sign manufacturing	43	2,263,772	1,895,129	4,816,187
Gasket, packing, and sealing device manufacturing	15	1,185,817	1,446,168	3,530,461
Musical instrument manufacturing	5	293,354	297,682	641,868
Fasteners, buttons, needles, and pins manufacturing	3	211,447	251,139	603,018
Broom, brush, and mop manufacturing	8	514,740	795,971	2,191,216
Burial casket manufacturing	3	155,816	177,118	413,242
All other miscellaneous manufacturing	57	3,403,102	4,062,310	9,779,314
Wholesale - Motor vehicle and motor vehicle parts and supplies	202	14,825,572	38,064,842	79,342,578
Wholesale - Professional and commercial equipment and supplies	557	70,698,725	129,278,482	206,721,803
Wholesale - Household appliances and electrical and electronic goods	334	35,839,057	90,375,760	171,109,293
Wholesale - Machinery, equipment, and supplies	385	33,866,759	64,349,344	107,592,361
Wholesale - Other durable goods merchant wholesalers	838	66,263,807	111,728,286	207,617,121
Wholesale - Drugs and druggists' sundries	243	35,001,459	108,717,676	212,208,671
Wholesale - Grocery and related product wholesalers	760	54,790,414	78,363,260	149,166,023
Wholesale - Petroleum and petroleum products	136	13,952,971	188,595,006	212,533,204
Wholesale - Other nondurable goods merchant wholesalers	1,047	84,634,836	187,183,913	330,451,758
Wholesale - Wholesale electronic markets and agents and brokers	608	66,069,632	36,081,871	41,053,143
Retail - Motor vehicle and parts dealers	1,025	62,297,091	98,703,132	138,944,471

## APPENDIX

Retail - Furniture and home furnishings stores	720	32,719,197	43,993,887	69,125,619
Retail - Electronics and appliance stores	699	38,176,456	41,574,414	67,090,929
Retail - Building material and garden equipment and supplies stores	937	40,360,956	76,209,710	109,097,909
Retail - Food and beverage stores	3,010	101,097,691	143,700,360	230,022,281
Retail - Health and personal care stores	1,504	68,014,448	83,347,578	125,624,206
Retail - Gasoline stores	1,162	47,335,329	79,797,469	138,447,105
Retail - Clothing and clothing accessories stores	1,641	45,394,851	75,045,171	148,130,283
Retail - Sporting goods, hobby, musical instrument and book stores	944	26,725,725	35,825,823	56,335,363
Retail - General merchandise stores	3,174	98,244,591	147,398,827	233,706,193
Retail - Miscellaneous store retailers	1,851	48,375,356	59,156,406	93,392,199
Retail - Nonstore retailers	1,924	62,513,456	184,944,811	323,141,757
Air transportation	509	61,186,443	135,972,686	201,389,087
Rail transportation	185	22,975,104	42,306,420	86,475,301
Water transportation	73	7,712,515	14,977,610	52,571,338
Truck transportation	10,399	689,754,521	802,953,270	1,726,235,936
Transit and ground passenger transportation	1,971	41,452,841	53,490,704	82,182,641
Pipeline transportation	43	37,054,370	38,154,959	43,935,694
Scenic and sightseeing transportation and support activities for transportation	1,969	147,333,583	164,357,786	326,287,377
Couriers and messengers	1,391	57,112,420	76,845,027	143,099,096
Warehousing and storage	1,403	71,737,017	83,049,703	165,372,386
Newspaper publishers	217	12,515,897	20,534,811	26,752,403
Periodical publishers	154	15,705,927	23,814,657	35,582,923
Book publishers	71	6,379,001	20,525,980	34,145,969
Directory, mailing list, and other publishers	73	5,406,770	16,304,555	23,840,899
Greeting card publishing	5	348,743	1,200,759	1,741,159
Software publishers	938	157,496,143	399,416,825	462,796,272
Motion picture and video industries	380	30,864,003	62,447,156	109,411,143
Sound recording industries	41	2,856,043	15,697,327	20,850,917
Radio and television broadcasting	354	103,534,871	91,507,273	172,575,802

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Cable and other subscription programming	76	20,771,506	91,749,451	180,951,384
Wired telecommunications carriers	587	59,119,430	159,793,009	305,632,736
Wireless telecommunications carriers (except satellite)	173	14,235,366	111,799,838	282,257,221
Satellite, telecommunications resellers, and all other telecommunications	294	25,641,386	40,052,848	101,781,502
Data processing, hosting, and related services	578	71,274,906	149,001,296	281,423,941
News syndicates, libraries, archives and all other information services	82	7,281,824	11,958,704	17,433,366
Internet publishing and broadcasting and web search portals	416	104,028,633	258,611,403	497,928,846
Nondepository credit intermediation and related activities	1,419	138,024,314	196,423,075	310,911,736
Securities and commodity contracts intermediation and brokerage	937	147,625,363	144,055,637	265,464,787
Monetary authorities and depository credit intermediation	2,455	234,628,590	641,708,996	1,007,778,380
Other financial investment activities	3,173	159,595,606	178,458,902	432,658,001
Direct life insurance carriers	263	34,943,757	65,877,803	96,420,009
Insurance carriers, except direct life	1,114	124,655,862	366,803,210	792,922,306
Insurance agencies, brokerages, and related activities	2,402	165,570,934	241,563,826	561,197,799
Funds, trusts, and other financial vehicles	667	31,319,659	39,443,084	216,843,593
Other real estate	13,607	432,866,458	1,155,110,345	2,722,303,364
Tenant-occupied housing	1,380	39,862,590	469,176,888	524,435,934
Owner-occupied dwellings	0	0	1,462,531,999	1,847,892,063
Automotive equipment rental and leasing	352	24,200,632	74,368,654	104,522,952
General and consumer goods rental except video tapes and discs	409	28,155,611	36,667,759	55,302,654
Video tape and disc rental	106	5,430,528	8,842,785	13,723,330

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Commercial and industrial machinery and equipment rental and leasing	389	40,445,484	96,466,570	141,526,035
Lessors of nonfinancial intangible assets	43	4,072,876	86,037,512	103,128,121
Legal services	3,905	386,308,457	643,503,416	904,498,190
Accounting, tax preparation, bookkeeping, and payroll services	2,181	172,423,012	235,921,177	320,319,292
Architectural, engineering, and related services	3,095	308,066,065	372,560,182	622,225,291
Specialized design services	617	39,297,627	41,413,881	51,343,280
Custom computer programming services	598	69,894,370	79,696,197	109,957,297
Computer systems design services	782	94,594,017	98,500,494	127,331,564
Other computer related services, including facilities management	281	34,499,696	64,825,158	99,602,073
Management consulting services	12,953	1,184,645,317	1,174,153,431	1,769,778,505
Environmental and other technical consulting services	1,134	94,261,923	83,508,323	120,411,321
Scientific research and development services	48,912	5,590,831,407	7,980,750,665	14,179,588,239
Advertising, public relations, and related services	1,126	92,445,050	130,801,426	216,139,293
Photographic services	426	21,643,344	11,748,183	19,746,600
Veterinary services	333	16,063,166	23,504,963	35,978,154
Marketing research and all other miscellaneous professional, scientific, and technical services	11,985	749,199,705	683,686,684	989,623,539
Management of companies and enterprises	5,029	632,156,768	728,212,989	1,045,473,082
Office administrative services	1,524	111,492,289	47,582,085	104,726,905
Facilities support services	2,484	135,258,716	187,824,381	397,124,969
Employment services	9,100	412,683,767	658,330,562	988,405,715
Business support services	1,953	90,076,764	78,841,373	135,135,936
Travel arrangement and reservation services	400	25,423,788	34,858,760	77,763,321
Investigation and security services	1,560	61,670,523	63,480,798	91,435,781
Services to buildings	4,783	137,201,124	143,646,710	230,234,731
Landscape and horticultural services	2,091	75,741,758	80,598,098	130,195,400
Other support services	607	30,523,574	39,072,308	72,027,717
Waste management and remediation services	513	36,783,246	70,950,613	118,670,152

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Elementary and secondary schools	1,135	53,594,766	47,624,315	57,734,174
Junior colleges, colleges, universities, and professional schools	1,345	77,035,865	106,014,987	143,665,007
Other educational services	1,730	51,306,143	47,997,386	89,388,936
Offices of physicians	3,322	358,883,751	425,575,154	620,618,332
Offices of dentists	1,194	77,663,592	98,519,551	149,132,391
Offices of other health practitioners	1,599	93,895,110	88,056,843	123,044,477
Outpatient care centers	1,075	87,285,282	91,582,421	156,007,810
Medical and diagnostic laboratories	388	30,802,038	47,720,606	75,309,729
Home health care services	2,210	101,028,866	77,701,991	105,918,905
Other ambulatory health care services	415	24,966,781	27,444,453	45,169,105
Hospitals	5,712	482,807,981	566,054,632	1,036,683,413
Nursing and community care facilities	2,264	93,227,019	104,367,203	179,026,178
Residential mental retardation, mental health, substance abuse and other facilities	859	34,996,433	36,938,832	56,041,430
Individual and family services	3,189	88,784,912	82,335,786	123,897,781
Child day care services	1,687	45,005,158	53,311,079	72,441,147
Community food, housing, and other relief services, including rehabilitation services	661	25,065,343	28,018,050	60,086,560
Performing arts companies	320	12,889,177	19,632,802	34,220,673
Commercial Sports Except Racing	339	30,390,775	32,706,985	47,277,741
Racing and Track Operation	70	2,554,682	4,494,706	7,645,195
Independent artists, writers, and performers	1,440	39,966,066	48,100,079	56,259,507
Promoters of performing arts and sports and agents for public figures	352	15,521,862	32,267,576	64,238,602
Museums, historical sites, zoos, and parks	151	6,665,436	7,921,609	13,508,880
Amusement parks and arcades	149	4,715,861	9,814,018	12,944,669
Gambling industries (except casino hotels)	504	20,738,556	49,965,050	77,224,098
Other amusement and recreation industries	758	22,197,120	26,346,740	43,772,944
Fitness and recreational sports centers	769	16,376,393	23,301,565	36,409,693
Bowling centers	95	2,423,670	3,465,326	5,909,076

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Hotels and motels, including casino hotels	2,186	94,715,780	168,265,394	256,855,523
Other accommodations	550	29,761,754	38,475,349	49,956,283
Full-service restaurants	7,061	188,530,707	282,755,575	476,512,984
Limited-service restaurants	5,874	130,404,677	210,247,851	442,944,384
All other food and drinking places	4,100	131,096,422	174,805,602	259,047,205
Automotive repair and maintenance, except car washes	2,580	144,598,673	174,880,641	255,057,274
Car washes	1,113	59,872,222	92,836,602	136,089,255
Electronic and precision equipment repair and maintenance	8,112	606,728,594	874,181,292	1,368,201,872
Commercial and industrial machinery and equipment repair and maintenance	640	50,225,084	60,432,152	91,910,375
Personal and household goods repair and maintenance	877	45,909,107	36,258,159	48,609,306
Personal care services	2,301	63,688,971	48,085,041	64,633,760
Death care services	136	6,030,900	7,763,581	12,023,831
Dry-cleaning and laundry services	433	15,796,298	17,644,555	25,525,722
Other personal services	2,122	61,323,899	44,858,106	64,056,551
Religious organizations	2,162	113,854,577	54,214,123	199,588,258
Grantmaking, giving, and social advocacy organizations	503	29,523,873	83,815,081	126,708,257
Business and professional associations	333	27,426,799	41,809,894	68,127,538
Labor and civic organizations	811	25,794,631	60,881,834	101,627,615
Private households	1,292	22,107,988	22,107,988	22,107,988
Postal service	809	73,541,539	73,606,424	81,116,543
Federal electric utilities	14	2,691,212	4,925,125	19,051,696
Other federal government enterprises	1,568	97,615,533	69,346,071	365,228,413
State government passenger transit	29	3,113,865	(1,925,690)	2,190,586
State government electric utilities	4	551,177	753,169	2,359,799
Other state government enterprises	90	8,965,351	10,565,821	21,251,787
Local government passenger transit	264	23,481,411	(11,197,885)	15,576,999
Local government electric utilities	102	13,688,673	34,315,534	62,643,174
Other local government enterprises	969	86,114,745	164,025,444	317,316,695
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0



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* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	1	82,949	95,552	95,552
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	16,981	19,598	19,598
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	17,679	2,990,855,923	3,637,757,142	7,474,926,951

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 370: Detailed M2M Program Impacts by Types of Impact, U.S.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	69,233	5,223,375,680	7,849,838,101	14,163,222,100
Oilseed farming	11	1,163,694	2,439,487	5,623,049
Grain farming	49	1,902,776	3,701,909	12,329,803
Vegetable and melon farming	29	1,184,487	1,820,307	4,006,631
Fruit farming	31	1,176,071	2,039,972	3,494,005
Tree nut farming	18	797,528	843,663	1,261,678
Greenhouse, nursery, and floriculture production	32	1,153,486	1,550,955	3,273,092
Tobacco farming	2	36,807	47,672	104,724
Cotton farming	4	165,642	225,512	494,179
Sugarcane and sugar beet farming	3	159,421	231,978	522,956
All other crop farming	107	950,583	1,150,783	2,554,776
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	110	1,699,754	3,534,406	13,519,261
Dairy cattle and milk production	17	697,435	1,205,736	7,191,907
Poultry and egg production	21	531,404	751,266	9,817,743
Animal production, except cattle and poultry and eggs	74	2,348,102	4,470,408	7,906,590
Forestry, forest products, and timber tract production	4	271,880	290,484	372,358
Commercial logging	18	938,901	967,618	1,584,811



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Commercial fishing	10	297,171	613,667	818,294
Commercial hunting and trapping	4	100,694	219,094	292,152
Support activities for agriculture and forestry	149	5,953,808	5,609,312	6,735,383
Oil and gas extraction	86	6,089,048	20,571,597	40,131,452
Coal mining	10	953,550	2,557,390	4,331,841
Copper, nickel, lead, and zinc mining	4	389,297	2,424,664	4,442,889
Iron ore mining	1	65,059	140,656	281,437
Gold ore mining	3	271,778	571,952	1,143,713
Silver ore mining	0	48,082	100,793	201,533
Uranium-radium-vanadium ore mining	2	149,343	296,838	592,567
Other metal ore mining	0	42,447	90,894	181,807
Stone mining and quarrying	7	433,720	1,160,710	2,054,050
Sand and gravel mining	7	428,394	726,587	1,344,475
Other clay, ceramic, refractory minerals mining	1	42,120	74,438	137,921
Potash, soda, and borate mineral mining	0	32,746	50,470	93,222
Phosphate rock mining	0	15,794	26,106	48,297
Other chemical and fertilizer mineral mining	0	24,395	41,381	76,595
Other nonmetallic minerals	2	96,502	165,078	305,518
Drilling oil and gas wells	0	2,928	5,810	13,194
Support activities for oil and gas operations	1	69,576	110,383	247,129
Metal mining services	5	324,759	1,045,337	2,051,593
Other nonmetallic minerals services	0	15,485	48,263	95,520
Electric power generation - Hydroelectric	4	504,402	1,237,134	2,262,733
Electric power generation - Fossil fuel	30	4,684,292	18,394,803	43,627,672
Electric power generation - Nuclear	14	2,669,355	6,675,188	13,653,998
Electric power generation - Solar	4	334,804	666,442	1,181,974
Electric power generation - Wind	4	442,377	2,490,200	4,878,859
Electric power generation - Geothermal	1	68,290	163,171	297,589
Electric power generation - Biomass	3	206,708	459,811	1,109,588
Electric power generation - All other	1	140,419	87,273	225,842

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Electric power transmission and distribution	84	12,146,008	46,881,561	112,504,642
Natural gas distribution	30	4,335,215	12,368,633	24,923,929
Water, sewage and other systems	21	1,690,860	3,221,122	5,637,461
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	1,148	73,890,259	43,038,305	95,470,263
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	267	17,291,658	23,352,163	53,977,090
Maintenance and repair construction of residential structures	109	6,652,098	9,894,697	22,917,410
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	20,772	14,069	31,675
Dog and cat food manufacturing	6	530,796	2,126,081	8,787,384
Other animal food manufacturing	12	888,984	1,673,887	12,060,832
Flour milling	3	256,577	547,883	3,517,754
Rice milling	1	56,943	98,411	619,544
Malt manufacturing	0	21,977	58,521	381,877
Wet corn milling	3	350,361	892,807	5,571,937
Soybean and other oilseed processing	2	140,978	767,868	8,194,312
Fats and oils refining and blending	1	119,922	248,687	2,344,650
Breakfast cereal manufacturing	3	250,622	638,865	2,396,920
Beet sugar manufacturing	1	99,466	200,629	903,774

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Sugar cane mills and refining	1	121,975	293,541	1,341,116
Nonchocolate confectionery manufacturing	5	315,971	462,707	2,014,302
Chocolate and confectionery manufacturing from cacao beans	2	153,306	315,680	1,424,310
Confectionery manufacturing from purchased chocolate	7	417,773	610,201	2,655,141
Frozen fruits, juices and vegetables manufacturing	6	384,142	673,001	2,829,334
Frozen specialties manufacturing	14	831,834	1,279,411	5,301,598
Canned fruits and vegetables manufacturing	11	775,864	1,396,519	5,830,617
Canned specialties	2	166,304	437,985	1,886,686
Dehydrated food products manufacturing	2	151,548	264,555	1,101,074
Cheese manufacturing	11	795,616	1,165,264	10,396,292
Dry, condensed, and evaporated dairy product manufacturing	3	301,110	873,969	4,591,917
Fluid milk manufacturing	11	845,279	1,414,118	7,850,269
Creamery butter manufacturing	1	39,801	168,703	997,843
Ice cream and frozen dessert manufacturing	4	240,879	383,395	1,710,408
Frozen cakes and other pastries manufacturing	38	1,303,759	1,923,719	3,428,626
Poultry processing	51	2,300,732	3,132,947	15,428,463
Animal, except poultry, slaughtering	28	1,635,354	2,410,385	19,209,704
Meat processed from carcasses	27	1,617,120	1,833,367	13,868,764
Rendering and meat byproduct processing	2	183,690	197,342	938,908
Seafood product preparation and packaging	7	451,222	567,612	2,977,636
Bread and bakery product, except frozen, manufacturing	89	3,826,707	5,180,496	12,597,949
Cookie and cracker manufacturing	8	536,416	799,213	2,874,663
Dry pasta, mixes, and dough manufacturing	5	320,983	758,231	2,851,364
Tortilla manufacturing	5	235,783	287,634	1,006,071
Roasted nuts and peanut butter manufacturing	6	429,467	909,732	2,978,009
Other snack food manufacturing	12	865,020	1,854,337	6,626,643
Coffee and tea manufacturing	5	311,462	581,425	3,038,272
Flavoring syrup and concentrate manufacturing	3	675,694	4,616,614	11,487,281

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Mayonnaise, dressing, and sauce manufacturing	4	261,819	489,681	2,113,233
Spice and extract manufacturing	5	459,128	722,655	3,062,513
All other food manufacturing	20	1,153,810	1,555,073	7,124,674
Bottled and canned soft drinks & water	22	1,712,111	3,677,122	16,421,875
Manufactured ice	2	96,686	54,439	235,048
Breweries	20	1,459,194	4,010,679	10,295,230
Wineries	19	1,364,510	2,253,904	6,792,523
Distilleries	4	419,769	2,482,153	5,056,893
Tobacco product manufacturing	2	261,911	6,066,218	9,237,788
Fiber, yarn, and thread mills	4	184,087	272,588	1,262,675
Broadwoven fabric mills	4	219,492	314,631	988,232
Narrow fabric mills and schiffli machine embroidery	1	39,611	44,876	134,841
Nonwoven fabric mills	2	152,212	304,630	1,001,016
Knit fabric mills	1	38,280	52,982	165,435
Textile and fabric finishing mills	5	245,057	325,454	1,193,625
Fabric coating mills	1	86,610	117,535	432,785
Carpet and rug mills	4	234,133	413,168	1,450,483
Curtain and linen mills	4	192,881	291,292	911,140
Textile bag and canvas mills	6	286,701	366,330	983,666
Rope, cordage, twine, tire cord and tire fabric mills	2	102,320	172,358	483,719
Other textile product mills	7	295,237	373,188	999,884
Hosiery and sock mills	2	80,794	101,331	226,436
Other apparel knitting mills	2	56,427	75,599	173,639
Cut and sew apparel contractors	14	420,988	446,841	883,646
Mens and boys cut and sew apparel manufacturing	7	306,424	371,644	967,483
Womens and girls cut and sew apparel manufacturing	7	351,800	481,834	1,490,320
Other cut and sew apparel manufacturing	4	167,687	207,444	526,320
Apparel accessories and other apparel manufacturing	4	150,237	186,453	470,087
Leather and hide tanning and finishing	0	15,039	22,047	118,312
Footwear manufacturing	3	141,836	158,004	497,210
Other leather and allied product manufacturing	2	74,720	78,381	228,533
Sawmills	15	886,603	1,323,737	4,395,023
Wood preservation	2	109,997	347,860	1,107,498

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Veneer and plywood manufacturing	4	260,527	403,407	1,181,582
Engineered wood member and truss manufacturing	6	319,784	440,541	1,302,108
Reconstituted wood product manufacturing	2	159,091	412,948	1,172,663
Wood windows and door manufacturing	15	921,680	1,301,350	3,539,988
Cut stock, resawing lumber, and planing	3	131,948	237,222	633,694
Other millwork, including flooring	10	513,011	748,431	2,029,424
Wood container and pallet manufacturing	10	495,222	595,942	1,614,833
Manufactured home (mobile home) manufacturing	0	2,328	4,099	10,782
Prefabricated wood building manufacturing	2	134,729	155,270	422,516
All other miscellaneous wood product manufacturing	7	360,014	465,534	1,252,448
Pulp mills	0	44,381	73,934	277,020
Paper mills	11	1,225,864	2,798,106	9,348,812
Paperboard mills	7	833,348	1,911,538	6,729,141
Paperboard container manufacturing	31	2,550,316	3,668,640	15,300,948
Paper bag and coated and treated paper manufacturing	11	916,021	1,502,205	5,257,228
Stationery product manufacturing	2	149,973	205,699	829,553
Sanitary paper product manufacturing	6	535,900	1,501,817	4,614,580
All other converted paper product manufacturing	3	229,302	322,411	1,016,511
Printing	136	7,497,998	10,624,133	22,407,579
Support activities for printing	8	451,141	635,872	1,014,732
Petroleum refineries	11	2,489,419	20,991,927	93,312,980
Asphalt paving mixture and block manufacturing	1	169,867	312,943	1,254,167
Asphalt shingle and coating materials manufacturing	1	142,649	552,645	1,214,584
Petroleum lubricating oil and grease manufacturing	14	1,669,524	7,014,124	17,308,807
All other petroleum and coal products manufacturing	1	118,266	395,524	988,133
Petrochemical manufacturing	4	744,550	6,252,638	25,586,792
Industrial gas manufacturing	3	454,566	1,176,064	3,329,028

## APPENDIX

Synthetic dye and pigment manufacturing	2	203,741	464,801	1,373,481
Other basic inorganic chemical manufacturing	5	649,088	1,444,549	4,088,952
Other basic organic chemical manufacturing	9	1,198,235	2,480,569	14,033,673
Plastics material and resin manufacturing	8	1,107,539	1,880,525	10,811,653
Synthetic rubber manufacturing	1	131,802	214,361	990,556
Artificial and synthetic fibers and filaments manufacturing	4	472,548	717,620	3,254,034
Nitrogenous fertilizer manufacturing	1	185,534	447,176	1,454,157
Phosphatic fertilizer manufacturing	1	112,423	301,028	995,391
Fertilizer mixing	1	155,266	288,238	890,440
Pesticide and other agricultural chemical manufacturing	2	300,351	1,024,591	3,871,748
Medicinal and botanical manufacturing	6	861,631	1,603,410	3,640,410
Pharmaceutical preparation manufacturing	35	5,744,278	24,698,174	54,606,265
In-vitro diagnostic substance manufacturing	3	451,215	765,400	1,600,760
Biological product (except diagnostic) manufacturing	4	524,413	1,419,176	2,693,635
Paint and coating manufacturing	6	706,950	1,398,961	4,943,829
Adhesive manufacturing	4	420,936	711,663	2,415,908
Soap and other detergent manufacturing	7	905,050	2,857,443	8,396,744
Polish and other sanitation good manufacturing	7	902,813	1,794,321	4,895,348
Surface active agent manufacturing	1	75,705	209,764	605,980
Toilet preparation manufacturing	12	1,246,099	4,140,325	10,416,592
Printing ink manufacturing	2	215,976	231,870	902,797
Explosives manufacturing	1	56,527	66,173	207,965
Custom compounding of purchased resins	4	361,013	628,004	2,238,147
Photographic film and chemical manufacturing	5	448,458	900,704	3,314,847
Other miscellaneous chemical product manufacturing	7	824,002	1,254,348	4,312,892

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	15	1,107,045	1,950,401	6,786,447
Unlaminated plastics profile shape manufacturing	6	430,229	976,327	2,705,556
Plastics pipe and pipe fitting manufacturing	6	392,333	1,028,553	2,856,646
Laminated plastics plate, sheet (except packaging), and shape manufacturing	3	249,818	489,116	1,211,796
Polystyrene foam product manufacturing	8	474,810	836,476	2,715,783
Urethane and other foam product (except polystyrene) manufacturing	8	519,103	879,049	3,079,300
Plastics bottle manufacturing	7	524,370	904,503	3,300,780
Other plastics product manufacturing	64	4,153,948	6,435,353	18,540,118
Tire manufacturing	9	694,996	1,016,463	3,510,149
Rubber and plastics hoses and belting manufacturing	3	179,758	301,623	805,247
Other rubber product manufacturing	20	1,384,194	2,131,374	6,709,863
Pottery, ceramics, and plumbing fixture manufacturing	3	162,001	211,615	460,222
Brick, tile, and other structural clay product manufacturing	4	262,364	475,406	1,083,915
Flat glass manufacturing	2	132,211	287,730	727,230
Other pressed and blown glass and glassware manufacturing	6	406,620	583,468	1,401,001
Glass container manufacturing	3	289,180	516,529	1,278,093
Glass product manufacturing made of purchased glass	10	661,605	1,097,772	2,690,892
Cement manufacturing	2	224,222	578,981	1,542,091
Ready-mix concrete manufacturing	16	1,159,394	2,074,130	6,562,071
Concrete block and brick manufacturing	5	307,176	606,933	1,515,267
Concrete pipe manufacturing	2	176,896	313,647	773,482
Other concrete product manufacturing	14	891,817	1,371,990	3,322,406
Lime manufacturing	1	72,231	186,089	475,753
Gypsum product manufacturing	6	522,058	1,492,764	3,846,625
Abrasive product manufacturing	1	94,397	298,214	549,331

## APPENDIX

Cut stone and stone product manufacturing	6	318,765	377,119	826,326
Ground or treated mineral and earth manufacturing	1	109,543	333,540	755,813
Mineral wool manufacturing	2	146,292	348,931	803,635
Miscellaneous nonmetallic mineral products manufacturing	3	190,057	502,085	1,125,883
Iron and steel mills and ferroalloy manufacturing	10	1,190,190	2,190,354	10,375,535
Iron, steel pipe and tube manufacturing from purchased steel	3	277,107	423,499	1,417,673
Rolled steel shape manufacturing	2	210,403	492,728	1,642,959
Steel wire drawing	1	87,276	150,697	502,979
Alumina refining and primary aluminum production	1	109,595	202,337	834,545
Secondary smelting and alloying of aluminum	1	51,697	96,095	699,001
Aluminum sheet, plate, and foil manufacturing	2	209,959	434,869	1,790,547
Other aluminum rolling, drawing and extruding	4	257,574	379,807	1,567,698
Nonferrous metal (exc aluminum) smelting and refining	0	26,782	136,032	330,566
Copper rolling, drawing, extruding and alloying	3	248,976	379,256	2,686,068
Nonferrous metal, except copper and aluminum, shaping	2	152,821	199,488	773,435
Secondary processing of other nonferrous metals	0	26,814	110,545	424,894
Ferrous metal foundries	6	461,239	896,235	1,862,557
Nonferrous metal foundries	6	421,821	634,858	1,531,178
Custom roll forming	1	57,798	93,114	391,263
Crown and closure manufacturing and metal stamping	7	505,716	758,782	2,037,546
Iron and steel forging	4	284,805	402,176	1,183,835
Nonferrous forging	2	122,760	159,295	466,016
Cutlery, utensil, pot, and pan manufacturing	2	138,767	488,031	992,877
Handtool manufacturing	4	288,109	493,494	975,513
Prefabricated metal buildings and components manufacturing	7	486,530	721,440	2,056,014
Fabricated structural metal manufacturing	23	1,682,141	2,631,782	7,526,181
Plate work manufacturing	5	398,610	416,185	1,153,015



## APPENDIX

Metal window and door manufacturing	10	623,287	991,217	2,486,049
Sheet metal work manufacturing	14	910,152	1,207,040	2,990,026
Ornamental and architectural metal work manufacturing	10	634,242	865,320	2,147,679
Power boiler and heat exchanger manufacturing	1	62,771	93,181	216,489
Metal tank (heavy gauge) manufacturing	3	219,322	275,490	744,887
Metal cans manufacturing	4	326,110	790,091	2,987,684
Metal barrels, drums and pails manufacturing	2	120,423	153,581	560,049
Hardware manufacturing	4	286,331	496,793	1,326,758
Spring and wire product manufacturing	6	395,044	554,877	1,527,975
Machine shops	53	3,526,861	4,133,991	7,973,526
Turned product and screw, nut, and bolt manufacturing	9	628,791	904,071	2,176,175
Metal heat treating	4	277,197	449,854	1,000,621
Metal coating and nonprecious engraving	10	619,968	1,145,089	2,565,390
Electroplating, anodizing, and coloring metal	11	679,594	770,902	1,670,096
Valve and fittings, other than plumbing, manufacturing	7	606,081	1,018,603	2,409,495
Plumbing fixture fitting and trim manufacturing	2	169,652	561,443	1,449,598
Ball and roller bearing manufacturing	3	225,103	445,557	961,132
Small arms ammunition manufacturing	2	113,687	272,337	542,853
Ammunition, except for small arms, manufacturing	0	26,037	33,012	63,468
Small arms, ordnance, and accessories manufacturing	2	175,360	464,887	930,212
Fabricated pipe and pipe fitting manufacturing	3	209,176	250,611	612,645
Other fabricated metal manufacturing	15	1,002,814	1,369,304	3,340,846
Farm machinery and equipment manufacturing	1	84,189	132,269	495,514
Lawn and garden equipment manufacturing	1	30,307	57,881	281,481
Construction machinery manufacturing	0	38,087	84,193	253,868

## APPENDIX

Mining machinery and equipment manufacturing	0	9,643	12,509	32,423
Oil and gas field machinery and equipment manufacturing	0	41,506	53,081	137,082
Semiconductor machinery manufacturing	0	23,280	27,136	63,281
Food product machinery manufacturing	0	10,386	13,349	40,250
Sawmill, woodworking, and paper machinery	0	35,617	39,813	115,399
Printing machinery and equipment manufacturing	0	12,750	14,832	43,510
All other industrial machinery manufacturing	1	78,890	108,425	269,803
Optical instrument and lens manufacturing	1	124,677	202,209	447,715
Photographic and photocopying equipment manufacturing	0	23,112	37,674	109,226
Other commercial service industry machinery manufacturing	3	238,729	430,572	1,124,486
Air purification and ventilation equipment manufacturing	2	107,823	159,032	427,997
Heating equipment (except warm air furnaces) manufacturing	2	155,506	248,086	644,876
Air conditioning, refrigeration, and warm air heating equipment manufacturing	6	455,109	920,028	2,676,201
Industrial mold manufacturing	1	55,062	64,330	135,332
Special tool, die, jig, and fixture manufacturing	1	45,674	60,705	111,988
Cutting tool and machine tool accessory manufacturing	1	48,116	54,249	125,855
Machine tool manufacturing	0	31,195	36,046	97,612
Rolling mill and other metalworking machinery manufacturing	0	40,644	52,755	127,297
Turbine and turbine generator set units manufacturing	0	42,156	60,502	180,662
Speed changer, industrial high-speed drive, and gear manufacturing	1	111,980	174,701	433,054
Mechanical power transmission equipment manufacturing	2	125,636	210,329	486,361
Other engine equipment manufacturing	5	583,001	1,201,397	4,866,540

## APPENDIX

Pump and pumping equipment manufacturing	1	52,306	96,194	259,133
Air and gas compressor manufacturing	1	60,998	106,765	304,275
Elevator and moving stairway manufacturing	0	6,202	10,453	32,610
Conveyor and conveying equipment manufacturing	0	23,101	24,297	67,333
Overhead cranes, hoists, and monorail systems manufacturing	1	59,871	115,749	369,684
Industrial truck, trailer, and stacker manufacturing	0	34,813	57,652	179,266
Power-driven handtool manufacturing	0	32,021	83,783	211,226
Welding and soldering equipment manufacturing	0	37,934	52,881	145,022
Packaging machinery manufacturing	1	66,798	105,759	260,385
Industrial process furnace and oven manufacturing	0	8,631	11,212	26,050
Fluid power cylinder and actuator manufacturing	1	70,068	102,460	254,215
Fluid power pump and motor manufacturing	1	71,263	118,585	302,067
Scales, balances, and miscellaneous general purpose machinery manufacturing	1	41,970	56,821	154,749
Electronic computer manufacturing	4	1,179,507	2,505,449	5,722,548
Computer storage device manufacturing	1	161,220	437,134	1,401,762
Computer terminals and other computer peripheral equipment manufacturing	20	2,704,169	5,223,241	13,114,447
Telephone apparatus manufacturing	1	197,634	406,847	1,009,731
Broadcast and wireless communications equipment manufacturing	1	79,707	116,237	252,772
Other communications equipment manufacturing	2	161,339	270,120	663,647
Audio and video equipment manufacturing	2	205,658	363,473	939,473

## APPENDIX

Printed circuit assembly (electronic assembly) manufacturing	10	705,698	1,105,659	3,470,202
Bare printed circuit board manufacturing	4	344,077	457,538	1,088,778
Semiconductor and related device manufacturing	25	5,062,466	9,309,617	19,881,982
Capacitor, resistor, coil, transformer, and other inductor manufacturing	2	120,113	173,415	439,153
Electronic connector manufacturing	14	1,150,703	1,746,593	4,577,752
Other electronic component manufacturing	9	708,582	820,484	2,245,496
Electromedical and electrotherapeutic apparatus manufacturing	1	158,348	325,404	640,381
Search, detection, and navigation instruments manufacturing	1	119,863	200,046	387,278
Automatic environmental control manufacturing	4	382,914	511,772	1,071,301
Industrial process variable instruments manufacturing	1	124,402	185,732	403,841
Totalizing fluid meter and counting device manufacturing	1	68,523	158,667	343,094
Electricity and signal testing instruments manufacturing	1	166,335	239,358	587,387
Analytical laboratory instrument manufacturing	14	1,620,673	2,858,108	6,152,932
Irradiation apparatus manufacturing	0	8,775	17,063	41,316
Watch, clock, and other measuring and controlling device manufacturing	1	142,056	244,203	493,309
Blank magnetic and optical recording media manufacturing	1	237,804	661,183	1,724,035
Software and other prerecorded and record reproducing	4	368,681	545,199	1,077,416
Electric lamp bulb and part manufacturing	1	115,450	177,349	436,308
Lighting fixture manufacturing	10	848,571	1,210,532	3,261,102
Small electrical appliance manufacturing	1	66,925	124,980	378,545
Household cooking appliance manufacturing	1	107,905	232,571	687,334

## APPENDIX

Household refrigerator and home freezer manufacturing	1	112,614	291,753	857,949
Household laundry equipment manufacturing	3	230,105	455,126	1,755,164
Other major household appliance manufacturing	1	47,114	111,843	297,205
Power, distribution, and specialty transformer manufacturing	1	75,349	107,614	296,340
Motor and generator manufacturing	2	186,329	276,850	789,230
Switchgear and switchboard apparatus manufacturing	5	444,212	675,290	1,827,394
Relay and industrial control manufacturing	3	314,224	405,925	991,667
Storage battery manufacturing	3	295,192	447,384	1,274,229
Primary battery manufacturing	3	239,774	420,686	1,221,842
Fiber optic cable manufacturing	4	456,648	674,453	2,606,713
Other communication and energy wire manufacturing	1	106,996	171,989	687,716
Wiring device manufacturing	4	382,998	673,465	1,694,538
Carbon and graphite product manufacturing	7	653,460	900,063	2,546,659
All other miscellaneous electrical equipment and component manufacturing	2	218,259	246,057	657,060
Automobile manufacturing	6	614,583	2,203,891	9,480,984
Light truck and utility vehicle manufacturing	3	287,682	994,030	6,154,767
Heavy duty truck manufacturing	0	27,101	55,518	324,436
Motor vehicle body manufacturing	1	45,159	58,502	220,513
Truck trailer manufacturing	0	3,217	4,203	16,717
Motor home manufacturing	4	273,051	439,436	1,810,478
Travel trailer and camper manufacturing	9	621,074	671,504	2,889,984
Motor vehicle gasoline engine and engine parts manufacturing	6	494,169	679,259	3,337,306
Motor vehicle electrical and electronic equipment manufacturing	11	843,806	1,172,547	5,345,989
Motor vehicle transmission and power train parts manufacturing	10	892,010	1,299,845	5,961,073
Motor vehicle seating and interior trim manufacturing	3	179,483	258,697	1,445,127
Motor vehicle metal stamping	9	682,552	879,789	3,463,670

## APPENDIX

Other motor vehicle parts manufacturing	18	1,333,721	2,122,536	10,272,432
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	6	473,076	708,855	3,175,249
Aircraft manufacturing	4	604,208	1,288,127	3,548,141
Aircraft engine and engine parts manufacturing	2	208,842	473,493	1,208,905
Other aircraft parts and auxiliary equipment manufacturing	4	362,197	559,590	1,289,528
Guided missile and space vehicle manufacturing	1	225,184	303,114	644,843
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	29,019	39,343	80,294
Railroad rolling stock manufacturing	0	19,482	30,909	136,924
Ship building and repairing	1	137,469	174,666	403,262
Boat building	8	459,094	618,960	2,128,764
Motorcycle, bicycle, and parts manufacturing	2	142,503	495,269	1,332,949
Military armored vehicle, tank, and tank component manufacturing	4	416,463	902,319	2,661,129
All other transportation equipment manufacturing	2	153,211	301,487	1,268,718
Wood kitchen cabinet and countertop manufacturing	24	1,166,381	1,631,811	3,525,803
Upholstered household furniture manufacturing	11	543,794	705,560	2,261,426
Nonupholstered wood household furniture manufacturing	7	297,665	343,485	894,567
Other household nonupholstered furniture manufacturing	2	107,021	152,689	546,371
Institutional furniture manufacturing	1	84,091	91,443	274,543
Wood office furniture manufacturing	0	19,264	27,019	72,943
Custom architectural woodwork and millwork	0	27,229	26,459	72,393
Office furniture, except wood, manufacturing	5	348,196	599,096	1,596,710
Showcase, partition, shelving, and locker manufacturing	2	138,183	197,723	499,243

## APPENDIX

Mattress manufacturing	5	256,218	541,336	1,769,948
Blind and shade manufacturing	2	96,565	102,169	349,780
Surgical and medical instrument manufacturing	5	576,262	1,093,551	2,359,697
Surgical appliance and supplies manufacturing	9	951,970	1,743,966	4,005,358
Dental equipment and supplies manufacturing	1	75,509	118,820	272,387
Ophthalmic goods manufacturing	5	426,894	763,429	1,588,233
Dental laboratories	10	590,270	561,444	967,399
Jewelry and silverware manufacturing	10	483,624	699,865	1,754,863
Sporting and athletic goods manufacturing	8	526,655	689,999	2,012,587
Doll, toy, and game manufacturing	3	259,064	403,489	1,002,891
Office supplies (except paper) manufacturing	3	151,002	190,003	560,429
Sign manufacturing	10	523,825	438,523	1,114,441
Gasket, packing, and sealing device manufacturing	3	264,813	322,953	788,410
Musical instrument manufacturing	1	64,269	65,217	140,623
Fasteners, buttons, needles, and pins manufacturing	1	46,552	55,291	132,760
Broom, brush, and mop manufacturing	2	110,930	171,537	472,220
Burial casket manufacturing	1	34,391	39,093	91,209
All other miscellaneous manufacturing	13	745,461	889,863	2,142,192
Wholesale - Motor vehicle and motor vehicle parts and supplies	41	3,020,889	7,756,170	16,167,006
Wholesale - Professional and commercial equipment and supplies	123	15,566,755	28,465,103	45,516,913
Wholesale - Household appliances and electrical and electronic goods	63	6,724,353	16,956,877	32,104,617
Wholesale - Machinery, equipment, and supplies	86	7,516,665	14,282,219	23,879,927
Wholesale - Other durable goods merchant wholesalers	186	14,682,384	24,756,163	46,002,704
Wholesale - Drugs and druggists' sundries	54	7,784,153	24,178,280	47,194,171
Wholesale - Grocery and related product wholesalers	168	12,083,029	17,281,592	32,895,853
Wholesale - Petroleum and petroleum products	21	2,172,956	29,370,712	33,098,710

## APPENDIX

Wholesale - Other nondurable goods merchant wholesalers	231	18,661,278	41,272,498	72,861,867
Wholesale - Wholesale electronic markets and agents and brokers	126	13,669,785	7,465,327	8,493,882
Retail - Motor vehicle and parts dealers	223	13,532,465	21,440,755	30,182,167
Retail - Furniture and home furnishings stores	159	7,221,922	9,710,520	15,257,704
Retail - Electronics and appliance stores	154	8,428,283	9,178,457	14,811,783
Retail - Building material and garden equipment and supplies stores	207	8,910,581	16,824,994	24,085,797
Retail - Food and beverage stores	658	22,090,861	31,399,972	50,262,179
Retail - Health and personal care stores	332	15,015,096	18,400,089	27,733,218
Retail - Gasoline stores	178	7,242,660	12,209,610	21,183,444
Retail - Clothing and clothing accessories stores	362	10,020,635	16,565,762	32,698,852
Retail - Sporting goods, hobby, musical instrument and book stores	208	5,899,316	7,908,030	12,435,213
Retail - General merchandise stores	691	21,378,633	32,074,900	50,855,918
Retail - Miscellaneous store retailers	409	10,678,662	13,058,535	20,615,947
Retail - Nonstore retailers	414	13,453,917	39,803,146	69,545,387
Air transportation	111	13,390,843	29,758,045	44,074,627
Rail transportation	32	4,036,411	7,432,658	15,192,525
Water transportation	18	1,847,208	3,587,255	12,591,248
Truck transportation	412	27,358,460	31,848,381	68,469,512
Transit and ground passenger transportation	428	8,999,276	11,612,657	17,841,583
Pipeline transportation	8	6,808,698	7,010,930	8,073,134
Scenic and sightseeing transportation and support activities for transportation	339	25,396,911	28,331,490	56,244,416
Couriers and messengers	219	9,007,017	12,118,983	22,567,700
Warehousing and storage	268	13,682,978	15,840,738	31,542,805
Newspaper publishers	50	2,869,982	4,708,775	6,134,513
Periodical publishers	36	3,612,166	5,477,071	8,183,624
Book publishers	16	1,468,275	4,724,532	7,859,489
Directory, mailing list, and other publishers	14	1,055,023	3,181,507	4,652,073
Greeting card publishing	1	75,310	259,301	375,999



## APPENDIX

Software publishers	299	50,209,685	127,333,868	147,539,202
Motion picture and video industries	86	6,959,054	14,080,259	24,669,454
Sound recording industries	9	631,100	3,468,639	4,607,429
Radio and television broadcasting	82	23,920,516	21,141,681	39,871,612
Cable and other subscription programming	17	4,751,292	20,986,850	41,390,979
Wired telecommunications carriers	130	13,066,461	35,317,139	67,550,352
Wireless telecommunications carriers (except satellite)	38	3,160,530	24,821,751	62,666,626
Satellite, telecommunications resellers, and all other telecommunications	70	6,112,314	9,547,674	24,262,359
Data processing, hosting, and related services	130	16,020,500	33,491,103	63,255,814
News syndicates, libraries, archives and all other information services	18	1,562,218	2,565,580	3,740,095
Internet publishing and broadcasting and web search portals	98	24,595,276	61,142,964	117,724,296
Nondepository credit intermediation and related activities	307	29,913,937	42,570,670	67,383,738
Securities and commodity contracts intermediation and brokerage	207	32,627,558	31,838,592	58,671,949
Monetary authorities and depository credit intermediation	552	52,720,550	144,190,660	226,445,680
Other financial investment activities	703	35,333,850	39,510,111	95,788,809
Direct life insurance carriers	58	7,701,982	14,520,179	21,252,012
Insurance carriers, except direct life	238	26,635,331	78,375,175	169,424,430
Insurance agencies, brokerages, and related activities	497	34,245,769	49,963,716	116,075,026
Funds, trusts, and other financial vehicles	147	6,896,361	8,685,081	47,747,384
Other real estate	3,290	104,660,108	279,286,996	658,208,917
Tenant-occupied housing	304	8,791,691	103,476,919	115,664,297
Owner-occupied dwellings	0	0	323,058,996	408,181,260
Automotive equipment rental and leasing	72	4,962,172	15,248,779	21,431,710

## APPENDIX

General and consumer goods rental except video tapes and discs	80	5,500,235	7,163,094	10,803,445
Video tape and disc rental	23	1,198,940	1,952,290	3,029,807
Commercial and industrial machinery and equipment rental and leasing	75	7,765,733	18,522,059	27,173,699
Lessors of nonfinancial intangible assets	10	951,479	20,099,533	24,092,132
Legal services	976	96,584,689	160,888,471	226,142,282
Accounting, tax preparation, bookkeeping, and payroll services	482	38,118,067	52,155,795	70,813,937
Architectural, engineering, and related services	631	62,844,584	76,001,196	126,932,154
Specialized design services	135	8,571,821	9,033,430	11,199,287
Custom computer programming services	126	14,736,476	16,803,086	23,183,314
Computer systems design services	180	21,818,353	22,719,392	29,369,352
Other computer related services, including facilities management	65	7,931,265	14,902,899	22,897,895
Management consulting services	1,667	152,460,762	151,110,483	227,765,874
Environmental and other technical consulting services	224	18,591,553	16,470,589	23,749,075
Scientific research and development services	13,425	1,534,549,154	2,190,524,681	3,891,956,948
Advertising, public relations, and related services	262	21,543,753	30,482,472	50,369,939
Photographic services	98	4,982,510	2,704,547	4,545,861
Veterinary services	74	3,584,738	5,245,487	8,029,069
Marketing research and all other miscellaneous professional, scientific, and technical services	5,478	342,446,368	312,501,486	452,339,991
Management of companies and enterprises	1,130	142,047,882	163,632,058	234,921,533
Office administrative services	357	26,095,462	11,136,882	24,511,982
Facilities support services	737	40,140,093	55,739,759	117,852,910
Employment services	2,119	96,105,021	153,310,786	230,178,069
Business support services	423	19,510,391	17,076,835	29,270,090
Travel arrangement and reservation services	91	5,787,423	7,935,182	17,701,896
Investigation and security services	352	13,936,082	14,345,161	20,662,327
Services to buildings	915	26,236,865	27,469,450	44,027,611
Landscape and horticultural services	444	16,067,731	17,097,947	27,619,437
Other support services	131	6,601,103	8,449,873	15,576,891

## APPENDIX

Waste management and remediation services	116	8,291,918	15,994,148	26,751,396
Elementary and secondary schools	251	11,871,181	10,548,733	12,788,055
Junior colleges, colleges, universities, and professional schools	297	16,994,931	23,388,034	31,694,028
Other educational services	360	10,674,982	9,986,547	18,598,656
Offices of physicians	734	79,247,057	93,973,545	137,042,081
Offices of dentists	264	17,144,429	21,748,433	32,921,342
Offices of other health practitioners	353	20,727,613	19,438,799	27,162,419
Outpatient care centers	237	19,273,324	20,222,168	34,447,835
Medical and diagnostic laboratories	77	6,087,554	9,431,252	14,883,823
Home health care services	488	22,300,721	17,151,637	23,380,130
Other ambulatory health care services	92	5,513,115	6,060,230	9,974,152
Hospitals	1,262	106,659,681	125,050,141	229,019,250
Nursing and community care facilities	499	20,549,048	23,004,561	39,460,851
Residential mental retardation, mental health, substance abuse and other facilities	190	7,725,324	8,154,101	12,370,923
Individual and family services	705	19,622,193	18,196,883	27,382,425
Child day care services	373	9,952,005	11,788,696	16,018,934
Community food, housing, and other relief services, including rehabilitation services	146	5,539,488	6,192,041	13,279,242
Performing arts companies	71	2,877,533	4,383,060	7,639,829
Commercial Sports Except Racing	76	6,840,750	7,362,112	10,641,887
Racing and Track Operation	15	564,864	993,821	1,690,423
Independent artists, writers, and performers	326	9,051,805	10,894,056	12,742,062
Promoters of performing arts and sports and agents for public figures	78	3,461,862	7,196,682	14,327,223
Museums, historical sites, zoos, and parks	33	1,472,452	1,749,951	2,984,227
Amusement parks and arcades	33	1,041,771	2,167,994	2,859,580
Gambling industries (except casino hotels)	111	4,575,789	11,024,370	17,038,850
Other amusement and recreation industries	168	4,917,167	5,836,402	9,696,703
Fitness and recreational sports centers	171	3,630,314	5,165,484	8,071,291

## APPENDIX

Bowling centers	21	535,655	765,871	1,305,963
Hotels and motels, including casino hotels	486	21,055,549	37,405,808	57,099,610
Other accommodations	122	6,611,208	8,546,826	11,097,174
Full-service restaurants	1,573	42,009,250	63,004,854	106,178,741
Limited-service restaurants	1,300	28,852,421	46,517,960	98,002,757
All other food and drinking places	923	29,521,264	39,364,021	58,334,169
Automotive repair and maintenance, except car washes	478	26,802,621	32,415,647	47,277,083
Car washes	246	13,225,464	20,507,125	30,061,412
Electronic and precision equipment repair and maintenance	390	29,140,663	41,986,191	65,713,584
Commercial and industrial machinery and equipment repair and maintenance	143	11,248,056	13,533,959	20,583,601
Personal and household goods repair and maintenance	200	10,481,050	8,277,739	11,097,506
Personal care services	508	14,063,979	10,618,275	14,272,610
Death care services	30	1,330,666	1,712,967	2,652,954
Dry-cleaning and laundry services	88	3,224,981	3,602,322	5,211,345
Other personal services	478	13,822,342	10,110,970	14,438,279
Religious organizations	478	25,155,987	11,978,524	44,098,708
Grantmaking, giving, and social advocacy organizations	111	6,524,123	18,521,278	27,999,721
Business and professional associations	74	6,065,300	9,246,051	15,066,067
Labor and civic organizations	179	5,699,533	13,452,335	22,455,446
Private households	286	4,890,050	4,890,050	4,890,050
Postal service	155	14,123,090	14,135,550	15,577,811
Federal electric utilities	3	582,801	1,066,571	4,125,782
Other federal government enterprises	220	13,695,421	9,729,227	51,241,404
State government passenger transit	6	675,994	(418,051)	475,558
State government electric utilities	1	117,390	160,411	502,593
Other state government enterprises	20	1,972,132	2,324,192	4,674,813
Local government passenger transit	57	5,097,615	(2,430,966)	3,381,634
Local government electric utilities	22	2,935,694	7,359,363	13,434,553
Other local government enterprises	214	19,064,777	36,313,277	70,250,131
* Not an industry (Used and secondhand goods)	0	0	0	0

## APPENDIX

* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	3,220	529,408,555	663,929,931	1,375,127,207

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 2. Alabama

**Table 371: Detailed NASA Impacts by Types of Impact, Alabama.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	35,768	2,257,559,134	3,131,749,990	6,058,407,177
Oilseed farming	4	1,591,608	1,512,411	2,113,858
Grain farming	12	839,864	1,339,010	2,624,970
Vegetable and melon farming	7	253,366	378,479	773,983
Fruit farming	2	59,631	94,318	154,627
Tree nut farming	1	16,098	17,327	35,424
Greenhouse, nursery, and floriculture production	12	392,482	543,899	1,193,417
Tobacco farming	0	0	0	0
Cotton farming	4	158,427	221,599	464,175
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	75	447,797	487,145	1,223,016
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	23	439,157	794,314	1,747,502
Dairy cattle and milk production	0	18,020	27,689	126,605
Poultry and egg production	23	524,611	736,803	10,207,965

## APPENDIX

Animal production, except cattle and poultry and eggs	62	3,273,715	3,814,270	5,781,223
Forestry, forest products, and timber tract production	2	75,261	78,361	117,867
Commercial logging	13	506,903	509,985	959,021
Commercial fishing	4	12,865	187,272	347,942
Commercial hunting and trapping	2	6,893	42,122	83,289
Support activities for agriculture and forestry	35	1,953,188	1,910,742	2,172,974
Oil and gas extraction	34	512,798	2,458,945	10,602,917
Coal mining	9	1,120,205	4,267,588	5,783,495
Copper, nickel, lead, and zinc mining	2	6,643	1,090,819	2,145,183
Iron ore mining	0	(372)	13,702	22,347
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	1	(32,617)	(18,454,253)	391,679
Other metal ore mining	0	5,488	36,047	94,411
Stone mining and quarrying	3	226,739	987,956	1,388,503
Sand and gravel mining	4	45,944	296,371	620,578
Other clay, ceramic, refractory minerals mining	0	23,811	52,847	76,979
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(4,595)	9,460	32,135
Drilling oil and gas wells	0	7	115	590
Support activities for oil and gas operations	0	1,640	8,631	35,692
Metal mining services	0	2,501	13,438	62,253
Other nonmetallic minerals services	0	1,656	6,090	20,254
Electric power generation - Hydroelectric	1	97,245	270,038	441,526
Electric power generation - Fossil fuel	13	1,873,763	6,236,084	17,195,480
Electric power generation - Nuclear	9	1,777,984	3,618,270	8,327,598
Electric power generation - Solar	0	14,404	35,820	87,374
Electric power generation - Wind	0	16,375	112,032	264,114
Electric power generation - Geothermal	0	0	0	0

## APPENDIX

Electric power generation - Biomass	0	44,678	132,217	224,558
Electric power generation - All other	0	7,013	1,076	7,941
Electric power transmission and distribution	34	5,176,999	16,532,926	43,421,253
Natural gas distribution	13	1,252,115	3,281,320	8,866,165
Water, sewage and other systems	7	195,921	470,901	1,282,398
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	405	22,310,969	9,026,042	27,755,372
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	122	6,362,847	7,683,204	21,658,578
Maintenance and repair construction of residential structures	58	2,847,819	3,764,151	10,677,520
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	5,278	2,839	8,412
Dog and cat food manufacturing	3	243,803	710,041	3,865,148
Other animal food manufacturing	3	192,624	289,916	2,900,722
Flour milling	0	32,810	54,027	535,723
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	2	287,657	602,015	3,449,107

## APPENDIX

Soybean and other oilseed processing	0	47,637	188,323	1,963,928
Fats and oils refining and blending	1	41,355	68,461	910,101
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	590	1,075	23,261
Nonchocolate confectionery manufacturing	0	13,160	17,290	128,847
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	2,153	2,615	39,154
Frozen fruits, juices and vegetables manufacturing	2	61,000	93,535	836,629
Frozen specialties manufacturing	0	5,068	6,242	59,006
Canned fruits and vegetables manufacturing	0	23,333	34,837	197,641
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	13,577	20,665	150,445
Cheese manufacturing	0	6,589	8,427	102,501
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	2	114,424	157,248	1,210,953
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	2	93,740	127,755	717,695
Frozen cakes and other pastries manufacturing	5	132,315	200,310	396,502
Poultry processing	61	2,615,872	3,134,200	17,786,060
Animal, except poultry, slaughtering	1	55,081	72,965	961,593
Meat processed from carcasses	3	143,013	158,180	1,284,239
Rendering and meat byproduct processing	0	21,476	21,784	121,952
Seafood product preparation and packaging	5	259,636	291,971	2,085,857
Bread and bakery product, except frozen, manufacturing	15	561,020	725,227	1,990,640
Cookie and cracker manufacturing	1	71,812	88,905	339,212
Dry pasta, mixes, and dough manufacturing	0	12,933	23,927	123,579
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	1	66,986	113,481	502,324



## APPENDIX

Other snack food manufacturing	2	119,626	205,434	997,823
Coffee and tea manufacturing	1	76,229	117,905	586,541
Flavoring syrup and concentrate manufacturing	0	20,619	105,360	248,927
Mayonnaise, dressing, and sauce manufacturing	1	26,533	42,246	290,009
Spice and extract manufacturing	0	24,968	33,202	222,014
All other food manufacturing	1	54,464	65,955	364,489
Bottled and canned soft drinks & water	7	626,995	1,054,145	5,327,016
Manufactured ice	1	36,722	12,198	103,255
Breweries	3	84,598	161,013	911,525
Wineries	0	750	986	7,080
Distilleries	0	22,664	78,232	289,489
Tobacco product manufacturing	1	81,277	1,110,645	2,776,985
Fiber, yarn, and thread mills	5	242,158	287,378	1,509,692
Broadwoven fabric mills	5	304,525	353,998	1,151,454
Narrow fabric mills and schiffli machine embroidery	0	6,766	7,082	30,063
Nonwoven fabric mills	1	41,924	51,137	309,165
Knit fabric mills	0	4,051	4,508	16,614
Textile and fabric finishing mills	0	1,475	1,657	18,016
Fabric coating mills	0	641	697	5,160
Carpet and rug mills	2	108,748	134,497	760,331
Curtain and linen mills	1	64,714	75,461	279,477
Textile bag and canvas mills	1	31,532	34,007	106,575
Rope, cordage, twine, tire cord and tire fabric mills	1	61,308	71,768	239,799
Other textile product mills	1	54,216	58,794	166,306
Hosiery and sock mills	3	73,318	71,615	209,320
Other apparel knitting mills	0	7,664	9,436	26,359
Cut and sew apparel contractors	1	8,869	9,964	25,627
Mens and boys cut and sew apparel manufacturing	2	37,675	42,294	178,050
Womens and girls cut and sew apparel manufacturing	0	2,775	4,419	40,442
Other cut and sew apparel manufacturing	0	12,870	15,326	48,607
Apparel accessories and other apparel manufacturing	0	2,947	4,131	16,080
Leather and hide tanning and finishing	0	1,210	1,516	11,557
Footwear manufacturing	0	929	1,014	5,391

## APPENDIX

Other leather and allied product manufacturing	0	1,597	1,659	7,654
Sawmills	12	740,237	1,042,814	3,374,335
Wood preservation	1	85,475	242,678	740,991
Veneer and plywood manufacturing	3	208,672	304,555	911,634
Engineered wood member and truss manufacturing	1	57,486	74,606	223,015
Reconstituted wood product manufacturing	2	104,936	260,096	860,822
Wood windows and door manufacturing	9	564,649	753,043	2,057,166
Cut stock, resawing lumber, and planing	2	124,939	202,522	533,721
Other millwork, including flooring	4	213,080	289,492	820,502
Wood container and pallet manufacturing	5	255,330	289,634	741,440
Manufactured home (mobile home) manufacturing	0	3,544	5,806	15,861
Prefabricated wood building manufacturing	2	151,173	172,102	355,375
All other miscellaneous wood product manufacturing	3	164,077	196,189	494,685
Pulp mills	0	59,176	103,716	364,471
Paper mills	15	1,672,394	4,550,628	13,173,713
Paperboard mills	8	948,347	2,601,631	7,953,329
Paperboard container manufacturing	9	608,436	965,151	4,216,818
Paper bag and coated and treated paper manufacturing	5	491,285	951,586	2,461,666
Stationery product manufacturing	1	31,304	46,977	210,017
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	2	146,448	230,409	637,225
Printing	47	1,975,199	2,517,598	6,656,944
Support activities for printing	1	27,177	34,211	59,913
Petroleum refineries	5	873,648	8,991,665	41,421,725
Asphalt paving mixture and block manufacturing	1	47,920	85,510	454,046
Asphalt shingle and coating materials manufacturing	1	86,924	339,355	779,727
Petroleum lubricating oil and grease manufacturing	4	302,928	1,291,581	4,323,272

## APPENDIX

All other petroleum and coal products manufacturing	2	226,622	853,050	2,089,486
Petrochemical manufacturing	1	138,280	1,262,940	4,865,407
Industrial gas manufacturing	1	132,759	367,727	1,059,466
Synthetic dye and pigment manufacturing	0	4,753	10,827	33,123
Other basic inorganic chemical manufacturing	1	162,774	374,597	1,060,658
Other basic organic chemical manufacturing	3	380,488	813,412	4,367,539
Plastics material and resin manufacturing	2	262,090	456,659	2,692,895
Synthetic rubber manufacturing	0	55,770	93,531	398,519
Artificial and synthetic fibers and filaments manufacturing	3	334,472	538,707	2,471,068
Nitrogenous fertilizer manufacturing	0	27,648	69,599	253,991
Phosphatic fertilizer manufacturing	0	7,610	21,014	68,049
Fertilizer mixing	0	23,705	45,161	136,318
Pesticide and other agricultural chemical manufacturing	2	250,391	894,916	2,833,850
Medicinal and botanical manufacturing	0	8,863	16,226	47,200
Pharmaceutical preparation manufacturing	2	206,277	857,925	2,233,816
In-vitro diagnostic substance manufacturing	0	5,096	8,402	22,994
Biological product (except diagnostic) manufacturing	0	9,349	24,624	57,698
Paint and coating manufacturing	1	97,707	201,463	728,341
Adhesive manufacturing	0	8,087	13,666	62,430
Soap and other detergent manufacturing	1	56,597	171,049	741,228
Polish and other sanitation good manufacturing	1	48,585	92,730	436,451
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	1	34,892	108,077	403,857
Printing ink manufacturing	0	15,834	16,949	70,302
Explosives manufacturing	0	14,590	17,196	67,392
Custom compounding of purchased resins	0	22,832	43,519	199,911
Photographic film and chemical manufacturing	0	3,490	6,611	38,649
Other miscellaneous chemical product manufacturing	0	38,121	59,277	268,653

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	2	111,273	207,091	804,479
Unlaminated plastics profile shape manufacturing	1	49,985	128,019	350,939
Plastics pipe and pipe fitting manufacturing	1	50,970	144,520	406,575
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	16,121	34,299	87,971
Polystyrene foam product manufacturing	1	85,378	155,839	487,646
Urethane and other foam product (except polystyrene) manufacturing	1	74,176	135,527	477,932
Plastics bottle manufacturing	0	21,537	39,256	145,637
Other plastics product manufacturing	27	1,529,485	2,514,414	7,706,215
Tire manufacturing	12	855,366	1,283,555	4,638,077
Rubber and plastics hoses and belting manufacturing	1	70,905	128,443	390,819
Other rubber product manufacturing	2	109,153	177,405	599,134
Pottery, ceramics, and plumbing fixture manufacturing	0	442	723	4,877
Brick, tile, and other structural clay product manufacturing	2	169,355	310,150	690,117
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	(308)	(292)	1,122
Glass container manufacturing	0	567	1,209	6,813
Glass product manufacturing made of purchased glass	2	165,504	285,355	652,371
Cement manufacturing	1	124,065	304,536	814,046
Ready-mix concrete manufacturing	8	418,508	746,691	3,081,541
Concrete block and brick manufacturing	1	59,066	114,054	327,545
Concrete pipe manufacturing	1	45,470	74,975	197,546
Other concrete product manufacturing	4	232,324	344,783	910,060
Lime manufacturing	1	86,980	216,350	494,545
Gypsum product manufacturing	1	54,868	150,584	437,219
Abrasive product manufacturing	0	18,455	59,103	100,413
Cut stone and stone product manufacturing	2	102,602	122,646	308,612

## APPENDIX

Ground or treated mineral and earth manufacturing	1	47,152	143,274	338,557
Mineral wool manufacturing	1	56,380	137,131	340,763
Miscellaneous nonmetallic mineral products manufacturing	0	14,368	36,523	85,744
Iron and steel mills and ferroalloy manufacturing	5	704,845	1,361,750	4,993,757
Iron, steel pipe and tube manufacturing from purchased steel	1	78,343	132,399	447,109
Rolled steel shape manufacturing	2	221,544	567,301	1,527,837
Steel wire drawing	0	18,841	33,370	97,010
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	9,670	18,578	146,357
Aluminum sheet, plate, and foil manufacturing	1	171,773	389,823	1,331,396
Other aluminum rolling, drawing and extruding	0	18,601	29,579	117,291
Nonferrous metal (exc aluminum) smelting and refining	0	5,421	32,109	74,856
Copper rolling, drawing, extruding and alloying	1	80,204	125,837	1,054,781
Nonferrous metal, except copper and aluminum, shaping	0	8,159	11,639	40,160
Secondary processing of other nonferrous metals	0	9,047	42,505	159,336
Ferrous metal foundries	3	269,879	592,611	1,024,371
Nonferrous metal foundries	1	73,324	126,564	264,435
Custom roll forming	0	12,935	22,807	97,122
Crown and closure manufacturing and metal stamping	1	56,238	91,415	273,465
Iron and steel forging	0	5,054	7,597	22,412
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	20,394	78,772	148,935
Handtool manufacturing	0	21,985	40,878	79,242
Prefabricated metal buildings and components manufacturing	3	241,346	381,945	1,001,515
Fabricated structural metal manufacturing	7	492,681	824,984	2,309,363
Plate work manufacturing	1	72,204	75,208	242,257
Metal window and door manufacturing	2	95,046	165,823	428,293

## APPENDIX

Sheet metal work manufacturing	3	183,457	256,438	671,890
Ornamental and architectural metal work manufacturing	2	137,366	198,991	482,559
Power boiler and heat exchanger manufacturing	0	3,783	5,793	14,041
Metal tank (heavy gauge) manufacturing	1	41,419	54,015	149,366
Metal cans manufacturing	0	26,713	74,233	328,885
Metal barrels, drums and pails manufacturing	0	8,223	10,860	49,088
Hardware manufacturing	1	50,443	97,163	291,381
Spring and wire product manufacturing	1	40,784	61,293	163,829
Machine shops	9	549,873	664,783	1,319,361
Turned product and screw, nut, and bolt manufacturing	1	78,497	121,890	295,903
Metal heat treating	0	21,662	38,262	80,908
Metal coating and nonprecious engraving	1	95,904	197,008	392,770
Electroplating, anodizing, and coloring metal	1	63,304	73,264	155,700
Valve and fittings, other than plumbing, manufacturing	1	96,918	181,633	431,846
Plumbing fixture fitting and trim manufacturing	0	11,565	44,367	107,546
Ball and roller bearing manufacturing	0	23,806	52,392	120,530
Small arms ammunition manufacturing	1	102,256	282,686	479,253
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	1	64,242	198,725	365,099
Fabricated pipe and pipe fitting manufacturing	2	118,048	144,569	347,047
Other fabricated metal manufacturing	1	70,813	103,071	287,302
Farm machinery and equipment manufacturing	1	45,082	59,802	279,831
Lawn and garden equipment manufacturing	0	1,621	2,554	18,244
Construction machinery manufacturing	0	6,814	11,530	40,206
Mining machinery and equipment manufacturing	0	925	1,052	3,219

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	3,818	4,289	12,294
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	235	269	1,052
Sawmill, woodworking, and paper machinery	0	18,711	20,016	63,747
Printing machinery and equipment manufacturing	0	109	119	591
All other industrial machinery manufacturing	0	497	585	2,099
Optical instrument and lens manufacturing	0	196	263	911
Photographic and photocopying equipment manufacturing	0	300	401	2,447
Other commercial service industry machinery manufacturing	0	18,105	29,383	91,123
Air purification and ventilation equipment manufacturing	0	21,601	28,153	69,514
Heating equipment (except warm air furnaces) manufacturing	1	43,039	57,348	227,470
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	33,095	53,389	225,832
Industrial mold manufacturing	0	2,307	2,512	6,199
Special tool, die, jig, and fixture manufacturing	0	7,272	8,480	16,463
Cutting tool and machine tool accessory manufacturing	0	1,141	1,207	3,764
Machine tool manufacturing	0	861	924	2,810
Rolling mill and other metalworking machinery manufacturing	0	242	276	791
Turbine and turbine generator set units manufacturing	0	2,197	2,753	11,109
Speed changer, industrial high-speed drive, and gear manufacturing	0	4,611	6,067	20,650
Mechanical power transmission equipment manufacturing	0	23,680	30,689	86,324
Other engine equipment manufacturing	1	51,331	83,226	559,469
Pump and pumping equipment manufacturing	0	367	566	3,036

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Air and gas compressor manufacturing	0	3,323	4,923	17,129
Elevator and moving stairway manufacturing	0	1,247	1,704	6,512
Conveyor and conveying equipment manufacturing	0	8,578	8,809	26,024
Overhead cranes, hoists, and monorail systems manufacturing	0	26,843	44,638	145,458
Industrial truck, trailer, and stacker manufacturing	0	12,970	17,925	66,760
Power-driven handtool manufacturing	0	965	2,044	7,986
Welding and soldering equipment manufacturing	0	2,224	2,676	7,596
Packaging machinery manufacturing	0	608	801	2,538
Industrial process furnace and oven manufacturing	0	709	801	2,149
Fluid power cylinder and actuator manufacturing	0	5,401	6,748	20,419
Fluid power pump and motor manufacturing	0	948	1,294	5,944
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2,303	2,740	10,429
Electronic computer manufacturing	0	39,601	71,135	269,430
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	2	137,358	221,063	1,049,350
Telephone apparatus manufacturing	0	53,418	84,355	312,930
Broadcast and wireless communications equipment manufacturing	0	2,992	3,972	11,881
Other communications equipment manufacturing	0	1,919	2,747	9,744
Audio and video equipment manufacturing	0	20	37	813
Printed circuit assembly (electronic assembly) manufacturing	2	123,303	165,643	582,861
Bare printed circuit board manufacturing	0	29,276	35,247	85,285



## APPENDIX

Semiconductor and related device manufacturing	0	8,199	12,644	70,475
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	5,572	7,286	20,320
Electronic connector manufacturing	3	315,794	425,012	1,026,520
Other electronic component manufacturing	3	157,761	175,521	725,117
Electromedical and electrotherapeutic apparatus manufacturing	0	301	528	1,435
Search, detection, and navigation instruments manufacturing	0	651	940	2,756
Automatic environmental control manufacturing	1	51,589	63,716	136,328
Industrial process variable instruments manufacturing	0	5,070	6,704	15,553
Totalizing fluid meter and counting device manufacturing	0	35,924	64,219	141,758
Electricity and signal testing instruments manufacturing	0	1,995	2,630	8,297
Analytical laboratory instrument manufacturing	2	171,143	262,435	659,359
Irradiation apparatus manufacturing	0	75	126	448
Watch, clock, and other measuring and controlling device manufacturing	0	1,456	2,226	7,923
Blank magnetic and optical recording media manufacturing	0	10,018	23,013	142,712
Software and other prerecorded and record reproducing	3	160,380	215,061	623,882
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	21,326	28,268	94,940
Small electrical appliance manufacturing	0	1,055	1,403	4,187
Household cooking appliance manufacturing	1	108,522	214,438	575,156
Household refrigerator and home freezer manufacturing	1	112,206	261,170	673,837
Household laundry equipment manufacturing	2	220,964	398,935	1,483,681

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Other major household appliance manufacturing	0	44,667	96,173	233,821
Power, distribution, and specialty transformer manufacturing	0	7,314	10,047	31,869
Motor and generator manufacturing	0	24,767	34,775	111,848
Switchgear and switchboard apparatus manufacturing	1	74,958	112,868	339,471
Relay and industrial control manufacturing	0	18,417	23,127	62,255
Storage battery manufacturing	1	32,729	48,364	193,053
Primary battery manufacturing	0	10,520	(4,473)	37,258
Fiber optic cable manufacturing	1	49,399	72,831	417,740
Other communication and energy wire manufacturing	0	8,971	14,562	78,922
Wiring device manufacturing	1	50,418	87,760	256,151
Carbon and graphite product manufacturing	7	750,525	1,005,297	2,676,350
All other miscellaneous electrical equipment and component manufacturing	0	447	480	1,187
Automobile manufacturing	4	374,785	1,040,389	6,297,003
Light truck and utility vehicle manufacturing	6	617,447	1,371,106	12,242,191
Heavy duty truck manufacturing	1	59,610	119,508	768,097
Motor vehicle body manufacturing	0	36,579	44,270	157,374
Truck trailer manufacturing	0	2,156	2,485	11,284
Motor home manufacturing	11	764,281	1,167,741	5,249,236
Travel trailer and camper manufacturing	2	118,447	124,460	550,505
Motor vehicle gasoline engine and engine parts manufacturing	4	394,059	506,805	2,270,439
Motor vehicle electrical and electronic equipment manufacturing	10	610,379	728,848	4,668,119
Motor vehicle transmission and power train parts manufacturing	6	436,427	592,015	3,736,491
Motor vehicle seating and interior trim manufacturing	4	255,773	302,651	2,182,157
Motor vehicle metal stamping	15	1,221,224	1,472,589	6,124,156
Other motor vehicle parts manufacturing	8	591,166	780,879	4,412,206
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	4	325,761	438,932	2,195,516

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Aircraft manufacturing	0	8,725	18,295	57,554
Aircraft engine and engine parts manufacturing	0	2,776	6,337	17,353
Other aircraft parts and auxiliary equipment manufacturing	0	12,595	19,710	49,731
Guided missile and space vehicle manufacturing	1	77,624	103,087	245,774
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	7,349	9,889	22,046
Railroad rolling stock manufacturing	0	9,293	14,204	80,976
Ship building and repairing	1	52,307	65,394	146,567
Boat building	3	150,093	203,581	767,456
Motorcycle, bicycle, and parts manufacturing	0	4,422	14,304	41,212
Military armored vehicle, tank, and tank component manufacturing	5	310,361	668,478	2,654,425
All other transportation equipment manufacturing	1	46,832	87,252	325,671
Wood kitchen cabinet and countertop manufacturing	9	396,936	796,041	1,499,228
Upholstered household furniture manufacturing	0	14,519	26,315	74,580
Nonupholstered wood household furniture manufacturing	1	52,717	72,866	181,134
Other household nonupholstered furniture manufacturing	0	7,604	16,768	45,820
Institutional furniture manufacturing	0	2,096	2,525	8,200
Wood office furniture manufacturing	0	1,652	3,375	7,945
Custom architectural woodwork and millwork	0	3,140	3,163	8,834
Office furniture, except wood, manufacturing	1	91,654	254,302	488,844
Showcase, partition, shelving, and locker manufacturing	1	47,132	95,157	201,917
Mattress manufacturing	0	19,696	74,905	187,883
Blind and shade manufacturing	0	2,118	2,306	8,669
Surgical and medical instrument manufacturing	1	42,194	69,237	231,060
Surgical appliance and supplies manufacturing	1	66,960	109,341	352,169

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Dental equipment and supplies manufacturing	0	2,536	3,661	11,310
Ophthalmic goods manufacturing	0	1,426	2,300	7,061
Dental laboratories	1	68,450	64,045	115,461
Jewelry and silverware manufacturing	1	37,176	60,443	158,622
Sporting and athletic goods manufacturing	1	80,959	99,948	330,807
Doll, toy, and game manufacturing	0	4,255	4,479	30,783
Office supplies (except paper) manufacturing	0	5,127	6,098	22,548
Sign manufacturing	8	468,064	366,884	884,532
Gasket, packing, and sealing device manufacturing	1	83,530	96,603	254,184
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	1	47,645	60,044	214,716
Burial casket manufacturing	1	64,992	73,034	172,056
All other miscellaneous manufacturing	3	208,102	238,905	558,554
Wholesale - Motor vehicle and motor vehicle parts and supplies	11	712,025	2,117,206	4,384,790
Wholesale - Professional and commercial equipment and supplies	32	3,024,093	6,078,257	10,480,104
Wholesale - Household appliances and electrical and electronic goods	26	2,332,893	6,890,475	13,240,418
Wholesale - Machinery, equipment, and supplies	28	2,254,484	4,818,510	7,987,395
Wholesale - Other durable goods merchant wholesalers	60	4,176,310	7,845,016	14,696,922
Wholesale - Drugs and druggists' sundries	18	1,843,064	7,179,890	14,656,025
Wholesale - Grocery and related product wholesalers	76	4,927,539	7,702,759	14,820,334
Wholesale - Petroleum and petroleum products	12	861,191	14,140,357	16,203,008
Wholesale - Other nondurable goods merchant wholesalers	78	4,877,134	12,007,102	22,761,196
Wholesale - Wholesale electronic markets and agents and brokers	66	6,716,138	4,605,269	5,141,019
Retail - Motor vehicle and parts dealers	133	6,829,403	11,396,535	16,603,021

## APPENDIX

Retail - Furniture and home furnishings stores	88	3,187,893	4,376,889	7,434,318
Retail - Electronics and appliance stores	82	3,825,534	4,167,137	7,163,840
Retail - Building material and garden equipment and supplies stores	108	4,312,744	8,418,969	12,210,161
Retail - Food and beverage stores	304	8,297,572	12,347,395	21,029,526
Retail - Health and personal care stores	199	8,439,255	10,506,504	16,089,785
Retail - Gasoline stores	126	3,128,996	6,421,414	12,645,568
Retail - Clothing and clothing accessories stores	190	3,920,628	7,153,337	15,670,476
Retail - Sporting goods, hobby, musical instrument and book stores	127	2,877,082	3,871,709	6,621,130
Retail - General merchandise stores	406	11,980,618	18,166,740	29,188,148
Retail - Miscellaneous store retailers	247	3,995,970	5,356,204	9,937,275
Retail - Nonstore retailers	178	3,140,993	10,312,273	23,426,191
Air transportation	11	1,250,534	2,122,331	3,573,109
Rail transportation	14	1,513,093	3,876,733	7,250,068
Water transportation	5	462,172	826,765	3,360,493
Truck transportation	191	11,292,391	13,570,372	30,546,429
Transit and ground passenger transportation	68	1,240,237	1,486,853	2,505,258
Pipeline transportation	5	3,264,053	3,708,493	4,442,939
Scenic and sightseeing transportation and support activities for transportation	118	9,015,146	9,825,072	19,526,334
Couriers and messengers	84	3,445,599	4,202,656	8,227,433
Warehousing and storage	132	6,496,707	7,310,348	15,040,735
Newspaper publishers	35	1,691,929	3,450,203	4,464,691
Periodical publishers	18	1,347,680	2,463,803	3,898,664
Book publishers	8	738,494	3,445,441	4,879,981
Directory, mailing list, and other publishers	3	137,912	646,938	946,284
Greeting card publishing	0	0	0	0
Software publishers	217	22,612,624	76,065,702	91,453,843
Motion picture and video industries	26	783,942	1,302,138	4,848,145
Sound recording industries	3	60,976	324,571	701,674
Radio and television broadcasting	60	5,030,425	3,408,732	18,911,565

## APPENDIX

Cable and other subscription programming	4	240,852	1,913,463	6,344,799
Wired telecommunications carriers	65	5,749,314	15,534,314	31,776,262
Wireless telecommunications carriers (except satellite)	16	1,425,997	8,473,541	24,190,415
Satellite, telecommunications resellers, and all other telecommunications	11	1,017,396	1,482,216	3,718,270
Data processing, hosting, and related services	43	2,742,693	6,865,337	16,829,822
News syndicates, libraries, archives and all other information services	4	171,348	255,702	490,473
Internet publishing and broadcasting and web search portals	16	1,530,181	4,827,795	14,164,170
Nondepository credit intermediation and related activities	113	6,669,998	9,302,548	18,693,372
Securities and commodity contracts intermediation and brokerage	88	9,166,487	9,106,787	21,166,707
Monetary authorities and depository credit intermediation	369	33,440,138	85,904,314	141,891,264
Other financial investment activities	228	4,391,338	5,072,067	24,460,212
Direct life insurance carriers	30	3,573,237	6,374,801	9,996,747
Insurance carriers, except direct life	104	11,246,970	30,494,824	70,583,545
Insurance agencies, brokerages, and related activities	218	14,734,988	20,516,611	49,653,429
Funds, trusts, and other financial vehicles	59	1,916,786	2,267,286	18,005,007
Other real estate	1,347	22,698,953	63,438,495	217,797,021
Tenant-occupied housing	194	3,118,222	40,478,808	47,922,379
Owner-occupied dwellings	0	0	131,229,951	165,807,518
Automotive equipment rental and leasing	35	1,517,153	6,973,271	9,988,394
General and consumer goods rental except video tapes and discs	42	2,119,666	3,179,706	5,108,942
Video tape and disc rental	12	472,560	852,815	1,387,748
Commercial and industrial machinery and equipment rental and leasing	30	2,382,889	7,473,710	10,924,861
Lessors of nonfinancial intangible assets	3	99,951	4,593,511	5,772,366

## APPENDIX

Legal services	471	39,415,541	66,489,486	98,309,186
Accounting, tax preparation, bookkeeping, and payroll services	242	15,980,740	18,965,771	28,374,898
Architectural, engineering, and related services	241	23,178,096	25,930,013	45,269,816
Specialized design services	161	9,148,572	9,486,157	12,125,302
Custom computer programming services	48	4,166,240	4,834,317	7,242,350
Computer systems design services	96	9,812,811	10,038,749	13,568,557
Other computer related services, including facilities management	13	945,923	2,506,500	4,131,845
Management consulting services	2,271	172,054,280	168,294,171	274,102,019
Environmental and other technical consulting services	63	4,376,244	3,663,952	5,731,501
Scientific research and development services	4,783	390,938,433	517,913,450	1,121,094,730
Advertising, public relations, and related services	118	6,992,296	8,765,934	17,962,660
Photographic services	61	2,977,079	1,291,166	2,429,508
Veterinary services	39	1,482,567	1,870,534	3,302,735
Marketing research and all other miscellaneous professional, scientific, and technical services	5,222	311,294,923	286,974,430	420,829,309
Management of companies and enterprises	364	38,862,868	43,345,055	66,462,039
Office administrative services	112	4,385,547	1,292,249	5,493,067
Facilities support services	72	3,185,408	3,969,618	10,003,636
Employment services	1,360	44,703,524	63,626,404	112,762,789
Business support services	229	7,926,810	6,410,153	13,065,369
Travel arrangement and reservation services	24	1,088,843	1,359,318	3,971,722
Investigation and security services	194	5,684,160	5,780,046	9,270,204
Services to buildings	532	10,766,034	11,111,852	20,787,538
Landscape and horticultural services	233	5,429,361	5,678,985	11,204,608
Other support services	60	1,707,540	2,057,226	5,313,888
Waste management and remediation services	48	2,970,248	5,417,254	9,849,149
Elementary and secondary schools	90	3,084,955	2,667,998	3,468,963
Junior colleges, colleges, universities, and professional schools	98	2,977,815	4,019,134	6,714,235
Other educational services	134	2,967,894	2,668,066	5,858,579
Offices of physicians	425	43,250,978	49,559,854	74,531,045
Offices of dentists	135	8,576,403	10,356,093	16,101,336

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Offices of other health practitioners	175	11,651,904	10,666,918	14,489,918
Outpatient care centers	106	9,286,102	9,620,578	15,975,707
Medical and diagnostic laboratories	65	4,591,627	6,461,675	11,083,066
Home health care services	189	13,337,492	10,419,299	12,897,210
Other ambulatory health care services	51	2,794,271	3,010,670	5,184,183
Hospitals	556	38,894,732	48,376,127	94,177,774
Nursing and community care facilities	288	10,151,857	11,355,951	20,852,644
Residential mental retardation, mental health, substance abuse and other facilities	111	3,309,236	3,515,484	5,985,853
Individual and family services	217	5,890,082	4,989,210	7,832,120
Child day care services	188	3,951,471	4,274,999	6,409,399
Community food, housing, and other relief services, including rehabilitation services	52	1,670,834	1,742,133	4,254,468
Performing arts companies	30	600,081	856,006	2,281,422
Commercial Sports Except Racing	34	477,901	528,503	2,020,330
Racing and Track Operation	10	234,799	435,841	873,658
Independent artists, writers, and performers	117	1,145,738	1,249,664	1,973,141
Promoters of performing arts and sports and agents for public figures	23	532,222	976,898	3,119,394
Museums, historical sites, zoos, and parks	13	407,410	461,504	955,065
Amusement parks and arcades	11	154,254	373,181	610,367
Gambling industries (except casino hotels)	35	843,813	2,404,162	4,262,323
Other amusement and recreation industries	89	1,861,002	2,023,114	4,070,855
Fitness and recreational sports centers	83	920,902	1,342,717	2,800,647
Bowling centers	10	160,193	218,701	462,077
Hotels and motels, including casino hotels	38	1,082,933	1,968,805	3,524,379
Other accommodations	11	381,233	488,322	708,240
Full-service restaurants	760	15,938,830	23,985,876	44,802,768
Limited-service restaurants	660	11,348,540	18,632,158	44,699,503
All other food and drinking places	445	11,216,433	14,842,061	23,993,413
Automotive repair and maintenance, except car washes	194	8,480,347	12,079,716	18,111,054
Car washes	103	4,655,645	7,832,178	11,823,587



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Electronic and precision equipment repair and maintenance	1,171	76,997,202	99,516,898	170,967,411
Commercial and industrial machinery and equipment repair and maintenance	64	4,390,785	5,379,121	8,536,771
Personal and household goods repair and maintenance	80	2,788,289	3,400,038	4,523,823
Personal care services	200	4,158,272	4,374,225	5,811,061
Death care services	14	483,420	706,909	1,143,567
Dry-cleaning and laundry services	43	1,541,504	1,790,791	2,576,533
Other personal services	174	3,660,764	4,060,442	5,585,080
Religious organizations	162	6,839,204	6,479,075	17,374,295
Grantmaking, giving, and social advocacy organizations	50	1,505,669	6,269,270	10,548,012
Business and professional associations	44	1,998,574	3,800,862	7,258,839
Labor and civic organizations	73	1,594,035	5,064,354	8,717,576
Private households	132	1,525,638	1,525,638	1,525,638
Postal service	87	7,214,012	7,219,663	8,030,562
Federal electric utilities	11	2,188,576	3,884,791	15,367,550
Other federal government enterprises	30	1,566,584	1,152,458	6,419,422
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	51	4,174,539	5,054,845	11,181,154
Local government passenger transit	47	1,778,929	(750,704)	3,428,400
Local government electric utilities	10	798,984	2,231,647	4,902,522
Other local government enterprises	126	8,635,730	18,931,647	38,813,324
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2,368	386,025,978	486,305,439	985,463,470

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 372: Detailed M2M Program Impacts by Types of Impact, Alabama.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>18,609</i>	<i>1,237,772,295</i>	<i>1,769,387,357</i>	<i>3,281,845,482</i>
Oilseed farming	4	810,469	1,129,490	1,802,286
Grain farming	7	417,657	741,643	1,331,270
Vegetable and melon farming	4	142,736	223,496	431,377
Fruit farming	1	43,567	69,671	107,803
Tree nut farming	1	18,382	19,722	39,815
Greenhouse, nursery, and floriculture production	5	189,508	271,543	581,993
Tobacco farming	0	0	0	0
Cotton farming	2	72,917	101,861	211,641
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	32	204,296	231,289	564,211
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	11	243,792	430,473	880,904
Dairy cattle and milk production	0	11,789	18,672	74,753
Poultry and egg production	10	241,915	346,449	4,704,670
Animal production, except cattle and poultry and eggs	30	1,314,999	1,715,105	2,675,462
Forestry, forest products, and timber tract production	1	47,220	48,961	70,512
Commercial logging	5	238,809	239,430	417,806
Commercial fishing	2	9,288	101,954	191,158
Commercial hunting and trapping	1	3,922	22,523	39,365
Support activities for agriculture and forestry	20	1,145,430	1,111,013	1,260,183
Oil and gas extraction	14	174,568	1,093,965	4,606,185
Coal mining	4	406,152	1,362,014	2,036,199
Copper, nickel, lead, and zinc mining	0	1,928	220,566	454,881
Iron ore mining	0	(1,555)	18,138	23,291
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(14,427)	995,561	151,114
Other metal ore mining	0	3,241	16,574	46,923
Stone mining and quarrying	1	184,588	407,185	586,530
Sand and gravel mining	1	48,784	158,016	277,243
Other clay, ceramic, refractory minerals mining	0	12,377	21,546	31,641
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(5,556)	6,113	19,225
Drilling oil and gas wells	0	3	50	258
Support activities for oil and gas operations	0	585	3,212	13,110
Metal mining services	0	827	5,669	25,787
Other nonmetallic minerals services	0	558	2,606	8,362
Electric power generation - Hydroelectric	0	80,286	201,120	306,684
Electric power generation - Fossil fuel	7	1,135,504	3,599,679	9,505,144
Electric power generation - Nuclear	5	1,053,633	2,238,955	5,015,578
Electric power generation - Solar	0	7,260	17,399	41,063
Electric power generation - Wind	0	8,023	52,707	116,885
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	49,738	113,769	192,530
Electric power generation - All other	0	8,051	965	6,165
Electric power transmission and distribution	18	2,736,817	8,914,226	22,674,926
Natural gas distribution	7	810,410	2,197,909	5,213,291
Water, sewage and other systems	3	135,052	281,362	688,078
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

## APPENDIX

Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	26	1,592,163	533,848	1,728,036
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	64	3,489,425	4,231,340	11,588,776
Maintenance and repair construction of residential structures	30	1,568,286	2,086,396	5,724,774
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	2,789	1,456	4,292
Dog and cat food manufacturing	1	116,024	350,583	1,830,537
Other animal food manufacturing	2	111,461	175,757	1,671,343
Flour milling	0	15,225	25,353	255,039
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	1	192,722	438,146	2,528,467
Soybean and other oilseed processing	0	35,564	142,532	1,461,915
Fats and oils refining and blending	0	27,889	47,738	583,704
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	423	777	16,668
Nonchocolate confectionery manufacturing	0	8,686	11,270	76,928
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	1,328	1,630	22,552
Frozen fruits, juices and vegetables manufacturing	1	41,251	63,746	532,550
Frozen specialties manufacturing	0	3,342	4,085	36,330
Canned fruits and vegetables manufacturing	0	17,975	26,895	150,155

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	10,943	16,471	110,603
Cheese manufacturing	0	4,176	5,335	66,219
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	1	65,626	92,370	681,146
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	1	57,714	81,447	404,575
Frozen cakes and other pastries manufacturing	3	77,814	116,394	225,017
Poultry processing	28	1,208,139	1,528,561	8,210,704
Animal, except poultry, slaughtering	1	25,040	33,742	434,828
Meat processed from carcasses	1	80,872	90,777	713,393
Rendering and meat byproduct processing	0	14,264	14,281	79,674
Seafood product preparation and packaging	2	127,957	149,468	953,099
Bread and bakery product, except frozen, manufacturing	8	319,502	413,726	1,112,872
Cookie and cracker manufacturing	1	44,113	58,076	201,184
Dry pasta, mixes, and dough manufacturing	0	8,265	14,956	79,327
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	1	45,420	85,820	330,637
Other snack food manufacturing	1	70,162	121,128	566,338
Coffee and tea manufacturing	1	47,392	74,591	351,687
Flavoring syrup and concentrate manufacturing	0	18,277	88,472	213,774
Mayonnaise, dressing, and sauce manufacturing	0	17,431	27,094	177,346
Spice and extract manufacturing	0	21,018	28,540	173,293
All other food manufacturing	1	38,597	46,942	244,488
Bottled and canned soft drinks & water	4	325,819	569,606	2,751,380
Manufactured ice	0	19,870	7,274	51,130
Breweries	1	46,222	90,865	495,396
Wineries	0	914	1,200	8,420
Distilleries	0	13,846	49,920	166,146
Tobacco product manufacturing	1	41,169	743,574	1,620,957
Fiber, yarn, and thread mills	2	126,694	167,345	784,559
Broadwoven fabric mills	2	146,722	188,299	597,510

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	5,347	5,670	22,182
Nonwoven fabric mills	1	30,578	39,780	217,236
Knit fabric mills	0	4,329	4,930	17,973
Textile and fabric finishing mills	0	2,026	2,277	23,751
Fabric coating mills	0	583	618	4,169
Carpet and rug mills	1	71,027	94,306	458,101
Curtain and linen mills	1	42,535	51,805	179,195
Textile bag and canvas mills	0	18,658	20,436	61,648
Rope, cordage, twine, tire cord and tire fabric mills	0	25,665	31,545	97,995
Other textile product mills	1	35,604	39,356	104,786
Hosiery and sock mills	1	41,124	42,931	109,609
Other apparel knitting mills	0	6,556	7,749	19,786
Cut and sew apparel contractors	0	9,378	10,437	25,469
Mens and boys cut and sew apparel manufacturing	1	32,439	36,894	134,037
Womens and girls cut and sew apparel manufacturing	0	3,059	4,830	38,839
Other cut and sew apparel manufacturing	0	11,684	13,721	38,784
Apparel accessories and other apparel manufacturing	0	2,643	3,714	12,607
Leather and hide tanning and finishing	0	631	818	6,019
Footwear manufacturing	0	587	656	3,265
Other leather and allied product manufacturing	0	1,300	1,354	5,739
Sawmills	5	306,206	450,361	1,381,743
Wood preservation	0	29,703	91,271	266,641
Veneer and plywood manufacturing	1	68,645	102,484	306,999
Engineered wood member and truss manufacturing	0	20,269	27,117	79,493
Reconstituted wood product manufacturing	1	33,973	87,759	291,428
Wood windows and door manufacturing	4	268,649	371,241	985,987
Cut stock, resawing lumber, and planing	1	64,246	111,957	273,756
Other millwork, including flooring	2	104,094	148,428	392,963
Wood container and pallet manufacturing	2	129,029	150,485	376,115
Manufactured home (mobile home) manufacturing	0	990	1,778	4,600

## APPENDIX

Prefabricated wood building manufacturing	0	43,537	50,141	98,909
All other miscellaneous wood product manufacturing	1	91,421	114,227	259,282
Pulp mills	0	22,949	38,760	139,923
Paper mills	7	747,914	1,777,649	5,629,511
Paperboard mills	4	438,374	1,105,644	3,595,606
Paperboard container manufacturing	5	377,381	578,188	2,514,754
Paper bag and coated and treated paper manufacturing	2	266,920	471,344	1,260,721
Stationery product manufacturing	0	22,388	31,181	125,693
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	1	84,240	124,864	350,360
Printing	24	1,092,877	1,389,741	3,518,714
Support activities for printing	0	21,058	25,938	44,960
Petroleum refineries	3	490,403	4,549,804	21,354,499
Asphalt paving mixture and block manufacturing	0	21,237	36,212	178,495
Asphalt shingle and coating materials manufacturing	0	37,648	133,537	314,639
Petroleum lubricating oil and grease manufacturing	2	127,547	552,062	1,781,724
All other petroleum and coal products manufacturing	1	78,227	279,923	689,040
Petrochemical manufacturing	0	56,761	515,774	1,992,543
Industrial gas manufacturing	1	74,368	218,098	604,114
Synthetic dye and pigment manufacturing	0	2,742	6,421	21,175
Other basic inorganic chemical manufacturing	1	81,727	201,333	552,101
Other basic organic chemical manufacturing	1	188,085	406,405	2,260,463
Plastics material and resin manufacturing	1	139,004	247,221	1,523,486
Synthetic rubber manufacturing	0	27,549	46,445	206,334
Artificial and synthetic fibers and filaments manufacturing	2	194,844	302,242	1,397,341
Nitrogenous fertilizer manufacturing	0	17,706	47,607	159,631
Phosphatic fertilizer manufacturing	0	3,014	8,439	27,867
Fertilizer mixing	0	12,471	24,976	74,586

## APPENDIX

Pesticide and other agricultural chemical manufacturing	1	125,167	455,889	1,439,720
Medicinal and botanical manufacturing	0	8,130	16,256	39,829
Pharmaceutical preparation manufacturing	1	187,943	827,587	1,940,643
In-vitro diagnostic substance manufacturing	0	7,255	12,048	32,683
Biological product (except diagnostic) manufacturing	0	11,807	32,797	70,548
Paint and coating manufacturing	0	50,837	112,023	396,093
Adhesive manufacturing	0	5,234	9,589	40,466
Soap and other detergent manufacturing	0	28,877	109,416	388,302
Polish and other sanitation good manufacturing	0	32,300	72,492	280,350
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	24,771	87,781	297,293
Printing ink manufacturing	0	11,284	12,238	49,643
Explosives manufacturing	0	7,291	8,692	35,127
Custom compounding of purchased resins	0	12,871	27,097	125,538
Photographic film and chemical manufacturing	0	1,956	4,090	21,639
Other miscellaneous chemical product manufacturing	0	21,115	34,910	159,582
Plastics packaging materials and unlaminated film and sheet manufacturing	1	77,212	141,984	540,895
Unlaminated plastics profile shape manufacturing	0	30,949	78,020	211,160
Plastics pipe and pipe fitting manufacturing	0	28,778	82,770	230,056
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	8,959	19,028	48,382
Polystyrene foam product manufacturing	1	46,533	83,740	260,098
Urethane and other foam product (except polystyrene) manufacturing	1	44,199	79,581	278,847
Plastics bottle manufacturing	0	15,132	27,306	99,252
Other plastics product manufacturing	15	920,261	1,507,807	4,379,722
Tire manufacturing	4	293,328	447,646	1,719,857



## APPENDIX

Rubber and plastics hoses and belting manufacturing	1	40,142	70,927	211,163
Other rubber product manufacturing	1	73,966	119,339	415,242
Pottery, ceramics, and plumbing fixture manufacturing	0	185	288	2,052
Brick, tile, and other structural clay product manufacturing	1	64,446	112,632	261,554
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	(244)	(229)	875
Glass container manufacturing	0	327	653	3,853
Glass product manufacturing made of purchased glass	1	103,280	173,027	394,848
Cement manufacturing	0	46,092	107,574	291,415
Ready-mix concrete manufacturing	3	161,894	278,477	1,154,445
Concrete block and brick manufacturing	0	20,668	37,918	110,264
Concrete pipe manufacturing	0	7,655	12,307	33,302
Other concrete product manufacturing	1	63,488	91,514	244,021
Lime manufacturing	0	35,560	90,274	210,053
Gypsum product manufacturing	0	27,431	72,456	214,450
Abrasive product manufacturing	0	12,490	38,162	66,267
Cut stone and stone product manufacturing	1	48,115	57,177	142,717
Ground or treated mineral and earth manufacturing	0	21,778	64,022	156,029
Mineral wool manufacturing	0	29,625	67,385	168,713
Miscellaneous nonmetallic mineral products manufacturing	0	4,354	10,453	24,065
Iron and steel mills and ferroalloy manufacturing	2	386,271	656,571	2,531,826
Iron, steel pipe and tube manufacturing from purchased steel	1	48,145	72,978	245,282
Rolled steel shape manufacturing	1	96,338	228,074	679,817
Steel wire drawing	0	11,341	15,858	51,003
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	8,442	13,156	108,794
Aluminum sheet, plate, and foil manufacturing	1	77,470	157,474	599,814

## APPENDIX

Other aluminum rolling, drawing and extruding	0	13,283	18,744	78,444
Nonferrous metal (exc aluminum) smelting and refining	0	2,135	10,805	27,472
Copper rolling, drawing, extruding and alloying	1	47,291	70,052	570,639
Nonferrous metal, except copper and aluminum, shaping	0	7,576	9,907	37,231
Secondary processing of other nonferrous metals	0	6,163	17,678	85,936
Ferrous metal foundries	2	155,000	280,846	539,784
Nonferrous metal foundries	1	57,224	88,779	192,052
Custom roll forming	0	9,695	16,906	66,118
Crown and closure manufacturing and metal stamping	1	32,275	52,696	153,975
Iron and steel forging	0	4,166	6,282	17,973
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	14,330	59,010	105,745
Handtool manufacturing	0	17,184	32,100	62,140
Prefabricated metal buildings and components manufacturing	1	42,415	67,739	171,248
Fabricated structural metal manufacturing	3	231,120	388,966	1,071,279
Plate work manufacturing	1	39,881	41,616	129,283
Metal window and door manufacturing	1	41,458	72,554	183,395
Sheet metal work manufacturing	2	94,816	132,953	336,591
Ornamental and architectural metal work manufacturing	1	60,578	88,172	204,328
Power boiler and heat exchanger manufacturing	0	2,723	4,263	10,547
Metal tank (heavy gauge) manufacturing	0	14,460	18,956	51,232
Metal cans manufacturing	0	14,394	40,742	177,359
Metal barrels, drums and pails manufacturing	0	4,732	6,264	26,158
Hardware manufacturing	0	29,743	57,474	167,642
Spring and wire product manufacturing	0	31,480	46,976	122,593
Machine shops	5	350,544	425,180	825,172
Turned product and screw, nut, and bolt manufacturing	1	56,912	88,193	206,158
Metal heat treating	0	16,653	29,342	62,065

## APPENDIX

Metal coating and nonprecious engraving	1	61,531	126,514	252,388
Electroplating, anodizing, and coloring metal	1	51,441	59,629	124,329
Valve and fittings, other than plumbing, manufacturing	1	60,091	111,932	263,991
Plumbing fixture fitting and trim manufacturing	0	6,350	24,984	57,687
Ball and roller bearing manufacturing	0	22,808	50,244	111,459
Small arms ammunition manufacturing	0	33,932	93,128	159,553
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	38,721	117,488	201,606
Fabricated pipe and pipe fitting manufacturing	1	48,360	59,465	142,792
Other fabricated metal manufacturing	1	40,130	58,491	155,095
Farm machinery and equipment manufacturing	0	36,801	53,199	213,732
Lawn and garden equipment manufacturing	0	1,317	2,039	13,291
Construction machinery manufacturing	0	10,055	18,206	59,708
Mining machinery and equipment manufacturing	0	350	404	1,196
Oil and gas field machinery and equipment manufacturing	0	1,712	1,939	5,505
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	200	232	891
Sawmill, woodworking, and paper machinery	0	15,209	16,497	47,433
Printing machinery and equipment manufacturing	0	69	77	341
All other industrial machinery manufacturing	0	352	418	1,462
Optical instrument and lens manufacturing	0	195	274	868
Photographic and photocopying equipment manufacturing	0	268	363	2,122

## APPENDIX

Other commercial service industry machinery manufacturing	0	6,502	11,423	33,874
Air purification and ventilation equipment manufacturing	0	13,840	18,795	44,741
Heating equipment (except warm air furnaces) manufacturing	1	29,616	41,239	143,050
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	15,202	25,263	103,800
Industrial mold manufacturing	0	1,536	1,701	4,024
Special tool, die, jig, and fixture manufacturing	0	6,102	7,206	13,396
Cutting tool and machine tool accessory manufacturing	0	895	951	2,931
Machine tool manufacturing	0	699	757	2,183
Rolling mill and other metalworking machinery manufacturing	0	143	164	458
Turbine and turbine generator set units manufacturing	0	1,409	1,857	6,218
Speed changer, industrial high-speed drive, and gear manufacturing	0	3,544	4,821	14,757
Mechanical power transmission equipment manufacturing	0	15,646	20,382	56,928
Other engine equipment manufacturing	0	32,591	52,325	325,057
Pump and pumping equipment manufacturing	0	180	293	1,443
Air and gas compressor manufacturing	0	667	965	3,494
Elevator and moving stairway manufacturing	0	713	1,027	3,679
Conveyor and conveying equipment manufacturing	0	4,186	4,329	12,690
Overhead cranes, hoists, and monorail systems manufacturing	0	18,507	33,916	102,213
Industrial truck, trailer, and stacker manufacturing	0	6,577	9,337	34,598
Power-driven handtool manufacturing	0	1,290	2,762	9,601
Welding and soldering equipment manufacturing	0	1,547	1,905	4,543
Packaging machinery manufacturing	0	544	742	2,273

## APPENDIX

Industrial process furnace and oven manufacturing	0	575	650	1,701
Fluid power cylinder and actuator manufacturing	0	2,225	2,872	8,955
Fluid power pump and motor manufacturing	0	832	1,202	4,948
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1,481	1,801	6,388
Electronic computer manufacturing	0	47,247	86,458	264,180
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	2	131,728	210,505	992,437
Telephone apparatus manufacturing	0	28,843	44,905	166,605
Broadcast and wireless communications equipment manufacturing	0	2,248	2,927	8,514
Other communications equipment manufacturing	0	1,048	1,480	5,535
Audio and video equipment manufacturing	0	21	39	788
Printed circuit assembly (electronic assembly) manufacturing	1	37,439	50,237	172,408
Bare printed circuit board manufacturing	0	19,370	23,219	60,185
Semiconductor and related device manufacturing	0	2,010	3,060	16,460
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	3,419	4,400	11,840
Electronic connector manufacturing	1	126,401	168,836	415,358
Other electronic component manufacturing	1	36,454	40,463	161,538
Electromedical and electrotherapeutic apparatus manufacturing	0	273	465	1,223
Search, detection, and navigation instruments manufacturing	0	467	661	1,913
Automatic environmental control manufacturing	1	74,959	91,103	179,978

## APPENDIX

Industrial process variable instruments manufacturing	0	3,248	4,227	9,723
Totalizing fluid meter and counting device manufacturing	0	20,132	36,257	79,665
Electricity and signal testing instruments manufacturing	0	1,730	2,277	6,791
Analytical laboratory instrument manufacturing	1	123,078	194,991	439,141
Irradiation apparatus manufacturing	0	58	96	334
Watch, clock, and other measuring and controlling device manufacturing	0	1,830	2,725	9,080
Blank magnetic and optical recording media manufacturing	0	31,002	69,447	334,912
Software and other prerecorded and record reproducing	2	135,554	184,110	468,023
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	14,423	18,664	61,001
Small electrical appliance manufacturing	0	761	992	2,789
Household cooking appliance manufacturing	1	60,183	124,316	334,694
Household refrigerator and home freezer manufacturing	1	62,769	153,894	414,445
Household laundry equipment manufacturing	1	125,070	235,315	871,204
Other major household appliance manufacturing	0	24,678	56,337	135,953
Power, distribution, and specialty transformer manufacturing	0	7,755	10,744	32,837
Motor and generator manufacturing	0	14,345	19,472	65,076
Switchgear and switchboard apparatus manufacturing	1	59,298	88,494	266,742
Relay and industrial control manufacturing	0	14,577	18,319	47,198
Storage battery manufacturing	0	25,373	35,485	143,901
Primary battery manufacturing	0	7,208	(2,460)	23,324
Fiber optic cable manufacturing	1	52,326	76,685	387,455
Other communication and energy wire manufacturing	0	5,380	8,455	44,388
Wiring device manufacturing	0	31,275	54,393	148,058

## APPENDIX

Carbon and graphite product manufacturing	5	467,435	625,018	1,745,588
All other miscellaneous electrical equipment and component manufacturing	0	346	369	874
Automobile manufacturing	2	221,575	534,903	3,492,825
Light truck and utility vehicle manufacturing	2	195,310	482,702	3,980,704
Heavy duty truck manufacturing	0	20,618	41,651	252,107
Motor vehicle body manufacturing	0	18,441	22,486	82,404
Truck trailer manufacturing	0	919	1,038	4,703
Motor home manufacturing	3	240,511	385,065	1,617,374
Travel trailer and camper manufacturing	1	55,039	57,996	257,123
Motor vehicle gasoline engine and engine parts manufacturing	2	220,856	284,298	1,340,808
Motor vehicle electrical and electronic equipment manufacturing	5	309,655	366,354	2,153,247
Motor vehicle transmission and power train parts manufacturing	4	352,377	488,282	2,660,172
Motor vehicle seating and interior trim manufacturing	1	91,310	112,890	781,517
Motor vehicle metal stamping	6	486,026	593,051	2,414,729
Other motor vehicle parts manufacturing	4	276,923	335,558	2,124,705
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	2	183,740	267,869	1,251,848
Aircraft manufacturing	0	5,078	10,851	32,884
Aircraft engine and engine parts manufacturing	0	7,780	17,614	50,111
Other aircraft parts and auxiliary equipment manufacturing	0	5,042	7,877	19,937
Guided missile and space vehicle manufacturing	0	61,265	80,061	180,219
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	3,886	5,264	11,055
Railroad rolling stock manufacturing	0	5,883	9,235	48,449
Ship building and repairing	0	42,848	54,722	118,622
Boat building	1	65,411	89,343	329,443
Motorcycle, bicycle, and parts manufacturing	0	3,806	11,704	30,777

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	3	243,557	538,633	1,788,900
All other transportation equipment manufacturing	0	27,489	53,303	195,821
Wood kitchen cabinet and countertop manufacturing	5	208,672	383,123	740,273
Upholstered household furniture manufacturing	0	12,606	22,726	63,572
Nonupholstered wood household furniture manufacturing	1	31,642	42,239	101,643
Other household nonupholstered furniture manufacturing	0	5,117	11,140	28,702
Institutional furniture manufacturing	0	1,067	1,268	4,084
Wood office furniture manufacturing	0	298	595	1,403
Custom architectural woodwork and millwork	0	1,593	1,592	4,286
Office furniture, except wood, manufacturing	0	16,544	43,810	89,263
Showcase, partition, shelving, and locker manufacturing	0	25,149	46,885	102,938
Mattress manufacturing	0	10,795	36,383	99,534
Blind and shade manufacturing	0	947	1,020	4,196
Surgical and medical instrument manufacturing	0	26,226	41,858	131,611
Surgical appliance and supplies manufacturing	1	52,493	86,808	261,664
Dental equipment and supplies manufacturing	0	1,906	2,692	7,922
Ophthalmic goods manufacturing	0	925	1,527	4,697
Dental laboratories	1	49,941	46,744	82,870
Jewelry and silverware manufacturing	1	23,047	36,893	93,064
Sporting and athletic goods manufacturing	1	45,906	55,099	177,196
Doll, toy, and game manufacturing	0	3,177	3,124	19,169
Office supplies (except paper) manufacturing	0	3,919	4,693	15,910
Sign manufacturing	3	220,567	177,180	398,038
Gasket, packing, and sealing device manufacturing	1	43,216	49,031	126,312
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0



## APPENDIX

Broom, brush, and mop manufacturing	1	33,261	48,017	139,828
Burial casket manufacturing	0	23,713	26,722	61,521
All other miscellaneous manufacturing	2	115,018	131,239	296,079
Wholesale - Motor vehicle and motor vehicle parts and supplies	6	402,233	1,195,953	2,477,037
Wholesale - Professional and commercial equipment and supplies	17	1,735,625	3,493,987	5,889,803
Wholesale - Household appliances and electrical and electronic goods	11	986,299	2,919,005	5,535,571
Wholesale - Machinery, equipment, and supplies	14	1,112,743	2,387,105	3,939,182
Wholesale - Other durable goods merchant wholesalers	29	2,079,970	3,911,844	7,272,671
Wholesale - Drugs and druggists' sundries	9	996,711	3,820,902	7,617,760
Wholesale - Grocery and related product wholesalers	40	2,575,023	3,992,002	7,680,230
Wholesale - Petroleum and petroleum products	6	410,603	7,586,831	8,558,062
Wholesale - Other nondurable goods merchant wholesalers	41	2,602,173	6,616,730	12,291,729
Wholesale - Wholesale electronic markets and agents and brokers	33	3,493,800	2,271,764	2,537,461
Retail - Motor vehicle and parts dealers	66	3,478,271	5,837,749	8,434,445
Retail - Furniture and home furnishings stores	44	1,679,744	2,305,314	3,850,549
Retail - Electronics and appliance stores	41	1,993,467	2,179,941	3,675,144
Retail - Building material and garden equipment and supplies stores	50	2,075,161	4,050,614	5,805,242
Retail - Food and beverage stores	158	4,632,333	6,819,458	11,340,277
Retail - Health and personal care stores	100	4,287,257	5,370,037	8,195,040
Retail - Gasoline stores	59	1,805,527	3,448,341	6,412,947
Retail - Clothing and clothing accessories stores	97	2,132,707	3,860,456	8,208,747
Retail - Sporting goods, hobby, musical instrument and book stores	62	1,482,386	2,000,663	3,358,092

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Retail - General merchandise stores	198	5,906,071	9,023,715	14,395,856
Retail - Miscellaneous store retailers	121	2,161,973	2,870,611	5,141,238
Retail - Nonstore retailers	91	1,763,771	5,858,040	12,678,036
Air transportation	6	679,960	1,183,210	1,961,406
Rail transportation	8	825,597	1,876,734	3,726,994
Water transportation	4	368,493	643,156	2,548,429
Truck transportation	100	6,355,977	7,482,910	16,397,286
Transit and ground passenger transportation	38	793,918	958,756	1,516,640
Pipeline transportation	2	1,259,045	1,539,433	1,883,311
Scenic and sightseeing transportation and support activities for transportation	75	5,634,322	6,219,954	12,368,074
Couriers and messengers	46	1,899,848	2,392,223	4,577,518
Warehousing and storage	72	3,614,869	4,061,521	8,279,301
Newspaper publishers	17	892,720	1,764,747	2,249,986
Periodical publishers	10	911,713	1,633,379	2,382,550
Book publishers	4	410,168	1,812,231	2,567,618
Directory, mailing list, and other publishers	1	60,195	286,686	417,381
Greeting card publishing	0	0	0	0
Software publishers	182	24,842,449	71,865,850	84,506,144
Motion picture and video industries	13	571,348	959,048	2,959,200
Sound recording industries	1	44,234	222,219	443,318
Radio and television broadcasting	29	4,178,476	3,102,629	11,563,197
Cable and other subscription programming	2	201,655	1,274,837	3,501,867
Wired telecommunications carriers	30	3,049,234	7,650,537	15,209,028
Wireless telecommunications carriers (except satellite)	9	1,033,064	5,025,524	13,907,722
Satellite, telecommunications resellers, and all other telecommunications	5	680,124	852,651	1,903,056
Data processing, hosting, and related services	21	1,600,400	3,762,202	8,795,326
News syndicates, libraries, archives and all other information services	2	111,866	166,122	299,608
Internet publishing and broadcasting and web search portals	11	1,454,911	4,368,016	11,033,527

## APPENDIX

Nondepository credit intermediation and related activities	58	3,890,287	5,497,610	10,400,329
Securities and commodity contracts intermediation and brokerage	43	5,165,343	5,043,226	10,969,418
Monetary authorities and depository credit intermediation	174	16,292,020	43,320,534	69,428,649
Other financial investment activities	117	3,214,291	3,609,027	13,879,451
Direct life insurance carriers	13	1,622,555	2,990,105	4,576,691
Insurance carriers, except direct life	51	5,733,147	15,999,568	35,617,333
Insurance agencies, brokerages, and related activities	104	7,366,135	10,308,748	24,210,217
Funds, trusts, and other financial vehicles	30	1,217,036	1,414,268	9,490,391
Other real estate	746	16,029,707	44,539,315	132,725,852
Tenant-occupied housing	98	1,925,782	23,570,946	27,502,359
Owner-occupied dwellings	0	0	75,883,681	95,878,148
Automotive equipment rental and leasing	17	1,020,867	3,854,611	5,293,329
General and consumer goods rental except video tapes and discs	19	1,239,977	1,743,736	2,618,485
Video tape and disc rental	6	258,250	449,579	713,435
Commercial and industrial machinery and equipment rental and leasing	13	1,284,288	3,464,844	4,914,757
Lessors of nonfinancial intangible assets	2	56,114	2,538,331	3,169,056
Legal services	278	24,179,667	42,478,874	61,229,152
Accounting, tax preparation, bookkeeping, and payroll services	116	8,346,572	9,942,621	14,509,340
Architectural, engineering, and related services	116	11,605,180	13,043,822	22,428,086
Specialized design services	51	3,124,710	3,248,555	4,075,533
Custom computer programming services	23	2,193,229	2,527,509	3,695,929
Computer systems design services	51	5,626,174	5,735,616	7,620,761
Other computer related services, including facilities management	7	604,098	1,539,627	2,421,469
Management consulting services	344	28,046,811	27,481,172	43,551,888
Environmental and other technical consulting services	38	2,756,793	2,328,356	3,585,993

## APPENDIX

Scientific research and development services	3,320	318,676,720	427,907,968	856,095,488
Advertising, public relations, and related services	60	3,973,398	4,956,573	9,685,950
Photographic services	29	1,522,113	695,508	1,237,032
Veterinary services	20	803,549	1,028,130	1,766,996
Marketing research and all other miscellaneous professional, scientific, and technical services	3,745	233,836,754	214,622,754	310,164,417
Management of companies and enterprises	196	22,849,187	25,725,981	38,213,217
Office administrative services	69	3,172,441	952,672	3,658,463
Facilities support services	25	1,230,551	1,529,267	3,613,821
Employment services	737	26,382,725	38,546,162	65,743,933
Business support services	103	3,765,410	3,105,717	6,128,998
Travel arrangement and reservation services	13	605,125	761,597	2,136,264
Investigation and security services	101	3,246,825	3,309,956	5,143,622
Services to buildings	254	5,819,798	6,024,078	10,725,568
Landscape and horticultural services	115	2,938,320	3,079,362	5,857,774
Other support services	31	899,991	1,086,706	2,785,949
Waste management and remediation services	26	1,650,345	3,029,798	5,430,856
Elementary and secondary schools	57	2,132,422	1,835,950	2,347,717
Junior colleges, colleges, universities, and professional schools	61	2,258,749	3,021,028	4,794,643
Other educational services	75	1,781,064	1,606,040	3,399,369
Offices of physicians	217	22,442,620	25,918,613	38,672,207
Offices of dentists	72	4,663,927	5,691,667	8,726,333
Offices of other health practitioners	91	6,055,968	5,588,731	7,574,130
Outpatient care centers	59	5,326,177	5,540,244	9,062,205
Medical and diagnostic laboratories	22	1,622,496	2,311,278	3,892,798
Home health care services	101	6,879,740	5,436,096	6,775,570
Other ambulatory health care services	27	1,509,019	1,635,744	2,771,139
Hospitals	305	22,586,342	27,976,226	53,148,725
Nursing and community care facilities	148	5,533,488	6,199,335	11,087,139
Residential mental retardation, mental health, substance abuse and other facilities	64	2,036,072	2,164,160	3,610,085

## APPENDIX

Individual and family services	131	3,557,814	3,066,762	4,785,796
Child day care services	99	2,245,475	2,465,306	3,606,626
Community food, housing, and other relief services, including rehabilitation services	32	1,077,154	1,137,157	2,683,772
Performing arts companies	15	386,063	532,855	1,288,084
Commercial Sports Except Racing	17	259,003	285,490	1,068,132
Racing and Track Operation	5	139,794	246,597	475,541
Independent artists, writers, and performers	59	762,620	811,054	1,223,543
Promoters of performing arts and sports and agents for public figures	12	339,678	570,944	1,704,819
Museums, historical sites, zoos, and parks	7	244,215	273,492	548,498
Amusement parks and arcades	6	93,285	196,948	325,526
Gambling industries (except casino hotels)	18	487,835	1,310,153	2,293,731
Other amusement and recreation industries	44	966,258	1,007,418	2,020,589
Fitness and recreational sports centers	45	550,157	749,674	1,542,067
Bowling centers	5	85,637	112,734	235,525
Hotels and motels, including casino hotels	24	748,901	1,303,232	2,297,939
Other accommodations	8	305,775	385,337	546,817
Full-service restaurants	384	8,433,051	12,765,854	23,336,385
Limited-service restaurants	339	6,272,009	10,236,902	23,691,869
All other food and drinking places	231	6,433,657	8,376,301	13,155,493
Automotive repair and maintenance, except car washes	104	4,811,637	6,598,804	9,833,280
Car washes	55	2,539,755	4,256,874	6,378,179
Electronic and precision equipment repair and maintenance	108	8,203,136	10,614,011	17,215,484
Commercial and industrial machinery and equipment repair and maintenance	30	2,148,245	2,585,685	4,082,993
Personal and household goods repair and maintenance	40	1,561,882	1,700,708	2,263,556
Personal care services	113	2,455,606	2,363,999	3,175,232
Death care services	8	296,837	410,417	660,514
Dry-cleaning and laundry services	21	767,476	877,815	1,260,829
Other personal services	100	2,224,623	2,162,380	3,058,617
Religious organizations	103	4,405,986	3,248,968	10,271,415
Grantmaking, giving, and social advocacy organizations	32	1,116,625	3,988,653	6,710,407

## APPENDIX

Business and professional associations	21	1,168,110	2,010,109	3,701,312
Labor and civic organizations	44	1,025,895	2,882,497	5,065,941
Private households	72	939,219	939,219	939,219
Postal service	42	3,573,415	3,576,451	3,970,168
Federal electric utilities	3	564,837	1,029,002	3,994,332
Other federal government enterprises	4	311,229	283,395	1,115,403
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	14	1,295,254	1,528,137	3,167,776
Local government passenger transit	20	954,351	(501,840)	1,269,671
Local government electric utilities	5	472,656	1,204,936	2,576,859
Other local government enterprises	68	5,099,493	10,337,842	21,007,507
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	865	138,511,352	178,687,319	373,522,554

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 3. Alaska

**Table 373: Detailed NASA Impacts by Types of Impact, Alaska.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>155</i>	<i>11,344,274</i>	<i>15,150,554</i>	<i>30,054,520</i>
Oilseed farming	0	0	0	0
Grain farming	0	15	32	197
Vegetable and melon farming	0	166	252	1,329
Fruit farming	0	2	6	46
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	491	556	1,260
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	248	268	712
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(61)	24	899
Dairy cattle and milk production	0	3	10	194
Poultry and egg production	0	9	11	129
Animal production, except cattle and poultry and eggs	0	365	1,549	5,781
Forestry, forest products, and timber tract production	0	212	215	258
Commercial logging	0	261	256	360
Commercial fishing	0	295	761	1,701
Commercial hunting and trapping	0	852	967	1,053
Support activities for agriculture and forestry	0	3,467	1,990	2,945
Oil and gas extraction	0	10,333	62,665	71,790
Coal mining	0	513	1,819	3,125
Copper, nickel, lead, and zinc mining	0	560	7,830	10,330
Iron ore mining	0	0	0	0
Gold ore mining	0	800	2,164	4,751
Silver ore mining	0	417	1,188	1,853
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	69	894	2,514
Sand and gravel mining	0	117	645	2,975

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	143	401	1,010
Drilling oil and gas wells	0	4	12	18
Support activities for oil and gas operations	0	93	151	269
Metal mining services	0	738	4,040	4,757
Other nonmetallic minerals services	0	82	437	520
Electric power generation - Hydroelectric	0	5,302	12,953	23,414
Electric power generation - Fossil fuel	0	8,500	28,350	101,640
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	136	1,358	6,771
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	253	788	2,836
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	26,678	80,114	230,565
Natural gas distribution	0	8,173	21,861	45,070
Water, sewage and other systems	0	5,010	9,281	16,848
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0



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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	37,429	44,257	95,785
Maintenance and repair construction of residential structures	0	15,992	20,335	45,449
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	30	14	34
Dog and cat food manufacturing	0	10	22	242
Other animal food manufacturing	0	231	469	3,731
Flour milling	0	34	64	1,022
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	5	5	21
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	17	21	148
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	0	0	0
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	228	253	1,452
Cheese manufacturing	0	0	0	0

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Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	26	28	108
Frozen cakes and other pastries manufacturing	0	361	464	830
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	197	255	2,645
Meat processed from carcasses	0	310	359	3,297
Rendering and meat byproduct processing	0	14	20	92
Seafood product preparation and packaging	0	1,183	1,465	7,423
Bread and bakery product, except frozen, manufacturing	0	2,285	2,853	7,093
Cookie and cracker manufacturing	0	53	61	235
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	196	231	990
Roasted nuts and peanut butter manufacturing	0	318	341	1,408
Other snack food manufacturing	0	296	325	1,524
Coffee and tea manufacturing	0	12	17	142
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	5	5	28
All other food manufacturing	0	20	23	122
Bottled and canned soft drinks & water	0	191	369	2,776
Manufactured ice	0	57	25	223
Breweries	0	1,146	3,116	10,697
Wineries	0	0	0	2
Distilleries	0	2	18	58
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	1	2	12
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	14	24	73
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	5	9	43
Hosiery and sock mills	0	0	0	1
Other apparel knitting mills	0	1	1	3
Cut and sew apparel contractors	0	2	2	4
Mens and boys cut and sew apparel manufacturing	0	0	1	2
Womens and girls cut and sew apparel manufacturing	0	1	1	15
Other cut and sew apparel manufacturing	0	0	1	18
Apparel accessories and other apparel manufacturing	0	0	0	15
Leather and hide tanning and finishing	0	0	0	1
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	1
Sawmills	0	111	290	1,457
Wood preservation	0	0	0	0
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	9	21	158
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	727	1,704	5,146
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	15	44	684
Wood container and pallet manufacturing	0	58	104	509
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	72	108	320
All other miscellaneous wood product manufacturing	0	302	639	1,292

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Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	4	23	34
Printing	0	2,905	3,769	9,960
Support activities for printing	0	14	18	39
Petroleum refineries	0	3,092	38,903	117,240
Asphalt paving mixture and block manufacturing	0	289	558	1,860
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	43	90	750
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	2	2	35
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	12	23	179
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	10
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	1

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Pharmaceutical preparation manufacturing	0	1	2	14
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	7	20	1,301
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1	2	168
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	52	92	560
Other miscellaneous chemical product manufacturing	0	16	22	193
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	78	92	364
Urethane and other foam product (except polystyrene) manufacturing	0	3	3	11
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	61	69	220
Tire manufacturing	0	4	4	18
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	29	32	111

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	7	8	101
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	37	55	799
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	1,375	4,082	9,814
Concrete block and brick manufacturing	0	184	638	1,213
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	889	2,087	3,554
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	0	0	0
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	0
Iron and steel mills and ferroalloy manufacturing	0	0	0	50
Iron, steel pipe and tube manufacturing from purchased steel	0	2	3	19
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	1	3

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	1	8
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	7	9	71
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	1	1	8
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	69	82	342
Fabricated structural metal manufacturing	0	143	175	805
Plate work manufacturing	0	71	73	224
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	28	31	115
Ornamental and architectural metal work manufacturing	0	7	7	49
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	6	6	19
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	19	22	99
Machine shops	0	244	262	517
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	6	7	40
Electroplating, anodizing, and coloring metal	0	13	14	49

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	3	4	29
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	22	24	83
Other fabricated metal manufacturing	0	60	68	309
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	3	3	14
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	2	3	12
Air purification and ventilation equipment manufacturing	0	0	0	0



## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	5	8	41
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	2	3	7
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	1	1
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0

## APPENDIX

Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1	1	3
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	1
Automatic environmental control manufacturing	0	0	0	1
Industrial process variable instruments manufacturing	0	0	0	2
Totalizing fluid meter and counting device manufacturing	0	0	0	0

## APPENDIX

Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	1
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	1
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	2	2	29
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	2

## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	2
Motor vehicle body manufacturing	0	2	3	11
Truck trailer manufacturing	0	0	0	2
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	31	34	154
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	5
Motor vehicle electrical and electronic equipment manufacturing	0	4	9	33
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	3
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	1	2	18
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	3
Aircraft engine and engine parts manufacturing	0	0	0	2
Other aircraft parts and auxiliary equipment manufacturing	0	2	2	10
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	187	192	557
Boat building	0	430	456	2,482
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	8

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	38	80	178
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	14	20	55
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	5	10	19
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	4	4	25
Surgical and medical instrument manufacturing	0	1	0	8
Surgical appliance and supplies manufacturing	0	4	(1)	15
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	12	10	19
Jewelry and silverware manufacturing	0	35	45	216
Sporting and athletic goods manufacturing	0	12	12	161
Doll, toy, and game manufacturing	0	57	40	678
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	718	441	2,847
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	0	155	138	1,377
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,898	4,448	10,791
Wholesale - Professional and commercial equipment and supplies	0	7,146	11,947	22,358
Wholesale - Household appliances and electrical and electronic goods	0	2,025	4,703	10,938
Wholesale - Machinery, equipment, and supplies	0	8,524	15,049	26,596
Wholesale - Other durable goods merchant wholesalers	0	8,178	12,984	28,088
Wholesale - Drugs and druggists' sundries	0	2,784	7,603	24,208
Wholesale - Grocery and related product wholesalers	0	12,100	16,459	35,579
Wholesale - Petroleum and petroleum products	0	4,031	47,783	56,105
Wholesale - Other nondurable goods merchant wholesalers	0	8,566	17,481	36,569
Wholesale - Wholesale electronic markets and agents and brokers	0	3,055	1,483	1,870
Retail - Motor vehicle and parts dealers	0	23,101	32,257	48,207
Retail - Furniture and home furnishings stores	0	10,208	12,186	20,714
Retail - Electronics and appliance stores	0	9,730	10,220	17,597
Retail - Building material and garden equipment and supplies stores	0	16,439	27,029	39,420
Retail - Food and beverage stores	1	41,034	52,357	82,165
Retail - Health and personal care stores	0	19,567	21,830	33,530
Retail - Gasoline stores	0	13,452	18,786	33,930
Retail - Clothing and clothing accessories stores	1	14,244	19,419	41,970
Retail - Sporting goods, hobby, musical instrument and book stores	1	11,916	14,054	25,522
Retail - General merchandise stores	1	53,525	65,792	104,638
Retail - Miscellaneous store retailers	1	24,578	25,539	42,219

## APPENDIX

Retail - Nonstore retailers	1	20,819	73,301	135,642
Air transportation	0	28,575	51,695	94,191
Rail transportation	0	(5)	(5)	26
Water transportation	0	7,780	12,185	43,223
Truck transportation	0	27,541	34,220	67,552
Transit and ground passenger transportation	1	22,088	26,760	34,637
Pipeline transportation	0	422	12,159	12,743
Scenic and sightseeing transportation and support activities for transportation	1	87,260	95,202	204,855
Couriers and messengers	0	20,618	27,577	34,988
Warehousing and storage	0	6,299	7,260	13,985
Newspaper publishers	0	6,560	13,156	17,637
Periodical publishers	0	1,047	1,782	4,132
Book publishers	0	124	360	2,425
Directory, mailing list, and other publishers	0	398	1,666	2,655
Greeting card publishing	0	0	0	0
Software publishers	0	10,074	28,202	52,616
Motion picture and video industries	0	1,553	2,673	10,268
Sound recording industries	0	109	394	1,158
Radio and television broadcasting	0	16,858	9,699	78,036
Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	28,103	70,034	141,794
Wireless telecommunications carriers (except satellite)	0	5,243	37,483	103,136
Satellite, telecommunications resellers, and all other telecommunications	0	8,343	12,129	27,590
Data processing, hosting, and related services	0	3,025	9,510	22,661
News syndicates, libraries, archives and all other information services	0	1,501	4,491	5,956
Internet publishing and broadcasting and web search portals	0	1,446	6,894	18,291
Nondepository credit intermediation and related activities	0	10,913	13,692	24,894
Securities and commodity contracts intermediation and brokerage	0	9,216	9,235	16,677

## APPENDIX

Monetary authorities and depository credit intermediation	2	118,966	249,471	492,373
Other financial investment activities	1	7,408	9,618	50,865
Direct life insurance carriers	0	935	2,386	3,625
Insurance carriers, except direct life	0	9,580	39,560	81,354
Insurance agencies, brokerages, and related activities	0	18,461	28,322	67,718
Funds, trusts, and other financial vehicles	0	16,528	17,574	78,272
Other real estate	10	274,390	571,745	1,669,030
Tenant-occupied housing	1	19,731	240,506	265,300
Owner-occupied dwellings	0	0	730,764	923,312
Automotive equipment rental and leasing	0	10,737	46,746	61,216
General and consumer goods rental except video tapes and discs	0	10,684	12,316	19,913
Video tape and disc rental	0	2,954	3,987	6,462
Commercial and industrial machinery and equipment rental and leasing	0	10,649	28,080	40,086
Lessors of nonfinancial intangible assets	0	185	3,112	7,278
Legal services	2	136,832	185,831	324,894
Accounting, tax preparation, bookkeeping, and payroll services	1	38,991	53,991	81,545
Architectural, engineering, and related services	2	169,335	215,894	355,552
Specialized design services	0	4,744	4,838	6,481
Custom computer programming services	0	4,767	5,473	8,477
Computer systems design services	0	4,702	4,897	6,866
Other computer related services, including facilities management	0	8,531	11,747	26,915
Management consulting services	3	175,913	175,399	304,393
Environmental and other technical consulting services	1	57,386	53,365	76,864
Scientific research and development services	73	6,561,752	7,458,288	16,742,437
Advertising, public relations, and related services	0	15,926	24,044	54,493
Photographic services	0	7,010	6,403	9,286
Veterinary services	0	7,291	11,841	17,367



## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	4	224,025	209,071	303,904
Management of companies and enterprises	2	210,441	246,743	402,800
Office administrative services	1	39,841	32,149	52,743
Facilities support services	0	8,208	13,162	23,993
Employment services	1	55,431	105,333	142,800
Business support services	0	17,774	17,337	27,580
Travel arrangement and reservation services	0	9,259	14,028	37,002
Investigation and security services	0	21,632	21,900	29,216
Services to buildings	2	52,720	53,921	84,063
Landscape and horticultural services	0	16,569	17,423	27,469
Other support services	0	9,322	11,533	19,739
Waste management and remediation services	0	23,543	41,765	67,136
Elementary and secondary schools	0	2,476	2,259	3,027
Junior colleges, colleges, universities, and professional schools	0	7,741	10,786	17,180
Other educational services	1	17,783	16,319	31,174
Offices of physicians	2	197,657	239,284	356,529
Offices of dentists	1	42,298	54,538	79,513
Offices of other health practitioners	1	69,867	66,759	83,833
Outpatient care centers	1	57,786	60,446	102,182
Medical and diagnostic laboratories	0	6,663	10,076	15,354
Home health care services	1	31,068	27,241	35,148
Other ambulatory health care services	0	15,678	17,203	23,507
Hospitals	3	261,564	316,283	547,748
Nursing and community care facilities	0	12,963	15,140	26,060
Residential mental retardation, mental health, substance abuse and other facilities	0	20,890	22,376	32,956
Individual and family services	1	47,974	45,483	60,859
Child day care services	1	23,079	27,109	35,512
Community food, housing, and other relief services, including rehabilitation services	0	19,090	21,924	44,860
Performing arts companies	0	2,902	4,321	9,929

## APPENDIX

Commercial Sports Except Racing	0	2,860	3,267	12,215
Racing and Track Operation	0	283	445	1,076
Independent artists, writers, and performers	0	4,735	5,385	8,204
Promoters of performing arts and sports and agents for public figures	0	1,997	4,273	11,161
Museums, historical sites, zoos, and parks	0	3,333	3,840	6,609
Amusement parks and arcades	0	720	1,159	1,650
Gambling industries (except casino hotels)	0	10,455	25,636	44,071
Other amusement and recreation industries	0	12,121	12,697	22,224
Fitness and recreational sports centers	0	6,647	8,298	13,959
Bowling centers	0	1,231	1,609	2,734
Hotels and motels, including casino hotels	0	358	633	1,053
Other accommodations	0	120	141	198
Full-service restaurants	3	76,132	108,035	177,095
Limited-service restaurants	2	48,588	70,852	145,210
All other food and drinking places	2	69,764	90,082	129,959
Automotive repair and maintenance, except car washes	1	52,179	52,042	79,340
Car washes	0	21,678	29,910	45,538
Electronic and precision equipment repair and maintenance	0	7,577	9,705	17,525
Commercial and industrial machinery and equipment repair and maintenance	0	19,435	19,793	31,051
Personal and household goods repair and maintenance	0	21,765	6,653	11,631
Personal care services	1	21,707	13,284	17,835
Death care services	0	807	905	1,411
Dry-cleaning and laundry services	0	3,879	4,010	5,928
Other personal services	1	22,885	17,140	22,942
Religious organizations	1	36,692	7,526	50,474
Grantmaking, giving, and social advocacy organizations	0	20,868	45,010	79,993
Business and professional associations	0	9,123	12,091	24,659
Labor and civic organizations	1	23,496	42,438	68,935
Private households	0	5,863	5,863	5,863
Postal service	0	23,407	23,418	25,616
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	3,929	8,932	25,568
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	12,328	11,891	22,268
Local government passenger transit	0	1,199	(1,648)	197
Local government electric utilities	0	5,661	9,701	19,880
Other local government enterprises	0	16,334	13,569	41,801
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	7	783,729	1,167,581	1,552,031

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 374: Detailed M2M Program Impacts by Types of Impact, Alaska.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<1	23,771	46,380	80,819
Oilseed farming	0	0	0	0
Grain farming	0	0	0	2
Vegetable and melon farming	0	1	1	5
Fruit farming	0	0	0	0
Tree nut farming	0	0	0	0

## APPENDIX

Greenhouse, nursery, and floriculture production	0	2	2	4
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	1	1	3
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(0)	0	2
Dairy cattle and milk production	0	0	0	0
Poultry and egg production	0	0	0	1
Animal production, except cattle and poultry and eggs	0	0	2	10
Forestry, forest products, and timber tract production	0	0	0	0
Commercial logging	0	2	2	3
Commercial fishing	0	4	3	8
Commercial hunting and trapping	0	3	2	2
Support activities for agriculture and forestry	0	2	1	2
Oil and gas extraction	0	51	436	445
Coal mining	0	11	30	55
Copper, nickel, lead, and zinc mining	0	7	46	61
Iron ore mining	0	0	0	0
Gold ore mining	0	1	2	4
Silver ore mining	0	0	1	1
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	0	1	4
Sand and gravel mining	0	0	1	2
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	1
Metal mining services	0	2	15	18

## APPENDIX

Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	26	64	110
Electric power generation - Fossil fuel	0	32	99	362
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	4	20
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	1	4	12
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	67	199	569
Natural gas distribution	0	25	70	125
Water, sewage and other systems	0	14	23	39
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	54	63	133

## APPENDIX

Maintenance and repair construction of residential structures	0	32	40	87
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	0
Dog and cat food manufacturing	0	0	0	2
Other animal food manufacturing	0	0	1	5
Flour milling	0	0	0	7
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	0	0	2
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	0	0	0
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	2	2	10
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	2	3	5
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	2	2	22
Meat processed from carcasses	0	2	3	24

## APPENDIX

Rendering and meat byproduct processing	0	0	0	1
Seafood product preparation and packaging	0	9	11	41
Bread and bakery product, except frozen, manufacturing	0	10	12	29
Cookie and cracker manufacturing	0	0	1	2
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	1	1	3
Roasted nuts and peanut butter manufacturing	0	2	2	7
Other snack food manufacturing	0	2	2	9
Coffee and tea manufacturing	0	0	0	2
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	1
All other food manufacturing	0	0	0	1
Bottled and canned soft drinks & water	0	0	1	7
Manufactured ice	0	0	0	1
Breweries	0	5	13	45
Wineries	0	0	0	0
Distilleries	0	0	1	4
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	1	3
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	0	0	1
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	0	0	1
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	0

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	1	2	8
Wood preservation	0	0	0	0
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	1
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	1	3	8
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	0	0	1
Wood container and pallet manufacturing	0	0	1	4
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	1	1
All other miscellaneous wood product manufacturing	0	2	3	6
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0



## APPENDIX

All other converted paper product manufacturing	0	0	1	1
Printing	0	57	78	185
Support activities for printing	0	0	0	1
Petroleum refineries	0	15	176	535
Asphalt paving mixture and block manufacturing	0	1	1	4
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	1
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	0	0	1
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	2
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	0
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	0	0	0
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	0	0	8

## APPENDIX

Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	0	0	2
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	1	2	12
Other miscellaneous chemical product manufacturing	0	0	0	2
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	1	1	3
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	1	1	4
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	0
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	1
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	2
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0

## APPENDIX

Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	1	3	7
Concrete block and brick manufacturing	0	0	1	1
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	1	2	4
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	0	0	0
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	0
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	1	5
Crown and closure manufacturing and metal stamping	0	0	0	0

## APPENDIX

Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	1
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	0	0	1
Fabricated structural metal manufacturing	0	0	0	2
Plate work manufacturing	0	0	0	1
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Ornamental and architectural metal work manufacturing	0	0	0	0
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	0	0
Machine shops	0	2	2	4
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	2	3	16
Electroplating, anodizing, and coloring metal	0	3	3	11
Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	1	1	3
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0

## APPENDIX

Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	0	0	1
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	1
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	1
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	1
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0



## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	0	0	0
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	1	1	2
Boat building	0	2	3	13
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	0	0	1
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	0	0	0
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	0	(0)	0
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	0	0	0
Jewelry and silverware manufacturing	0	0	0	1
Sporting and athletic goods manufacturing	0	0	0	1
Doll, toy, and game manufacturing	0	1	0	7
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	9	6	30
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	1	1	5
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4	10	23
Wholesale - Professional and commercial equipment and supplies	0	89	150	275
Wholesale - Household appliances and electrical and electronic goods	0	18	40	92
Wholesale - Machinery, equipment, and supplies	0	15	26	46
Wholesale - Other durable goods merchant wholesalers	0	22	34	73

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	7	19	57
Wholesale - Grocery and related product wholesalers	0	32	43	92
Wholesale - Petroleum and petroleum products	0	11	130	152
Wholesale - Other nondurable goods merchant wholesalers	0	29	58	118
Wholesale - Wholesale electronic markets and agents and brokers	0	16	8	10
Retail - Motor vehicle and parts dealers	0	40	55	83
Retail - Furniture and home furnishings stores	0	20	23	39
Retail - Electronics and appliance stores	0	19	20	33
Retail - Building material and garden equipment and supplies stores	0	32	51	75
Retail - Food and beverage stores	0	81	101	158
Retail - Health and personal care stores	0	36	40	61
Retail - Gasoline stores	0	28	37	67
Retail - Clothing and clothing accessories stores	0	31	40	82
Retail - Sporting goods, hobby, musical instrument and book stores	0	23	26	47
Retail - General merchandise stores	0	96	116	186
Retail - Miscellaneous store retailers	0	52	51	81
Retail - Nonstore retailers	0	63	187	312
Air transportation	0	93	167	303
Rail transportation	0	(0)	(0)	0
Water transportation	0	11	16	57
Truck transportation	0	80	99	187
Transit and ground passenger transportation	0	110	128	146
Pipeline transportation	0	2	66	67
Scenic and sightseeing transportation and support activities for transportation	0	62	69	149
Couriers and messengers	0	66	90	107
Warehousing and storage	0	40	45	87

## APPENDIX

Newspaper publishers	0	84	161	211
Periodical publishers	0	13	22	43
Book publishers	0	0	1	7
Directory, mailing list, and other publishers	0	4	16	26
Greeting card publishing	0	0	0	0
Software publishers	0	13,611	30,200	52,395
Motion picture and video industries	0	19	37	99
Sound recording industries	0	1	4	11
Radio and television broadcasting	0	432	283	1,279
Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	160	354	661
Wireless telecommunications carriers (except satellite)	0	57	207	534
Satellite, telecommunications resellers, and all other telecommunications	0	93	107	181
Data processing, hosting, and related services	0	20	62	137
News syndicates, libraries, archives and all other information services	0	9	29	37
Internet publishing and broadcasting and web search portals	0	30	139	296
Nondepository credit intermediation and related activities	0	25	34	57
Securities and commodity contracts intermediation and brokerage	0	36	36	53
Monetary authorities and depository credit intermediation	0	198	516	903
Other financial investment activities	0	27	35	125
Direct life insurance carriers	0	3	9	12
Insurance carriers, except direct life	0	21	103	183
Insurance agencies, brokerages, and related activities	0	37	62	135
Funds, trusts, and other financial vehicles	0	38	39	156
Other real estate	0	323	683	1,758
Tenant-occupied housing	0	44	478	526

## APPENDIX

Owner-occupied dwellings	0	0	1,331	1,682
Automotive equipment rental and leasing	0	30	119	150
General and consumer goods rental except video tapes and discs	0	27	29	43
Video tape and disc rental	0	6	8	12
Commercial and industrial machinery and equipment rental and leasing	0	40	93	127
Lessors of nonfinancial intangible assets	0	0	9	21
Legal services	0	169	248	410
Accounting, tax preparation, bookkeeping, and payroll services	0	197	265	387
Architectural, engineering, and related services	0	62	78	129
Specialized design services	0	13	14	17
Custom computer programming services	0	24	27	41
Computer systems design services	0	25	26	36
Other computer related services, including facilities management	0	43	54	122
Management consulting services	0	226	226	367
Environmental and other technical consulting services	0	187	173	242
Scientific research and development services	0	23	26	56
Advertising, public relations, and related services	0	279	398	814
Photographic services	0	19	16	22
Veterinary services	0	13	21	30
Marketing research and all other miscellaneous professional, scientific, and technical services	0	89	81	111
Management of companies and enterprises	0	656	783	1,221
Office administrative services	0	444	346	509
Facilities support services	0	62	96	171
Employment services	0	278	537	704
Business support services	0	47	46	69
Travel arrangement and reservation services	0	14	22	54
Investigation and security services	0	138	141	181
Services to buildings	0	122	126	185

## APPENDIX

Landscape and horticultural services	0	39	41	62
Other support services	0	101	125	211
Waste management and remediation services	0	38	69	108
Elementary and secondary schools	0	7	7	9
Junior colleges, colleges, universities, and professional schools	0	28	37	57
Other educational services	0	41	38	71
Offices of physicians	0	390	474	695
Offices of dentists	0	84	108	155
Offices of other health practitioners	0	137	132	163
Outpatient care centers	0	129	136	228
Medical and diagnostic laboratories	0	14	22	32
Home health care services	0	61	53	70
Other ambulatory health care services	0	33	37	50
Hospitals	0	656	779	1,313
Nursing and community care facilities	0	27	31	52
Residential mental retardation, mental health, substance abuse and other facilities	0	58	63	90
Individual and family services	0	141	137	179
Child day care services	0	51	61	78
Community food, housing, and other relief services, including rehabilitation services	0	52	61	121
Performing arts companies	0	11	16	32
Commercial Sports Except Racing	0	20	23	84
Racing and Track Operation	0	1	1	3
Independent artists, writers, and performers	0	33	37	52
Promoters of performing arts and sports and agents for public figures	0	9	19	43
Museums, historical sites, zoos, and parks	0	9	11	18
Amusement parks and arcades	0	2	3	4
Gambling industries (except casino hotels)	0	26	57	98
Other amusement and recreation industries	0	27	28	49

## APPENDIX

Fitness and recreational sports centers	0	17	21	33
Bowling centers	0	3	3	6
Hotels and motels, including casino hotels	0	14	24	40
Other accommodations	0	4	5	6
Full-service restaurants	0	156	223	359
Limited-service restaurants	0	94	135	272
All other food and drinking places	0	127	162	228
Automotive repair and maintenance, except car washes	0	145	139	213
Car washes	0	55	74	114
Electronic and precision equipment repair and maintenance	0	13	18	30
Commercial and industrial machinery and equipment repair and maintenance	0	95	95	148
Personal and household goods repair and maintenance	0	61	17	29
Personal care services	0	49	28	37
Death care services	0	2	2	3
Dry-cleaning and laundry services	0	6	6	9
Other personal services	0	42	29	39
Religious organizations	0	117	20	156
Grantmaking, giving, and social advocacy organizations	0	75	132	235
Business and professional associations	0	26	29	57
Labor and civic organizations	0	62	97	167
Private households	0	13	13	13
Postal service	0	60	60	65
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	5	7	28
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	23	20	34
Local government passenger transit	0	4	(7)	0
Local government electric utilities	0	16	26	52
Other local government enterprises	0	29	22	69

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 4. Arizona

**Table 375: Detailed NASA Impacts by Types of Impact, Arizona.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>5,041</i>	<i>325,320,426</i>	<i>513,200,471</i>	<i>971,010,401</i>
Oilseed farming	0	0	0	0
Grain farming	1	95,157	115,040	303,111
Vegetable and melon farming	3	200,762	224,254	475,050
Fruit farming	1	64,462	73,050	135,624
Tree nut farming	3	106,488	107,971	129,558
Greenhouse, nursery, and floriculture production	1	76,105	82,527	154,999
Tobacco farming	0	0	0	0
Cotton farming	0	23,062	23,993	46,511
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	7	128,956	116,461	244,329
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	6	252,961	348,711	1,056,270
Dairy cattle and milk production	2	128,718	152,031	838,574
Poultry and egg production	0	5,377	5,411	67,210



## APPENDIX

Animal production, except cattle and poultry and eggs	3	274,609	332,017	504,607
Forestry, forest products, and timber tract production	0	8,538	9,438	11,905
Commercial logging	0	19,754	22,377	36,810
Commercial fishing	0	5,180	13,783	15,197
Commercial hunting and trapping	0	10,398	35,127	39,216
Support activities for agriculture and forestry	13	520,994	520,016	615,985
Oil and gas extraction	3	4,624	5,310	850,939
Coal mining	0	47,689	66,735	117,576
Copper, nickel, lead, and zinc mining	6	979,653	3,299,257	6,393,315
Iron ore mining	0	0	0	0
Gold ore mining	0	24,421	26,092	39,819
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(4,288)	(696,764)	17,975
Other metal ore mining	0	15,360	15,544	30,010
Stone mining and quarrying	1	51,783	55,579	121,814
Sand and gravel mining	1	84,032	84,061	136,995
Other clay, ceramic, refractory minerals mining	0	2,948	2,833	7,551
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	32,338	34,370	51,464
Other nonmetallic minerals	0	27,675	23,992	40,112
Drilling oil and gas wells	0	26	30	194
Support activities for oil and gas operations	0	642	696	3,318
Metal mining services	0	3,323	4,481	49,268
Other nonmetallic minerals services	0	744	892	4,034
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	1	123,375	522,592	1,299,634
Electric power generation - Nuclear	0	56	138	298
Electric power generation - Solar	0	35,460	82,254	133,388
Electric power generation - Wind	0	1,365	10,355	15,703
Electric power generation - Geothermal	0	0	0	0

## APPENDIX

Electric power generation - Biomass	0	23	86	147
Electric power generation - All other	0	381	117	417
Electric power transmission and distribution	6	954,071	3,680,154	8,385,606
Natural gas distribution	1	166,641	514,070	1,132,059
Water, sewage and other systems	1	68,166	153,006	272,373
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	22	1,334,771	907,064	1,893,937
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	24	1,371,064	2,050,977	4,775,375
Maintenance and repair construction of residential structures	8	418,028	702,445	1,614,374
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1,111	844	1,904
Dog and cat food manufacturing	0	14,689	57,664	212,524
Other animal food manufacturing	1	45,269	85,001	639,407
Flour milling	0	4,551	9,198	79,445
Rice milling	0	0	0	0
Malt manufacturing	0	1,719	3,445	45,034
Wet corn milling	0	0	0	0

## APPENDIX

Soybean and other oilseed processing	0	2,396	13,242	125,832
Fats and oils refining and blending	0	3,412	6,880	68,456
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	543	1,244	8,272
Nonchocolate confectionery manufacturing	0	1,267	1,806	13,444
Chocolate and confectionery manufacturing from cacao beans	0	464	1,036	8,348
Confectionery manufacturing from purchased chocolate	0	1,310	1,722	20,460
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	1,793	2,673	16,091
Canned fruits and vegetables manufacturing	0	9,609	17,412	105,962
Canned specialties	0	8,932	22,369	127,521
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	2,454	3,534	37,621
Dry, condensed, and evaporated dairy product manufacturing	0	42,680	105,459	621,714
Fluid milk manufacturing	1	96,032	154,694	942,726
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	5,568	8,827	42,819
Frozen cakes and other pastries manufacturing	2	54,133	79,027	147,503
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	2	120,883	167,230	1,497,706
Meat processed from carcasses	0	13,554	17,058	114,083
Rendering and meat byproduct processing	0	5,972	6,536	32,699
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	5	212,204	289,781	743,980
Cookie and cracker manufacturing	0	25,890	36,485	139,589
Dry pasta, mixes, and dough manufacturing	0	4,409	10,488	53,244
Tortilla manufacturing	1	23,871	29,131	120,073
Roasted nuts and peanut butter manufacturing	0	14,426	21,933	91,177

## APPENDIX

Other snack food manufacturing	1	64,191	140,008	584,479
Coffee and tea manufacturing	0	2,349	4,055	39,607
Flavoring syrup and concentrate manufacturing	0	2,100	14,107	73,478
Mayonnaise, dressing, and sauce manufacturing	0	195	359	4,027
Spice and extract manufacturing	0	105	134	4,012
All other food manufacturing	2	62,556	85,610	503,379
Bottled and canned soft drinks & water	2	139,135	289,901	1,465,439
Manufactured ice	0	8,409	3,692	24,305
Breweries	1	14,555	42,247	194,208
Wineries	0	1,694	3,111	16,532
Distilleries	0	717	6,408	23,519
Tobacco product manufacturing	0	5,042	138,493	318,753
Fiber, yarn, and thread mills	0	4,444	10,426	23,011
Broadwoven fabric mills	0	265	614	2,901
Narrow fabric mills and schiffli machine embroidery	0	79	105	542
Nonwoven fabric mills	0	4,834	17,193	34,528
Knit fabric mills	0	358	721	1,629
Textile and fabric finishing mills	0	813	1,497	3,839
Fabric coating mills	0	2,050	4,064	9,458
Carpet and rug mills	0	6,616	21,446	63,161
Curtain and linen mills	0	2,903	6,880	18,583
Textile bag and canvas mills	0	3,521	6,235	14,657
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	6,409	10,829	25,973
Hosiery and sock mills	0	492	886	2,276
Other apparel knitting mills	0	362	691	1,841
Cut and sew apparel contractors	0	3,839	4,228	11,369
Mens and boys cut and sew apparel manufacturing	0	612	977	7,487
Womens and girls cut and sew apparel manufacturing	0	342	593	5,165
Other cut and sew apparel manufacturing	0	344	626	3,708
Apparel accessories and other apparel manufacturing	0	247	500	3,152
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	1,794	1,908	7,466

## APPENDIX

Other leather and allied product manufacturing	0	765	789	3,528
Sawmills	0	10,407	11,920	63,666
Wood preservation	0	1,651	2,352	15,713
Veneer and plywood manufacturing	0	398	432	1,838
Engineered wood member and truss manufacturing	0	18,931	21,464	75,619
Reconstituted wood product manufacturing	0	2,710	4,291	23,359
Wood windows and door manufacturing	1	92,979	104,828	321,439
Cut stock, resawing lumber, and planing	0	2,962	3,457	11,943
Other millwork, including flooring	0	27,110	29,553	89,078
Wood container and pallet manufacturing	1	32,437	33,946	104,762
Manufactured home (mobile home) manufacturing	0	305	378	1,053
Prefabricated wood building manufacturing	0	12,905	13,807	42,940
All other miscellaneous wood product manufacturing	1	28,066	29,259	92,271
Pulp mills	0	0	0	0
Paper mills	0	18,938	29,078	131,573
Paperboard mills	0	3,492	4,710	16,163
Paperboard container manufacturing	1	72,681	90,666	415,671
Paper bag and coated and treated paper manufacturing	1	54,395	74,936	286,392
Stationery product manufacturing	0	4,652	5,461	21,305
Sanitary paper product manufacturing	0	37,293	74,705	309,143
All other converted paper product manufacturing	0	16,177	20,636	80,485
Printing	9	479,429	664,277	1,457,719
Support activities for printing	1	55,087	77,979	122,844
Petroleum refineries	0	496	30,074	275,639
Asphalt paving mixture and block manufacturing	0	4,641	14,116	52,420
Asphalt shingle and coating materials manufacturing	0	1,900	15,649	30,951
Petroleum lubricating oil and grease manufacturing	0	(158)	882	16,205

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	227	989	13,710
Industrial gas manufacturing	0	39,108	61,433	196,046
Synthetic dye and pigment manufacturing	0	5,398	7,859	40,236
Other basic inorganic chemical manufacturing	0	16,043	23,374	122,848
Other basic organic chemical manufacturing	0	25,589	37,634	434,965
Plastics material and resin manufacturing	0	3,021	3,975	49,994
Synthetic rubber manufacturing	0	2,831	3,571	30,512
Artificial and synthetic fibers and filaments manufacturing	0	2,959	3,806	41,931
Nitrogenous fertilizer manufacturing	0	19,427	28,005	130,066
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	7,785	9,527	51,593
Pesticide and other agricultural chemical manufacturing	0	12,987	25,376	196,990
Medicinal and botanical manufacturing	0	5,627	6,852	39,845
Pharmaceutical preparation manufacturing	1	47,553	106,318	603,683
In-vitro diagnostic substance manufacturing	0	5,877	7,047	21,452
Biological product (except diagnostic) manufacturing	0	45	52	421
Paint and coating manufacturing	0	14,240	17,536	99,448
Adhesive manufacturing	0	7,519	8,530	45,230
Soap and other detergent manufacturing	0	35,869	54,313	372,536
Polish and other sanitation good manufacturing	0	12,590	13,191	73,910
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	26,774	39,048	214,696
Printing ink manufacturing	0	1,483	1,555	8,384
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	796	859	5,965
Photographic film and chemical manufacturing	1	80,492	116,231	532,127
Other miscellaneous chemical product manufacturing	0	18,914	21,494	109,899

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	9,957	21,366	82,618
Unlaminated plastics profile shape manufacturing	0	10,022	31,667	93,324
Plastics pipe and pipe fitting manufacturing	0	9,256	31,721	70,725
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	6,478	16,099	34,831
Polystyrene foam product manufacturing	1	26,806	58,631	182,760
Urethane and other foam product (except polystyrene) manufacturing	0	8,523	17,721	53,002
Plastics bottle manufacturing	0	14,069	30,433	98,572
Other plastics product manufacturing	3	139,435	258,587	755,880
Tire manufacturing	0	5,918	9,823	42,070
Rubber and plastics hoses and belting manufacturing	0	4,285	8,840	19,912
Other rubber product manufacturing	1	42,498	78,481	236,167
Pottery, ceramics, and plumbing fixture manufacturing	0	2,495	3,721	12,592
Brick, tile, and other structural clay product manufacturing	0	8,596	17,005	42,286
Flat glass manufacturing	0	(298)	(154)	3,767
Other pressed and blown glass and glassware manufacturing	1	44,224	69,872	188,304
Glass container manufacturing	0	308	900	7,881
Glass product manufacturing made of purchased glass	1	36,679	67,827	186,021
Cement manufacturing	0	19,115	49,833	147,686
Ready-mix concrete manufacturing	1	96,652	172,520	540,473
Concrete block and brick manufacturing	0	25,963	50,981	124,504
Concrete pipe manufacturing	0	4,178	7,281	19,878
Other concrete product manufacturing	0	30,638	46,923	116,612
Lime manufacturing	0	3,531	9,348	23,764
Gypsum product manufacturing	0	12,667	36,839	97,168
Abrasive product manufacturing	0	8,477	30,062	50,488
Cut stone and stone product manufacturing	1	21,703	26,482	67,915

## APPENDIX

Ground or treated mineral and earth manufacturing	0	13,913	45,204	118,130
Mineral wool manufacturing	0	2,669	7,643	29,247
Miscellaneous nonmetallic mineral products manufacturing	0	5,025	13,575	35,829
Iron and steel mills and ferroalloy manufacturing	1	95,046	148,480	947,313
Iron, steel pipe and tube manufacturing from purchased steel	0	3,978	5,635	25,324
Rolled steel shape manufacturing	0	5,556	10,539	57,725
Steel wire drawing	0	2,607	3,640	16,807
Alumina refining and primary aluminum production	0	6,386	12,438	85,631
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	13,316	23,136	106,129
Other aluminum rolling, drawing and extruding	0	10,024	13,618	60,860
Nonferrous metal (exc aluminum) smelting and refining	0	14,605	51,173	145,656
Copper rolling, drawing, extruding and alloying	0	3,181	4,292	38,424
Nonferrous metal, except copper and aluminum, shaping	0	3,007	3,770	12,816
Secondary processing of other nonferrous metals	0	649	1,900	10,138
Ferrous metal foundries	0	38,333	61,029	135,197
Nonferrous metal foundries	1	45,862	65,174	167,841
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	28,823	38,980	121,600
Iron and steel forging	0	2,653	3,553	16,159
Nonferrous forging	0	2,209	2,698	9,195
Cutlery, utensil, pot, and pan manufacturing	0	1,856	4,774	18,028
Handtool manufacturing	0	2,355	3,573	9,343
Prefabricated metal buildings and components manufacturing	0	25,845	34,115	75,021
Fabricated structural metal manufacturing	1	47,463	66,824	242,431
Plate work manufacturing	0	13,576	14,405	45,640
Metal window and door manufacturing	1	47,735	68,261	190,409



## APPENDIX

Sheet metal work manufacturing	1	74,783	92,618	246,134
Ornamental and architectural metal work manufacturing	1	37,489	47,891	146,368
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	1,092	1,308	4,043
Metal cans manufacturing	0	13,076	25,768	119,802
Metal barrels, drums and pails manufacturing	0	176	234	1,892
Hardware manufacturing	0	2,077	3,243	12,749
Spring and wire product manufacturing	1	31,139	41,112	148,223
Machine shops	3	153,232	174,179	369,937
Turned product and screw, nut, and bolt manufacturing	0	15,090	20,012	61,325
Metal heat treating	0	5,718	8,228	22,075
Metal coating and nonprecious engraving	0	18,814	30,343	87,550
Electroplating, anodizing, and coloring metal	0	13,728	15,321	38,988
Valve and fittings, other than plumbing, manufacturing	0	43,640	64,407	157,232
Plumbing fixture fitting and trim manufacturing	0	5,352	13,689	31,655
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	8,060	17,388	39,667
Ammunition, except for small arms, manufacturing	0	649	816	2,169
Small arms, ordnance, and accessories manufacturing	0	54,453	113,551	199,286
Fabricated pipe and pipe fitting manufacturing	0	1,716	1,986	5,939
Other fabricated metal manufacturing	0	21,289	27,226	84,394
Farm machinery and equipment manufacturing	0	663	863	5,684
Lawn and garden equipment manufacturing	0	10,251	15,979	68,338
Construction machinery manufacturing	0	2,540	4,197	9,496
Mining machinery and equipment manufacturing	0	622	719	2,578

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	32	34	152
Semiconductor machinery manufacturing	0	4,112	4,507	13,022
Food product machinery manufacturing	0	6	7	33
Sawmill, woodworking, and paper machinery	0	256	277	1,117
Printing machinery and equipment manufacturing	0	402	440	1,394
All other industrial machinery manufacturing	0	371	438	1,491
Optical instrument and lens manufacturing	0	437	591	1,751
Photographic and photocopying equipment manufacturing	0	379	494	1,685
Other commercial service industry machinery manufacturing	0	3,109	4,895	18,066
Air purification and ventilation equipment manufacturing	0	2,898	3,772	9,395
Heating equipment (except warm air furnaces) manufacturing	0	1,586	1,989	6,707
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	14,146	22,588	87,115
Industrial mold manufacturing	0	2,486	2,700	5,679
Special tool, die, jig, and fixture manufacturing	0	1,242	1,430	2,936
Cutting tool and machine tool accessory manufacturing	0	354	376	1,188
Machine tool manufacturing	0	1,778	1,920	5,494
Rolling mill and other metalworking machinery manufacturing	0	412	473	1,311
Turbine and turbine generator set units manufacturing	0	120	149	767
Speed changer, industrial high-speed drive, and gear manufacturing	0	713	930	3,378
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	7	753,625	1,468,610	6,713,724
Pump and pumping equipment manufacturing	0	525	789	2,851

## APPENDIX

Air and gas compressor manufacturing	0	34	46	198
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	224	236	847
Overhead cranes, hoists, and monorail systems manufacturing	0	53	85	395
Industrial truck, trailer, and stacker manufacturing	0	85	100	804
Power-driven handtool manufacturing	0	34	62	224
Welding and soldering equipment manufacturing	0	293	350	1,507
Packaging machinery manufacturing	0	267	345	628
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	2,260	2,790	5,031
Fluid power pump and motor manufacturing	0	103	137	362
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	943	1,111	3,779
Electronic computer manufacturing	0	8,533	21,681	54,542
Computer storage device manufacturing	0	158	538	2,348
Computer terminals and other computer peripheral equipment manufacturing	1	60,926	142,493	483,193
Telephone apparatus manufacturing	0	(25)	85	1,233
Broadcast and wireless communications equipment manufacturing	0	501	802	2,262
Other communications equipment manufacturing	0	2,193	4,198	13,029
Audio and video equipment manufacturing	0	1,004	2,192	11,296
Printed circuit assembly (electronic assembly) manufacturing	0	7,613	12,841	38,365
Bare printed circuit board manufacturing	0	6,148	8,566	23,911

## APPENDIX

Semiconductor and related device manufacturing	1	205,067	391,069	953,489
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	2,162	3,475	10,834
Electronic connector manufacturing	1	48,202	77,969	199,212
Other electronic component manufacturing	0	9,395	11,129	29,714
Electromedical and electrotherapeutic apparatus manufacturing	0	644	1,539	3,974
Search, detection, and navigation instruments manufacturing	0	1,020	1,824	3,615
Automatic environmental control manufacturing	0	45,717	63,202	115,081
Industrial process variable instruments manufacturing	0	1,467	2,512	7,393
Totalizing fluid meter and counting device manufacturing	0	4,178	9,860	19,996
Electricity and signal testing instruments manufacturing	0	914	1,555	5,510
Analytical laboratory instrument manufacturing	1	66,997	141,746	360,756
Irradiation apparatus manufacturing	0	318	687	1,385
Watch, clock, and other measuring and controlling device manufacturing	0	118	316	1,315
Blank magnetic and optical recording media manufacturing	0	684	2,251	6,120
Software and other prerecorded and record reproducing	0	(186)	342	4,271
Electric lamp bulb and part manufacturing	0	493	655	3,452
Lighting fixture manufacturing	0	18,808	26,952	76,229
Small electrical appliance manufacturing	0	412	593	2,067
Household cooking appliance manufacturing	0	2,336	3,992	17,895
Household refrigerator and home freezer manufacturing	0	2,312	4,323	15,940
Household laundry equipment manufacturing	0	3,790	6,102	37,942

## APPENDIX

Other major household appliance manufacturing	0	1,355	2,099	8,395
Power, distribution, and specialty transformer manufacturing	0	719	1,017	2,667
Motor and generator manufacturing	0	3,074	4,480	14,558
Switchgear and switchboard apparatus manufacturing	0	2,763	4,232	12,944
Relay and industrial control manufacturing	0	2,480	3,155	9,773
Storage battery manufacturing	0	8,820	13,702	42,888
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	3,579	5,995	23,566
Wiring device manufacturing	0	5,707	9,819	28,281
Carbon and graphite product manufacturing	0	9,643	12,687	38,533
All other miscellaneous electrical equipment and component manufacturing	1	213,085	237,125	493,003
Automobile manufacturing	0	2,674	27,747	65,062
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	305	1,543	3,219
Motor vehicle body manufacturing	0	855	1,723	5,869
Truck trailer manufacturing	0	77	148	515
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	14,133	17,739	78,411
Motor vehicle gasoline engine and engine parts manufacturing	0	10,337	24,039	69,863
Motor vehicle electrical and electronic equipment manufacturing	0	30,150	64,557	234,817
Motor vehicle transmission and power train parts manufacturing	0	8,085	21,355	73,561
Motor vehicle seating and interior trim manufacturing	0	2,721	6,190	19,613
Motor vehicle metal stamping	0	898	2,156	11,178
Other motor vehicle parts manufacturing	1	100,514	285,281	884,193
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	8,966	25,842	77,314

## APPENDIX

Aircraft manufacturing	0	2,177	5,661	13,990
Aircraft engine and engine parts manufacturing	0	12,826	38,014	68,419
Other aircraft parts and auxiliary equipment manufacturing	0	27,398	50,799	106,702
Guided missile and space vehicle manufacturing	0	32,589	49,101	114,155
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	267	408	827
Railroad rolling stock manufacturing	0	12	22	120
Ship building and repairing	0	73	101	278
Boat building	0	12,003	18,198	70,779
Motorcycle, bicycle, and parts manufacturing	0	1,819	7,975	21,477
Military armored vehicle, tank, and tank component manufacturing	0	13,124	36,612	111,461
All other transportation equipment manufacturing	0	8,613	19,536	69,112
Wood kitchen cabinet and countertop manufacturing	1	57,711	82,424	183,136
Upholstered household furniture manufacturing	0	4,565	6,120	21,611
Nonupholstered wood household furniture manufacturing	1	26,747	30,900	86,681
Other household nonupholstered furniture manufacturing	0	3,641	5,489	19,588
Institutional furniture manufacturing	0	8,622	9,421	29,966
Wood office furniture manufacturing	0	1,509	2,044	6,567
Custom architectural woodwork and millwork	0	1,379	1,339	4,154
Office furniture, except wood, manufacturing	1	71,554	124,451	400,434
Showcase, partition, shelving, and locker manufacturing	0	2,914	4,025	11,908
Mattress manufacturing	0	14,450	31,689	103,309
Blind and shade manufacturing	0	3,559	3,729	13,405
Surgical and medical instrument manufacturing	0	19,595	36,886	94,982
Surgical appliance and supplies manufacturing	1	59,399	110,824	244,756

## APPENDIX

Dental equipment and supplies manufacturing	0	8,443	15,540	39,138
Ophthalmic goods manufacturing	0	1,833	3,594	9,519
Dental laboratories	0	12,278	11,668	22,337
Jewelry and silverware manufacturing	0	7,951	13,540	47,401
Sporting and athletic goods manufacturing	0	26,840	36,603	110,108
Doll, toy, and game manufacturing	0	1,652	3,209	21,005
Office supplies (except paper) manufacturing	0	1,937	2,678	13,124
Sign manufacturing	1	32,405	25,134	97,101
Gasket, packing, and sealing device manufacturing	0	3,879	4,997	19,422
Musical instrument manufacturing	0	675	713	3,627
Fasteners, buttons, needles, and pins manufacturing	0	4,834	6,153	21,318
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	4,572	5,471	14,898
All other miscellaneous manufacturing	1	23,217	28,569	91,910
Wholesale - Motor vehicle and motor vehicle parts and supplies	3	239,413	588,205	1,291,975
Wholesale - Professional and commercial equipment and supplies	11	1,327,963	2,328,784	3,835,594
Wholesale - Household appliances and electrical and electronic goods	5	519,140	1,243,227	2,365,802
Wholesale - Machinery, equipment, and supplies	7	690,889	1,258,747	2,086,337
Wholesale - Other durable goods merchant wholesalers	15	1,091,993	1,789,287	3,492,418
Wholesale - Drugs and druggists' sundries	5	675,014	1,963,690	4,145,726
Wholesale - Grocery and related product wholesalers	12	946,573	1,313,754	2,447,638
Wholesale - Petroleum and petroleum products	1	104,929	1,606,932	1,805,317
Wholesale - Other nondurable goods merchant wholesalers	17	1,335,346	2,890,249	5,280,896
Wholesale - Wholesale electronic markets and agents and brokers	10	1,057,036	561,723	643,054
Retail - Motor vehicle and parts dealers	17	909,509	1,511,521	2,170,737

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Retail - Furniture and home furnishings stores	10	590,987	755,540	1,107,651
Retail - Electronics and appliance stores	11	648,685	668,345	1,077,792
Retail - Building material and garden equipment and supplies stores	15	606,028	1,146,825	1,668,971
Retail - Food and beverage stores	47	1,579,203	2,250,235	3,608,765
Retail - Health and personal care stores	24	1,044,249	1,287,705	1,950,537
Retail - Gasoline stores	14	504,254	908,408	1,599,500
Retail - Clothing and clothing accessories stores	23	552,336	964,435	1,995,198
Retail - Sporting goods, hobby, musical instrument and book stores	15	380,148	532,253	862,184
Retail - General merchandise stores	50	1,550,309	2,366,220	3,722,409
Retail - Miscellaneous store retailers	29	877,818	1,014,366	1,547,294
Retail - Nonstore retailers	31	1,310,896	3,690,337	5,849,398
Air transportation	12	1,198,125	2,904,614	4,387,194
Rail transportation	2	252,613	708,817	1,142,767
Water transportation	0	(19)	14	3,316
Truck transportation	27	1,724,394	2,172,253	4,609,131
Transit and ground passenger transportation	42	868,205	1,161,567	1,773,817
Pipeline transportation	0	92,060	223,459	299,963
Scenic and sightseeing transportation and support activities for transportation	28	2,187,535	2,425,567	4,762,264
Couriers and messengers	17	649,356	867,438	1,682,416
Warehousing and storage	24	1,109,935	1,244,854	2,624,776
Newspaper publishers	4	211,618	348,018	459,918
Periodical publishers	2	138,736	213,335	387,474
Book publishers	1	46,353	154,322	293,463
Directory, mailing list, and other publishers	1	25,831	86,935	160,645
Greeting card publishing	0	642	2,541	4,682
Software publishers	8	873,074	2,249,550	2,789,066
Motion picture and video industries	9	286,206	495,960	1,672,497
Sound recording industries	1	26,364	95,020	189,706
Radio and television broadcasting	6	2,012,560	1,761,308	3,087,028



## APPENDIX

Cable and other subscription programming	1	339,282	1,603,013	3,331,090
Wired telecommunications carriers	8	805,080	1,661,569	3,739,084
Wireless telecommunications carriers (except satellite)	4	357,649	1,530,028	5,061,439
Satellite, telecommunications resellers, and all other telecommunications	3	366,437	424,911	1,053,726
Data processing, hosting, and related services	15	1,491,782	3,270,519	6,628,249
News syndicates, libraries, archives and all other information services	1	91,330	147,002	242,792
Internet publishing and broadcasting and web search portals	7	687,640	1,839,894	6,307,404
Nondepository credit intermediation and related activities	30	2,569,112	3,415,237	5,840,793
Securities and commodity contracts intermediation and brokerage	20	2,757,179	2,783,148	5,488,807
Monetary authorities and depository credit intermediation	63	5,737,946	13,177,010	22,781,535
Other financial investment activities	54	1,393,643	1,742,113	6,242,829
Direct life insurance carriers	6	709,226	1,301,510	2,024,843
Insurance carriers, except direct life	20	1,908,140	5,551,823	13,511,157
Insurance agencies, brokerages, and related activities	59	3,776,590	5,391,617	13,257,607
Funds, trusts, and other financial vehicles	9	355,549	326,904	2,732,835
Other real estate	330	7,713,262	26,409,840	64,423,881
Tenant-occupied housing	13	297,505	5,444,624	5,967,446
Owner-occupied dwellings	0	0	21,253,044	26,852,972
Automotive equipment rental and leasing	7	354,752	1,162,912	1,768,919
General and consumer goods rental except video tapes and discs	6	431,463	552,613	830,036
Video tape and disc rental	2	83,122	133,630	213,337
Commercial and industrial machinery and equipment rental and leasing	7	685,823	1,404,775	2,173,864
Lessors of nonfinancial intangible assets	1	93,005	1,925,251	2,403,762

## APPENDIX

Legal services	78	6,813,660	10,433,714	15,712,066
Accounting, tax preparation, bookkeeping, and payroll services	41	2,521,275	3,586,536	5,196,720
Architectural, engineering, and related services	45	3,808,042	4,655,309	8,246,745
Specialized design services	7	342,481	363,856	487,572
Custom computer programming services	10	832,466	956,097	1,447,133
Computer systems design services	13	1,283,786	1,353,300	1,841,259
Other computer related services, including facilities management	10	883,315	1,287,935	2,543,429
Management consulting services	133	9,911,478	9,832,408	16,004,548
Environmental and other technical consulting services	13	882,879	779,603	1,195,498
Scientific research and development services	1,388	129,184,190	191,816,380	367,314,810
Advertising, public relations, and related services	24	1,642,667	2,336,056	4,215,807
Photographic services	7	260,866	124,134	261,336
Veterinary services	5	243,724	367,963	557,479
Marketing research and all other miscellaneous professional, scientific, and technical services	114	4,898,606	4,447,898	7,444,869
Management of companies and enterprises	87	7,346,970	8,595,447	14,118,905
Office administrative services	39	2,807,014	980,550	2,429,574
Facilities support services	5	245,657	334,536	742,178
Employment services	191	8,756,035	13,995,662	20,912,297
Business support services	50	2,139,120	1,831,184	3,271,123
Travel arrangement and reservation services	8	575,652	795,576	1,679,139
Investigation and security services	25	958,878	984,948	1,440,389
Services to buildings	73	2,140,336	2,232,978	3,559,425
Landscape and horticultural services	51	1,723,817	1,831,755	3,037,433
Other support services	11	461,323	584,084	1,176,942
Waste management and remediation services	8	600,655	1,204,763	1,949,447
Elementary and secondary schools	19	781,952	743,090	915,817
Junior colleges, colleges, universities, and professional schools	13	750,375	1,139,531	1,511,308
Other educational services	21	712,283	691,276	1,185,794
Offices of physicians	51	5,489,657	6,555,818	9,578,147
Offices of dentists	18	1,134,643	1,442,290	2,226,488

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Offices of other health practitioners	25	1,427,020	1,343,747	1,885,518
Outpatient care centers	18	1,303,269	1,370,322	2,451,982
Medical and diagnostic laboratories	6	420,380	667,691	1,083,438
Home health care services	34	1,445,907	1,102,043	1,536,926
Other ambulatory health care services	7	442,268	490,538	770,157
Hospitals	106	8,712,023	10,301,176	19,048,296
Nursing and community care facilities	32	1,226,357	1,458,866	2,529,415
Residential mental retardation, mental health, substance abuse and other facilities	14	552,392	597,616	915,754
Individual and family services	43	1,302,837	1,243,845	1,795,288
Child day care services	24	572,703	706,132	974,405
Community food, housing, and other relief services, including rehabilitation services	8	303,382	353,633	745,906
Performing arts companies	5	177,623	285,265	538,022
Commercial Sports Except Racing	6	678,878	717,342	955,830
Racing and Track Operation	1	38,840	79,837	131,178
Independent artists, writers, and performers	32	933,410	1,050,755	1,229,489
Promoters of performing arts and sports and agents for public figures	7	219,143	532,648	1,138,689
Museums, historical sites, zoos, and parks	2	92,445	116,507	198,277
Amusement parks and arcades	1	29,081	122,518	153,059
Gambling industries (except casino hotels)	7	270,169	559,910	912,964
Other amusement and recreation industries	13	362,206	451,190	754,596
Fitness and recreational sports centers	11	218,181	411,646	596,205
Bowling centers	2	41,047	64,302	105,862
Hotels and motels, including casino hotels	16	616,600	1,169,574	1,835,047
Other accommodations	3	124,746	170,752	230,089
Full-service restaurants	115	3,141,124	4,688,931	7,844,636
Limited-service restaurants	102	2,278,155	3,673,881	7,711,285
All other food and drinking places	69	2,069,559	2,847,113	4,270,572
Automotive repair and maintenance, except car washes	38	2,004,054	2,489,132	3,662,410
Car washes	21	1,028,020	1,612,780	2,426,465

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Electronic and precision equipment repair and maintenance	8	594,377	887,568	1,383,910
Commercial and industrial machinery and equipment repair and maintenance	14	1,095,024	1,275,965	1,970,093
Personal and household goods repair and maintenance	13	713,163	601,731	780,106
Personal care services	31	897,472	679,697	900,899
Death care services	1	59,696	73,747	117,210
Dry-cleaning and laundry services	6	235,396	253,281	369,527
Other personal services	29	952,427	703,296	959,374
Religious organizations	29	1,524,433	716,150	2,645,642
Grantmaking, giving, and social advocacy organizations	6	342,576	985,738	1,528,865
Business and professional associations	5	312,964	459,768	849,884
Labor and civic organizations	11	323,268	754,522	1,308,936
Private households	15	289,944	289,944	289,944
Postal service	11	974,998	975,625	1,078,072
Federal electric utilities	0	0	0	0
Other federal government enterprises	52	1,608,853	1,111,052	9,473,756
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	6,461	(2,975)	7,918
Local government electric utilities	4	554,449	1,517,750	2,547,436
Other local government enterprises	24	1,853,841	3,998,302	7,849,552
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	23	3,675,750	4,428,797	7,645,172

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 376: Detailed M2M Program Impacts by Types of Impact, Arizona.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>176</i>	<i>12,804,320</i>	<i>20,413,352</i>	<i>37,899,843</i>
Oilseed farming	0	0	0	0
Grain farming	0	2,910	3,897	9,430
Vegetable and melon farming	0	7,792	9,125	18,237
Fruit farming	0	3,227	3,697	6,477
Tree nut farming	0	8,375	8,465	10,030
Greenhouse, nursery, and floriculture production	0	2,377	2,663	4,888
Tobacco farming	0	0	0	0
Cotton farming	0	684	710	1,356
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	3,944	3,703	7,550
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	8,700	11,581	31,340
Dairy cattle and milk production	0	5,614	6,838	32,999
Poultry and egg production	0	168	173	2,104
Animal production, except cattle and poultry and eggs	0	6,467	8,698	13,582
Forestry, forest products, and timber tract production	0	361	397	480
Commercial logging	0	1,518	1,717	2,647
Commercial fishing	0	249	497	553
Commercial hunting and trapping	0	380	1,210	1,197
Support activities for agriculture and forestry	0	17,399	17,201	20,330
Oil and gas extraction	0	105	158	24,579
Coal mining	0	1,125	1,375	2,686
Copper, nickel, lead, and zinc mining	0	20,495	48,395	98,590
Iron ore mining	0	0	0	0
Gold ore mining	0	540	482	798

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(87)	1,828	318
Other metal ore mining	0	463	367	763
Stone mining and quarrying	0	3,240	1,727	3,885
Sand and gravel mining	0	6,395	3,170	4,319
Other clay, ceramic, refractory minerals mining	0	175	130	353
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	1,587	1,151	1,575
Other nonmetallic minerals	0	1,949	903	1,397
Drilling oil and gas wells	0	1	1	6
Support activities for oil and gas operations	0	13	15	69
Metal mining services	0	83	144	1,551
Other nonmetallic minerals services	0	16	25	109
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	4,788	19,313	46,043
Electric power generation - Nuclear	0	2	5	11
Electric power generation - Solar	0	1,159	2,582	4,051
Electric power generation - Wind	0	43	316	449
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	2	5	8
Electric power generation - All other	0	29	7	21
Electric power transmission and distribution	0	32,456	127,556	281,776
Natural gas distribution	0	6,652	21,225	41,073
Water, sewage and other systems	0	3,160	6,168	9,860
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	43,386	65,184	147,420
Maintenance and repair construction of residential structures	0	15,799	26,722	59,407
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	39	29	65
Dog and cat food manufacturing	0	478	1,947	6,887
Other animal food manufacturing	0	1,631	3,205	22,902
Flour milling	0	134	274	2,403
Rice milling	0	0	0	0
Malt manufacturing	0	54	119	1,181
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	121	679	6,340
Fats and oils refining and blending	0	162	338	3,091
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	27	62	407
Nonchocolate confectionery manufacturing	0	57	80	547
Chocolate and confectionery manufacturing from cacao beans	0	35	78	583
Confectionery manufacturing from purchased chocolate	0	55	73	806
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	75	110	626
Canned fruits and vegetables manufacturing	0	443	805	4,828

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Canned specialties	0	313	770	4,426
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	95	137	1,488
Dry, condensed, and evaporated dairy product manufacturing	0	2,049	5,198	27,354
Fluid milk manufacturing	0	3,724	6,140	35,834
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	206	338	1,449
Frozen cakes and other pastries manufacturing	0	2,169	3,128	5,703
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	3,533	4,968	43,547
Meat processed from carcasses	0	518	661	4,279
Rendering and meat byproduct processing	0	270	292	1,454
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	8,253	11,288	28,401
Cookie and cracker manufacturing	0	1,088	1,630	5,664
Dry pasta, mixes, and dough manufacturing	0	193	448	2,337
Tortilla manufacturing	0	877	1,063	4,290
Roasted nuts and peanut butter manufacturing	0	663	1,124	4,069
Other snack food manufacturing	0	2,554	5,597	22,500
Coffee and tea manufacturing	0	91	161	1,483
Flavoring syrup and concentrate manufacturing	0	115	730	3,899
Mayonnaise, dressing, and sauce manufacturing	0	8	14	154
Spice and extract manufacturing	0	6	7	199
All other food manufacturing	0	2,972	4,084	22,638
Bottled and canned soft drinks & water	0	4,869	10,541	50,956
Manufactured ice	0	307	149	813
Breweries	0	523	1,567	6,945
Wineries	0	140	257	1,332
Distilleries	0	29	273	902
Tobacco product manufacturing	0	177	6,420	12,882
Fiber, yarn, and thread mills	0	157	408	804
Broadwoven fabric mills	0	12	32	146



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Narrow fabric mills and schiffli machine embroidery	0	5	6	31
Nonwoven fabric mills	0	283	1,075	1,945
Knit fabric mills	0	48	100	224
Textile and fabric finishing mills	0	77	141	349
Fabric coating mills	0	219	422	897
Carpet and rug mills	0	331	1,155	2,907
Curtain and linen mills	0	132	328	826
Textile bag and canvas mills	0	134	241	545
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	290	499	1,126
Hosiery and sock mills	0	19	36	81
Other apparel knitting mills	0	20	36	88
Cut and sew apparel contractors	0	209	228	582
Mens and boys cut and sew apparel manufacturing	0	36	58	383
Womens and girls cut and sew apparel manufacturing	0	26	45	342
Other cut and sew apparel manufacturing	0	22	39	204
Apparel accessories and other apparel manufacturing	0	15	31	169
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	78	85	312
Other leather and allied product manufacturing	0	43	45	183
Sawmills	0	847	1,025	5,109
Wood preservation	0	121	193	1,182
Veneer and plywood manufacturing	0	36	40	171
Engineered wood member and truss manufacturing	0	1,684	1,997	6,793
Reconstituted wood product manufacturing	0	244	415	2,462
Wood windows and door manufacturing	0	5,745	6,713	19,979
Cut stock, resawing lumber, and planing	0	252	318	1,005
Other millwork, including flooring	0	1,803	2,069	5,805
Wood container and pallet manufacturing	0	1,196	1,287	3,877
Manufactured home (mobile home) manufacturing	0	8	10	27

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Prefabricated wood building manufacturing	0	367	399	1,185
All other miscellaneous wood product manufacturing	0	4,326	4,624	13,265
Pulp mills	0	0	0	0
Paper mills	0	602	807	3,998
Paperboard mills	0	120	149	542
Paperboard container manufacturing	0	3,624	4,366	19,904
Paper bag and coated and treated paper manufacturing	0	2,127	2,667	10,553
Stationery product manufacturing	0	222	241	847
Sanitary paper product manufacturing	0	1,231	2,220	9,691
All other converted paper product manufacturing	0	638	769	3,025
Printing	0	18,419	25,448	53,591
Support activities for printing	0	2,471	3,424	5,342
Petroleum refineries	0	20	1,084	10,123
Asphalt paving mixture and block manufacturing	0	255	719	2,527
Asphalt shingle and coating materials manufacturing	0	58	432	878
Petroleum lubricating oil and grease manufacturing	0	(6)	34	619
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	7	28	395
Industrial gas manufacturing	0	1,387	2,310	7,083
Synthetic dye and pigment manufacturing	0	220	330	1,822
Other basic inorganic chemical manufacturing	0	513	801	4,077
Other basic organic chemical manufacturing	0	865	1,285	15,389
Plastics material and resin manufacturing	0	133	179	2,345
Synthetic rubber manufacturing	0	175	222	1,990
Artificial and synthetic fibers and filaments manufacturing	0	154	193	2,128
Nitrogenous fertilizer manufacturing	0	784	1,207	5,157
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	255	328	1,758

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Pesticide and other agricultural chemical manufacturing	0	415	828	6,385
Medicinal and botanical manufacturing	0	348	462	2,264
Pharmaceutical preparation manufacturing	0	2,975	7,045	36,017
In-vitro diagnostic substance manufacturing	0	576	695	2,098
Biological product (except diagnostic) manufacturing	0	4	5	34
Paint and coating manufacturing	0	1,417	1,879	10,248
Adhesive manufacturing	0	1,203	1,527	7,456
Soap and other detergent manufacturing	0	1,218	2,331	13,050
Polish and other sanitation good manufacturing	0	529	654	3,005
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1,288	2,154	10,725
Printing ink manufacturing	0	77	81	430
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	42	51	360
Photographic film and chemical manufacturing	0	2,710	4,314	17,889
Other miscellaneous chemical product manufacturing	0	726	879	4,527
Plastics packaging materials and unlaminated film and sheet manufacturing	0	869	1,846	6,998
Unlaminated plastics profile shape manufacturing	0	362	1,127	3,277
Plastics pipe and pipe fitting manufacturing	0	943	3,334	7,162
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	341	846	1,812
Polystyrene foam product manufacturing	0	1,059	2,285	7,064
Urethane and other foam product (except polystyrene) manufacturing	0	350	718	2,133
Plastics bottle manufacturing	0	702	1,502	4,765
Other plastics product manufacturing	0	6,692	12,367	34,248
Tire manufacturing	0	140	235	1,079

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Rubber and plastics hoses and belting manufacturing	0	970	1,952	4,270
Other rubber product manufacturing	0	1,761	3,227	10,007
Pottery, ceramics, and plumbing fixture manufacturing	0	75	107	383
Brick, tile, and other structural clay product manufacturing	0	776	1,463	3,774
Flat glass manufacturing	0	(9)	(4)	114
Other pressed and blown glass and glassware manufacturing	0	1,915	2,991	8,036
Glass container manufacturing	0	12	33	301
Glass product manufacturing made of purchased glass	0	1,324	2,380	6,518
Cement manufacturing	0	1,181	2,897	8,666
Ready-mix concrete manufacturing	0	2,901	4,986	15,727
Concrete block and brick manufacturing	0	717	1,336	3,303
Concrete pipe manufacturing	0	81	137	383
Other concrete product manufacturing	0	2,294	3,369	8,479
Lime manufacturing	0	94	255	660
Gypsum product manufacturing	0	1,567	4,356	11,830
Abrasive product manufacturing	0	1,326	4,447	7,648
Cut stone and stone product manufacturing	0	661	802	2,042
Ground or treated mineral and earth manufacturing	0	912	2,859	7,716
Mineral wool manufacturing	0	116	310	1,196
Miscellaneous nonmetallic mineral products manufacturing	0	141	358	927
Iron and steel mills and ferroalloy manufacturing	0	941	1,278	8,490
Iron, steel pipe and tube manufacturing from purchased steel	0	439	545	2,460
Rolled steel shape manufacturing	0	450	778	4,731
Steel wire drawing	0	185	176	970
Alumina refining and primary aluminum production	0	666	1,173	7,663
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	841	1,268	6,614

## APPENDIX

Other aluminum rolling, drawing and extruding	0	775	909	4,361
Nonferrous metal (exc aluminum) smelting and refining	0	373	1,117	3,465
Copper rolling, drawing, extruding and alloying	0	565	708	6,145
Nonferrous metal, except copper and aluminum, shaping	0	646	734	2,745
Secondary processing of other nonferrous metals	0	86	149	1,049
Ferrous metal foundries	0	31,254	38,825	97,531
Nonferrous metal foundries	1	38,488	48,340	128,923
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	1,766	2,402	7,316
Iron and steel forging	0	1,289	1,735	7,557
Nonferrous forging	0	1,126	1,391	4,445
Cutlery, utensil, pot, and pan manufacturing	0	129	356	1,273
Handtool manufacturing	0	142	217	566
Prefabricated metal buildings and components manufacturing	0	530	706	1,491
Fabricated structural metal manufacturing	0	3,084	4,367	15,554
Plate work manufacturing	0	631	670	2,048
Metal window and door manufacturing	0	1,805	2,594	7,067
Sheet metal work manufacturing	0	10,817	13,468	34,482
Ornamental and architectural metal work manufacturing	0	1,326	1,703	4,964
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	88	106	319
Metal cans manufacturing	0	1,722	3,479	15,746
Metal barrels, drums and pails manufacturing	0	53	70	522
Hardware manufacturing	0	125	196	747
Spring and wire product manufacturing	0	525	686	2,434
Machine shops	0	8,316	9,495	19,698
Turned product and screw, nut, and bolt manufacturing	0	6,809	9,028	26,409
Metal heat treating	0	381	548	1,469

## APPENDIX

Metal coating and nonprecious engraving	0	1,087	1,755	5,069
Electroplating, anodizing, and coloring metal	0	894	999	2,493
Valve and fittings, other than plumbing, manufacturing	0	2,905	4,266	10,276
Plumbing fixture fitting and trim manufacturing	0	298	784	1,717
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	179	383	883
Ammunition, except for small arms, manufacturing	0	24	30	80
Small arms, ordnance, and accessories manufacturing	0	2,368	4,849	7,940
Fabricated pipe and pipe fitting manufacturing	0	56	66	196
Other fabricated metal manufacturing	0	1,028	1,314	3,882
Farm machinery and equipment manufacturing	0	28	40	223
Lawn and garden equipment manufacturing	0	521	798	3,113
Construction machinery manufacturing	0	285	506	1,074
Mining machinery and equipment manufacturing	0	15	17	60
Oil and gas field machinery and equipment manufacturing	0	1	1	4
Semiconductor machinery manufacturing	0	273	299	784
Food product machinery manufacturing	0	0	0	2
Sawmill, woodworking, and paper machinery	0	11	13	46
Printing machinery and equipment manufacturing	0	30	33	93
All other industrial machinery manufacturing	0	19	23	75
Optical instrument and lens manufacturing	0	27	38	103
Photographic and photocopying equipment manufacturing	0	30	40	129

## APPENDIX

Other commercial service industry machinery manufacturing	0	96	166	584
Air purification and ventilation equipment manufacturing	0	131	177	426
Heating equipment (except warm air furnaces) manufacturing	0	74	97	286
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	605	1,024	3,790
Industrial mold manufacturing	0	128	141	284
Special tool, die, jig, and fixture manufacturing	0	143	168	329
Cutting tool and machine tool accessory manufacturing	0	64	69	215
Machine tool manufacturing	0	284	310	831
Rolling mill and other metalworking machinery manufacturing	0	24	29	80
Turbine and turbine generator set units manufacturing	0	27	35	150
Speed changer, industrial high-speed drive, and gear manufacturing	0	173	236	756
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	3	360,760	746,896	2,945,254
Pump and pumping equipment manufacturing	0	21	34	111
Air and gas compressor manufacturing	0	1	2	8
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	11	12	43
Overhead cranes, hoists, and monorail systems manufacturing	0	2	3	12
Industrial truck, trailer, and stacker manufacturing	0	4	5	37
Power-driven handtool manufacturing	0	3	6	19
Welding and soldering equipment manufacturing	0	10	13	46
Packaging machinery manufacturing	0	18	24	43

## APPENDIX

Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	233	300	554
Fluid power pump and motor manufacturing	0	69	100	225
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	175	215	666
Electronic computer manufacturing	0	13	32	92
Computer storage device manufacturing	0	11	36	156
Computer terminals and other computer peripheral equipment manufacturing	0	29	69	256
Telephone apparatus manufacturing	0	(1)	3	44
Broadcast and wireless communications equipment manufacturing	0	32	51	139
Other communications equipment manufacturing	0	81	154	504
Audio and video equipment manufacturing	0	79	170	818
Printed circuit assembly (electronic assembly) manufacturing	0	989	1,656	4,794
Bare printed circuit board manufacturing	0	285	395	1,181
Semiconductor and related device manufacturing	0	26,294	48,586	112,771
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	180	285	854
Electronic connector manufacturing	0	2,870	4,607	11,983
Other electronic component manufacturing	0	1,295	1,529	3,921
Electromedical and electrotherapeutic apparatus manufacturing	0	40	94	234
Search, detection, and navigation instruments manufacturing	0	57	100	194
Automatic environmental control manufacturing	0	3,888	5,283	8,865



## APPENDIX

Industrial process variable instruments manufacturing	0	85	144	420
Totalizing fluid meter and counting device manufacturing	0	146	346	699
Electricity and signal testing instruments manufacturing	0	11	19	64
Analytical laboratory instrument manufacturing	0	5	10	28
Irradiation apparatus manufacturing	0	20	42	82
Watch, clock, and other measuring and controlling device manufacturing	0	11	29	114
Blank magnetic and optical recording media manufacturing	0	126	406	860
Software and other prerecorded and record reproducing	0	(9)	16	183
Electric lamp bulb and part manufacturing	0	28	37	194
Lighting fixture manufacturing	0	1,240	1,743	4,772
Small electrical appliance manufacturing	0	22	31	101
Household cooking appliance manufacturing	0	89	159	716
Household refrigerator and home freezer manufacturing	0	89	176	677
Household laundry equipment manufacturing	0	148	249	1,542
Other major household appliance manufacturing	0	53	86	343
Power, distribution, and specialty transformer manufacturing	0	104	148	371
Motor and generator manufacturing	0	467	655	2,202
Switchgear and switchboard apparatus manufacturing	0	362	551	1,689
Relay and industrial control manufacturing	0	204	259	767
Storage battery manufacturing	0	448	658	2,092
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	1,416	2,307	8,649
Wiring device manufacturing	0	1,860	3,173	8,367

## APPENDIX

Carbon and graphite product manufacturing	0	363	474	1,516
All other miscellaneous electrical equipment and component manufacturing	0	9,750	11,108	25,256
Automobile manufacturing	0	113	1,017	2,572
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	11	54	111
Motor vehicle body manufacturing	0	36	73	255
Truck trailer manufacturing	0	4	7	23
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	429	540	2,393
Motor vehicle gasoline engine and engine parts manufacturing	0	1,840	4,285	13,198
Motor vehicle electrical and electronic equipment manufacturing	0	6,649	14,160	46,709
Motor vehicle transmission and power train parts manufacturing	0	792	2,136	6,289
Motor vehicle seating and interior trim manufacturing	0	85	207	622
Motor vehicle metal stamping	0	25	61	307
Other motor vehicle parts manufacturing	0	6,713	17,266	60,823
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	397	1,237	3,458
Aircraft manufacturing	0	298	710	1,920
Aircraft engine and engine parts manufacturing	0	21,076	60,744	116,594
Other aircraft parts and auxiliary equipment manufacturing	0	281	513	1,094
Guided missile and space vehicle manufacturing	0	1,006	1,492	3,276
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	11	17	33
Railroad rolling stock manufacturing	0	1	1	6
Ship building and repairing	0	4	5	14
Boat building	0	360	550	2,091
Motorcycle, bicycle, and parts manufacturing	0	108	450	1,106

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	529	1,516	3,861
All other transportation equipment manufacturing	0	341	805	2,802
Wood kitchen cabinet and countertop manufacturing	0	6,446	8,431	19,196
Upholstered household furniture manufacturing	0	273	365	1,271
Nonupholstered wood household furniture manufacturing	0	1,181	1,317	3,590
Other household nonupholstered furniture manufacturing	0	165	246	827
Institutional furniture manufacturing	0	10	11	34
Wood office furniture manufacturing	0	4	6	19
Custom architectural woodwork and millwork	0	97	93	278
Office furniture, except wood, manufacturing	0	77	126	431
Showcase, partition, shelving, and locker manufacturing	0	140	178	545
Mattress manufacturing	0	545	1,060	3,768
Blind and shade manufacturing	0	112	116	456
Surgical and medical instrument manufacturing	0	828	1,517	3,680
Surgical appliance and supplies manufacturing	0	3,298	6,217	12,858
Dental equipment and supplies manufacturing	0	5	8	31
Ophthalmic goods manufacturing	0	82	164	436
Dental laboratories	0	617	587	1,105
Jewelry and silverware manufacturing	0	340	571	1,920
Sporting and athletic goods manufacturing	0	1,052	1,394	4,076
Doll, toy, and game manufacturing	0	83	151	884
Office supplies (except paper) manufacturing	0	172	240	1,062
Sign manufacturing	0	945	751	2,706
Gasket, packing, and sealing device manufacturing	0	338	424	1,610
Musical instrument manufacturing	0	57	60	236
Fasteners, buttons, needles, and pins manufacturing	0	244	309	963

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Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	115	138	368
All other miscellaneous manufacturing	0	896	1,093	3,394
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	18,562	45,827	100,341
Wholesale - Professional and commercial equipment and supplies	0	56,105	98,549	158,642
Wholesale - Household appliances and electrical and electronic goods	0	27,967	66,531	124,762
Wholesale - Machinery, equipment, and supplies	1	58,993	108,027	177,998
Wholesale - Other durable goods merchant wholesalers	1	68,718	112,717	217,996
Wholesale - Drugs and druggists' sundries	0	25,257	72,347	149,150
Wholesale - Grocery and related product wholesalers	0	33,003	45,416	84,605
Wholesale - Petroleum and petroleum products	0	3,549	61,161	67,636
Wholesale - Other nondurable goods merchant wholesalers	1	49,595	110,859	198,504
Wholesale - Wholesale electronic markets and agents and brokers	0	40,093	20,211	23,138
Retail - Motor vehicle and parts dealers	1	33,846	56,578	80,569
Retail - Furniture and home furnishings stores	0	21,528	27,511	39,661
Retail - Electronics and appliance stores	0	23,369	24,171	38,226
Retail - Building material and garden equipment and supplies stores	0	21,148	40,029	57,551
Retail - Food and beverage stores	2	60,901	85,850	134,427
Retail - Health and personal care stores	1	36,629	45,444	68,596
Retail - Gasoline stores	0	20,769	34,797	57,825
Retail - Clothing and clothing accessories stores	1	20,747	35,941	72,170
Retail - Sporting goods, hobby, musical instrument and book stores	1	13,542	19,016	30,233

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Retail - General merchandise stores	2	53,047	81,583	127,431
Retail - Miscellaneous store retailers	1	32,832	37,582	55,340
Retail - Nonstore retailers	1	51,288	146,071	220,568
Air transportation	0	44,669	111,033	165,127
Rail transportation	0	11,096	27,632	47,323
Water transportation	0	(1)	1	140
Truck transportation	1	85,169	104,864	216,339
Transit and ground passenger transportation	2	43,335	58,515	83,717
Pipeline transportation	0	2,333	6,114	8,382
Scenic and sightseeing transportation and support activities for transportation	1	80,132	90,010	176,842
Couriers and messengers	1	27,780	38,301	72,620
Warehousing and storage	1	47,453	53,126	111,023
Newspaper publishers	0	6,965	11,114	14,470
Periodical publishers	0	5,833	8,795	14,728
Book publishers	0	1,624	5,147	9,766
Directory, mailing list, and other publishers	0	392	1,344	2,474
Greeting card publishing	0	17	69	126
Software publishers	0	31,823	80,406	97,490
Motion picture and video industries	0	13,815	24,182	67,732
Sound recording industries	0	1,182	4,017	7,412
Radio and television broadcasting	0	100,663	96,435	114,039
Cable and other subscription programming	0	17,340	65,363	112,730
Wired telecommunications carriers	0	29,938	57,317	125,321
Wireless telecommunications carriers (except satellite)	0	17,977	62,984	202,024
Satellite, telecommunications resellers, and all other telecommunications	0	17,028	16,891	37,184
Data processing, hosting, and related services	0	55,018	113,311	219,110
News syndicates, libraries, archives and all other information services	0	3,563	5,715	8,879
Internet publishing and broadcasting and web search portals	0	39,454	100,613	297,749

## APPENDIX

Nondepository credit intermediation and related activities	1	100,785	135,699	218,508
Securities and commodity contracts intermediation and brokerage	1	110,551	109,661	202,279
Monetary authorities and depository credit intermediation	2	186,631	442,071	742,635
Other financial investment activities	2	69,255	84,155	240,507
Direct life insurance carriers	0	22,058	41,801	63,466
Insurance carriers, except direct life	1	64,559	192,986	452,212
Insurance agencies, brokerages, and related activities	2	106,848	153,629	365,063
Funds, trusts, and other financial vehicles	0	15,265	13,762	97,357
Other real estate	10	303,520	1,032,223	2,183,499
Tenant-occupied housing	0	12,719	219,471	237,072
Owner-occupied dwellings	0	0	847,432	1,070,720
Automotive equipment rental and leasing	0	15,367	41,438	60,424
General and consumer goods rental except video tapes and discs	0	17,430	20,926	29,369
Video tape and disc rental	0	3,136	4,863	7,571
Commercial and industrial machinery and equipment rental and leasing	0	25,914	45,638	68,510
Lessors of nonfinancial intangible assets	0	3,436	70,082	86,938
Legal services	2	224,746	358,235	525,998
Accounting, tax preparation, bookkeeping, and payroll services	1	92,350	131,873	186,383
Architectural, engineering, and related services	1	128,010	157,220	274,296
Specialized design services	0	13,238	14,094	18,505
Custom computer programming services	0	27,723	31,624	46,734
Computer systems design services	0	47,837	50,245	67,208
Other computer related services, including facilities management	0	34,583	48,529	91,488
Management consulting services	6	464,241	461,331	729,588
Environmental and other technical consulting services	0	34,882	31,075	46,928

## APPENDIX

Scientific research and development services	44	4,803,567	7,229,255	12,794,844
Advertising, public relations, and related services	1	56,867	80,443	138,501
Photographic services	0	9,161	4,591	9,132
Veterinary services	0	8,880	13,596	20,049
Marketing research and all other miscellaneous professional, scientific, and technical services	5	239,948	217,230	357,802
Management of companies and enterprises	3	273,972	323,570	514,882
Office administrative services	1	124,252	44,215	99,127
Facilities support services	0	9,466	12,894	27,004
Employment services	6	306,653	502,998	723,537
Business support services	1	59,659	52,072	90,094
Travel arrangement and reservation services	0	21,578	30,064	60,916
Investigation and security services	1	36,201	37,278	52,838
Services to buildings	2	82,089	85,893	130,286
Landscape and horticultural services	1	43,383	46,182	73,861
Other support services	0	13,934	17,678	35,333
Waste management and remediation services	0	21,326	43,062	68,694
Elementary and secondary schools	1	37,009	35,012	42,438
Junior colleges, colleges, universities, and professional schools	1	39,280	59,108	74,474
Other educational services	1	29,924	29,133	48,167
Offices of physicians	2	196,566	236,589	342,948
Offices of dentists	1	42,606	54,735	83,321
Offices of other health practitioners	1	51,205	48,606	68,045
Outpatient care centers	1	51,590	54,462	95,992
Medical and diagnostic laboratories	0	15,395	25,097	39,428
Home health care services	1	51,499	39,702	55,753
Other ambulatory health care services	0	16,475	18,384	28,397
Hospitals	4	348,810	410,733	741,166
Nursing and community care facilities	1	46,327	55,195	93,206
Residential mental retardation, mental health, substance abuse and other facilities	1	23,480	25,417	38,156

## APPENDIX

Individual and family services	2	54,209	52,666	75,566
Child day care services	1	22,385	28,009	37,714
Community food, housing, and other relief services, including rehabilitation services	0	13,474	15,902	32,415
Performing arts companies	0	7,885	12,251	20,968
Commercial Sports Except Racing	0	24,277	25,571	33,368
Racing and Track Operation	0	1,591	3,108	4,913
Independent artists, writers, and performers	1	41,076	45,095	50,425
Promoters of performing arts and sports and agents for public figures	0	9,482	21,112	42,221
Museums, historical sites, zoos, and parks	0	3,821	4,761	7,852
Amusement parks and arcades	0	1,211	4,451	5,619
Gambling industries (except casino hotels)	0	10,798	21,094	33,965
Other amusement and recreation industries	0	13,024	15,558	25,937
Fitness and recreational sports centers	0	8,976	15,829	22,606
Bowling centers	0	1,511	2,283	3,716
Hotels and motels, including casino hotels	1	29,315	53,224	82,257
Other accommodations	0	6,971	9,387	12,383
Full-service restaurants	4	113,408	170,295	278,838
Limited-service restaurants	4	86,894	139,306	282,074
All other food and drinking places	2	81,314	110,054	160,415
Automotive repair and maintenance, except car washes	1	79,355	94,947	138,849
Car washes	1	38,755	60,586	90,473
Electronic and precision equipment repair and maintenance	0	20,459	30,672	45,671
Commercial and industrial machinery and equipment repair and maintenance	0	23,516	26,925	41,442
Personal and household goods repair and maintenance	0	26,753	20,170	26,161
Personal care services	1	36,582	25,355	33,978
Death care services	0	2,535	2,961	4,682
Dry-cleaning and laundry services	0	8,772	9,290	13,527
Other personal services	1	38,110	24,708	34,632
Religious organizations	1	67,700	24,756	107,820
Grantmaking, giving, and social advocacy organizations	0	17,505	43,212	67,017



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Business and professional associations	0	11,578	15,394	27,472
Labor and civic organizations	0	14,338	29,596	52,421
Private households	1	12,272	12,272	12,272
Postal service	0	40,402	40,431	44,585
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	2,556	2,261	13,026
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	271	(157)	226
Local government electric utilities	0	20,786	52,001	84,983
Other local government enterprises	1	69,509	138,800	270,076
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	147,094	138,545	289,693

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 5. Arkansas

**Table 377: Detailed NASA Impacts by Types of Impact, Arkansas.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	32	1,930,807	2,848,987	5,655,183
Oilseed farming	0	6,963	10,065	22,220
Grain farming	0	1,780	2,184	12,204
Vegetable and melon farming	0	140	152	645
Fruit farming	0	36	39	150
Tree nut farming	0	75	76	164
Greenhouse, nursery, and floriculture production	0	89	95	339
Tobacco farming	0	0	0	0
Cotton farming	0	259	268	965
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	264	248	941
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	311	503	2,967
Dairy cattle and milk production	0	16	23	221
Poultry and egg production	0	543	598	12,524
Animal production, except cattle and poultry and eggs	0	2,029	3,550	8,066
Forestry, forest products, and timber tract production	0	135	144	189
Commercial logging	0	537	559	887
Commercial fishing	0	(19)	91	101
Commercial hunting and trapping	0	3	44	83
Support activities for agriculture and forestry	0	2,248	2,247	2,652
Oil and gas extraction	0	1,446	5,264	16,400
Coal mining	0	6	35	97
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(143)	(37,584)	834
Other metal ore mining	0	30	68	111
Stone mining and quarrying	0	226	601	1,142
Sand and gravel mining	0	252	485	875

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Other clay, ceramic, refractory minerals mining	0	20	34	65
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	38	74	146
Drilling oil and gas wells	0	0	1	2
Support activities for oil and gas operations	0	35	63	187
Metal mining services	0	16	64	220
Other nonmetallic minerals services	0	3	11	38
Electric power generation - Hydroelectric	0	21	64	102
Electric power generation - Fossil fuel	0	942	3,651	9,047
Electric power generation - Nuclear	0	2,157	5,011	10,905
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	74	181	347
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	4,782	19,008	50,826
Natural gas distribution	0	1,489	4,342	9,910
Water, sewage and other systems	0	308	858	2,216
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	6,126	7,702	22,487
Maintenance and repair construction of residential structures	0	2,157	3,012	8,780
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	5	3	10
Dog and cat food manufacturing	0	287	1,094	4,990
Other animal food manufacturing	0	325	538	3,894
Flour milling	0	30	51	350
Rice milling	0	43	71	548
Malt manufacturing	0	0	0	0
Wet corn milling	0	171	430	2,971
Soybean and other oilseed processing	0	49	250	2,956
Fats and oils refining and blending	0	23	43	491
Breakfast cereal manufacturing	0	192	450	1,856
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	10	11	35
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	13	12	23
Frozen fruits, juices and vegetables manufacturing	0	68	109	469
Frozen specialties manufacturing	0	744	1,070	4,600
Canned fruits and vegetables manufacturing	0	91	147	596
Canned specialties	0	144	320	1,560
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	41	91	707
Fluid milk manufacturing	0	235	365	3,018
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	13	15	44
Frozen cakes and other pastries manufacturing	0	112	173	330
Poultry processing	0	3,008	3,907	20,526
Animal, except poultry, slaughtering	0	89	110	635
Meat processed from carcasses	0	428	492	3,910
Rendering and meat byproduct processing	0	87	76	452
Seafood product preparation and packaging	0	80	79	163
Bread and bakery product, except frozen, manufacturing	0	1,077	1,345	2,889
Cookie and cracker manufacturing	0	182	230	670
Dry pasta, mixes, and dough manufacturing	0	39	79	301
Tortilla manufacturing	0	117	140	451
Roasted nuts and peanut butter manufacturing	0	162	356	1,207
Other snack food manufacturing	0	272	566	2,253
Coffee and tea manufacturing	0	6	7	24
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	36	61	391
Spice and extract manufacturing	0	11	13	40
All other food manufacturing	0	38	45	181
Bottled and canned soft drinks & water	0	507	985	4,555
Manufactured ice	0	37	16	123
Breweries	0	66	280	990
Wineries	0	3	6	25
Distilleries	0	131	1,028	1,847
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	10	12	43
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	27	35	142
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	0	0	3
Fabric coating mills	0	2	2	22
Carpet and rug mills	0	21	28	118
Curtain and linen mills	0	1	1	8
Textile bag and canvas mills	0	13	14	47
Rope, cordage, twine, tire cord and tire fabric mills	0	216	271	850
Other textile product mills	0	17	19	57
Hosiery and sock mills	0	1	2	5
Other apparel knitting mills	0	42	52	143
Cut and sew apparel contractors	0	8	9	23
Mens and boys cut and sew apparel manufacturing	0	9	12	43
Womens and girls cut and sew apparel manufacturing	0	0	1	6
Other cut and sew apparel manufacturing	0	1	2	7
Apparel accessories and other apparel manufacturing	0	2	3	11
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	55	65	263
Other leather and allied product manufacturing	0	6	6	19
Sawmills	0	585	987	3,054
Wood preservation	0	43	182	506
Veneer and plywood manufacturing	0	138	240	645
Engineered wood member and truss manufacturing	0	24	37	123
Reconstituted wood product manufacturing	0	65	215	601
Wood windows and door manufacturing	0	330	521	1,416
Cut stock, resawing lumber, and planing	0	88	189	464
Other millwork, including flooring	0	247	420	1,078
Wood container and pallet manufacturing	0	154	199	625
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	7	9	32
All other miscellaneous wood product manufacturing	0	101	142	392

## APPENDIX

Pulp mills	0	0	0	0
Paper mills	0	1,315	3,615	10,545
Paperboard mills	0	332	940	3,080
Paperboard container manufacturing	0	695	1,134	4,825
Paper bag and coated and treated paper manufacturing	0	376	752	2,754
Stationery product manufacturing	0	57	88	379
Sanitary paper product manufacturing	0	599	2,178	6,755
All other converted paper product manufacturing	0	20	32	117
Printing	0	2,473	3,689	8,091
Support activities for printing	0	249	370	625
Petroleum refineries	0	708	5,610	36,850
Asphalt paving mixture and block manufacturing	0	64	106	439
Asphalt shingle and coating materials manufacturing	0	37	116	365
Petroleum lubricating oil and grease manufacturing	0	2,835	9,376	42,389
All other petroleum and coal products manufacturing	0	59	179	676
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	27	56	294
Synthetic dye and pigment manufacturing	0	2	4	22
Other basic inorganic chemical manufacturing	0	151	270	1,067
Other basic organic chemical manufacturing	0	356	613	5,074
Plastics material and resin manufacturing	0	108	161	1,508
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	61	118	434
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	11	16	60
Pesticide and other agricultural chemical manufacturing	0	53	141	826
Medicinal and botanical manufacturing	0	8	11	58

## APPENDIX

Pharmaceutical preparation manufacturing	0	42	132	640
In-vitro diagnostic substance manufacturing	0	2	2	8
Biological product (except diagnostic) manufacturing	0	0	1	5
Paint and coating manufacturing	0	25	42	215
Adhesive manufacturing	0	16	22	111
Soap and other detergent manufacturing	0	28	79	738
Polish and other sanitation good manufacturing	0	16	26	228
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	300	733	2,421
Printing ink manufacturing	0	35	37	170
Explosives manufacturing	0	17	19	79
Custom compounding of purchased resins	0	76	127	982
Photographic film and chemical manufacturing	0	1	3	47
Other miscellaneous chemical product manufacturing	0	63	85	371
Plastics packaging materials and unlaminated film and sheet manufacturing	0	183	384	1,252
Unlaminated plastics profile shape manufacturing	0	66	197	475
Plastics pipe and pipe fitting manufacturing	0	51	169	422
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	34	76	171
Polystyrene foam product manufacturing	0	119	255	794
Urethane and other foam product (except polystyrene) manufacturing	0	63	129	415
Plastics bottle manufacturing	0	16	33	123
Other plastics product manufacturing	0	448	811	2,743
Tire manufacturing	0	517	836	3,020
Rubber and plastics hoses and belting manufacturing	0	140	281	695
Other rubber product manufacturing	0	556	1,008	3,033



## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	6	7	15
Brick, tile, and other structural clay product manufacturing	0	104	188	454
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	12	14	50
Glass container manufacturing	0	36	64	195
Glass product manufacturing made of purchased glass	0	25	41	125
Cement manufacturing	0	27	67	179
Ready-mix concrete manufacturing	0	407	686	2,619
Concrete block and brick manufacturing	0	81	144	428
Concrete pipe manufacturing	0	27	46	114
Other concrete product manufacturing	0	77	113	336
Lime manufacturing	0	31	79	214
Gypsum product manufacturing	0	34	93	270
Abrasive product manufacturing	0	33	96	235
Cut stone and stone product manufacturing	0	74	85	223
Ground or treated mineral and earth manufacturing	0	38	110	246
Mineral wool manufacturing	0	32	78	190
Miscellaneous nonmetallic mineral products manufacturing	0	14	35	87
Iron and steel mills and ferroalloy manufacturing	0	560	1,519	4,584
Iron, steel pipe and tube manufacturing from purchased steel	0	82	184	566
Rolled steel shape manufacturing	0	(44)	4	142
Steel wire drawing	0	11	40	132
Alumina refining and primary aluminum production	0	8	42	228
Secondary smelting and alloying of aluminum	0	(4)	(4)	1
Aluminum sheet, plate, and foil manufacturing	0	36	136	397
Other aluminum rolling, drawing and extruding	0	(6)	1	59
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	15	39	308
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	(2)	4	18
Ferrous metal foundries	0	7	48	96
Nonferrous metal foundries	0	37	128	287
Custom roll forming	0	9	18	76
Crown and closure manufacturing and metal stamping	0	27	51	137
Iron and steel forging	0	7	12	37
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	10	52	120
Handtool manufacturing	0	54	120	221
Prefabricated metal buildings and components manufacturing	0	54	97	249
Fabricated structural metal manufacturing	0	201	389	972
Plate work manufacturing	0	24	25	86
Metal window and door manufacturing	0	85	173	374
Sheet metal work manufacturing	0	108	168	366
Ornamental and architectural metal work manufacturing	0	37	61	161
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	9	13	37
Metal cans manufacturing	0	55	189	646
Metal barrels, drums and pails manufacturing	0	36	52	199
Hardware manufacturing	0	32	72	184
Spring and wire product manufacturing	0	28	47	128
Machine shops	0	213	275	578
Turned product and screw, nut, and bolt manufacturing	0	17	31	84
Metal heat treating	0	6	12	30
Metal coating and nonprecious engraving	0	26	64	129
Electroplating, anodizing, and coloring metal	0	28	34	82

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	53	118	282
Plumbing fixture fitting and trim manufacturing	0	90	450	1,070
Ball and roller bearing manufacturing	0	16	43	88
Small arms ammunition manufacturing	0	269	978	1,554
Ammunition, except for small arms, manufacturing	0	34	49	107
Small arms, ordnance, and accessories manufacturing	0	20	79	164
Fabricated pipe and pipe fitting manufacturing	0	51	67	176
Other fabricated metal manufacturing	0	62	101	235
Farm machinery and equipment manufacturing	0	54	91	445
Lawn and garden equipment manufacturing	0	44	100	524
Construction machinery manufacturing	0	3	7	21
Mining machinery and equipment manufacturing	0	2	2	7
Oil and gas field machinery and equipment manufacturing	0	16	21	64
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	1	1	2
Sawmill, woodworking, and paper machinery	0	19	21	57
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	1	1	4
Optical instrument and lens manufacturing	0	0	1	1
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	15	35	99
Air purification and ventilation equipment manufacturing	0	9	16	39

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	96	228	653
Industrial mold manufacturing	0	6	7	18
Special tool, die, jig, and fixture manufacturing	0	5	7	13
Cutting tool and machine tool accessory manufacturing	0	6	7	14
Machine tool manufacturing	0	1	1	4
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	3	5	22
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	11	20	57
Other engine equipment manufacturing	0	12	29	137
Pump and pumping equipment manufacturing	0	1	1	6
Air and gas compressor manufacturing	0	0	0	1
Elevator and moving stairway manufacturing	0	0	0	1
Conveyor and conveying equipment manufacturing	0	21	22	69
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	6	11	34
Power-driven handtool manufacturing	0	2	6	16
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	1	1	3
Industrial process furnace and oven manufacturing	0	0	0	1
Fluid power cylinder and actuator manufacturing	0	7	11	27

## APPENDIX

Fluid power pump and motor manufacturing	0	0	0	1
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	3	4	13
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	2	4	15
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	1	4	18
Printed circuit assembly (electronic assembly) manufacturing	0	7	16	65
Bare printed circuit board manufacturing	0	3	4	10
Semiconductor and related device manufacturing	0	3	9	28
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	13	23	49
Electronic connector manufacturing	0	249	483	1,023
Other electronic component manufacturing	0	2	2	15
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	1	2
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	1	2	4
Totalizing fluid meter and counting device manufacturing	0	1	3	10

## APPENDIX

Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	1
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	1	3
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	4	7	14
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	24	34	111
Small electrical appliance manufacturing	0	2	4	12
Household cooking appliance manufacturing	0	1	3	9
Household refrigerator and home freezer manufacturing	0	1	3	9
Household laundry equipment manufacturing	0	2	4	19
Other major household appliance manufacturing	0	0	1	3
Power, distribution, and specialty transformer manufacturing	0	7	10	32
Motor and generator manufacturing	0	115	165	539
Switchgear and switchboard apparatus manufacturing	0	2	3	10
Relay and industrial control manufacturing	0	1	1	3
Storage battery manufacturing	0	20	29	87
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	12	19	69
Wiring device manufacturing	0	39	67	214
Carbon and graphite product manufacturing	0	47	63	252
All other miscellaneous electrical equipment and component manufacturing	0	1	1	2

## APPENDIX

Automobile manufacturing	0	3	9	57
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	2	12
Motor vehicle body manufacturing	0	23	28	131
Truck trailer manufacturing	0	4	4	22
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	209	222	1,174
Motor vehicle gasoline engine and engine parts manufacturing	0	117	151	1,010
Motor vehicle electrical and electronic equipment manufacturing	0	26	38	276
Motor vehicle transmission and power train parts manufacturing	0	202	272	1,416
Motor vehicle seating and interior trim manufacturing	0	3	4	55
Motor vehicle metal stamping	0	1	1	7
Other motor vehicle parts manufacturing	0	288	381	2,460
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	398	535	2,815
Aircraft manufacturing	0	3	8	23
Aircraft engine and engine parts manufacturing	0	1	4	10
Other aircraft parts and auxiliary equipment manufacturing	0	4	8	19
Guided missile and space vehicle manufacturing	0	5	8	20
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	6	13	54
Ship building and repairing	0	5	8	17
Boat building	0	433	702	2,628
Motorcycle, bicycle, and parts manufacturing	0	5	28	56
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	135	342	1,054

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	77	156	336
Upholstered household furniture manufacturing	0	79	141	390
Nonupholstered wood household furniture manufacturing	0	16	23	78
Other household nonupholstered furniture manufacturing	0	3	7	24
Institutional furniture manufacturing	0	8	10	32
Wood office furniture manufacturing	0	0	0	1
Custom architectural woodwork and millwork	0	2	2	8
Office furniture, except wood, manufacturing	0	0	0	1
Showcase, partition, shelving, and locker manufacturing	0	22	44	94
Mattress manufacturing	0	5	18	57
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	53	60	269
Surgical appliance and supplies manufacturing	0	16	18	73
Dental equipment and supplies manufacturing	0	1	1	11
Ophthalmic goods manufacturing	0	1	1	5
Dental laboratories	0	29	26	47
Jewelry and silverware manufacturing	0	18	34	86
Sporting and athletic goods manufacturing	0	42	44	213
Doll, toy, and game manufacturing	0	10	9	71
Office supplies (except paper) manufacturing	0	46	48	151
Sign manufacturing	0	219	159	494
Gasket, packing, and sealing device manufacturing	0	10	11	41
Musical instrument manufacturing	0	10	10	29
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	14	13	81
Burial casket manufacturing	0	0	0	0



## APPENDIX

All other miscellaneous manufacturing	0	58	64	221
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,228	3,758	7,447
Wholesale - Professional and commercial equipment and supplies	0	3,255	6,661	11,545
Wholesale - Household appliances and electrical and electronic goods	0	1,840	5,663	10,943
Wholesale - Machinery, equipment, and supplies	0	2,958	6,459	11,154
Wholesale - Other durable goods merchant wholesalers	0	3,399	6,484	12,243
Wholesale - Drugs and druggists' sundries	0	2,985	11,563	21,298
Wholesale - Grocery and related product wholesalers	0	4,564	7,087	11,512
Wholesale - Petroleum and petroleum products	0	819	15,372	17,715
Wholesale - Other nondurable goods merchant wholesalers	0	7,271	17,486	30,684
Wholesale - Wholesale electronic markets and agents and brokers	0	4,930	3,394	3,824
Retail - Motor vehicle and parts dealers	0	5,677	9,778	14,131
Retail - Furniture and home furnishings stores	0	2,360	3,401	5,813
Retail - Electronics and appliance stores	0	2,620	3,235	5,493
Retail - Building material and garden equipment and supplies stores	0	3,010	6,521	9,561
Retail - Food and beverage stores	0	7,151	11,017	18,404
Retail - Health and personal care stores	0	6,735	8,574	13,069
Retail - Gasoline stores	0	2,488	5,748	11,508
Retail - Clothing and clothing accessories stores	0	2,883	5,366	11,384
Retail - Sporting goods, hobby, musical instrument and book stores	0	2,132	2,982	5,066
Retail - General merchandise stores	0	10,511	16,142	25,743
Retail - Miscellaneous store retailers	0	3,961	5,421	9,479

## APPENDIX

Retail - Nonstore retailers	0	2,145	9,465	22,021
Air transportation	0	1,161	2,066	4,289
Rail transportation	0	1,315	3,355	6,187
Water transportation	0	6	93	786
Truck transportation	0	22,742	28,585	61,700
Transit and ground passenger transportation	0	989	1,266	1,994
Pipeline transportation	0	1,063	2,255	3,109
Scenic and sightseeing transportation and support activities for transportation	0	9,666	11,560	25,202
Couriers and messengers	0	2,757	4,072	7,477
Warehousing and storage	0	5,570	6,389	13,426
Newspaper publishers	0	2,086	3,592	5,025
Periodical publishers	0	643	968	1,862
Book publishers	0	166	544	1,067
Directory, mailing list, and other publishers	0	55	83	277
Greeting card publishing	0	148	685	864
Software publishers	0	884	2,428	3,068
Motion picture and video industries	0	702	1,785	5,291
Sound recording industries	0	33	322	612
Radio and television broadcasting	0	3,182	3,455	15,540
Cable and other subscription programming	0	19	278	841
Wired telecommunications carriers	0	3,010	11,974	20,414
Wireless telecommunications carriers (except satellite)	0	1,083	11,309	19,921
Satellite, telecommunications resellers, and all other telecommunications	0	671	1,172	2,986
Data processing, hosting, and related services	0	3,544	7,923	18,294
News syndicates, libraries, archives and all other information services	0	165	267	592
Internet publishing and broadcasting and web search portals	0	714	2,110	8,787
Nondepository credit intermediation and related activities	0	3,832	5,448	10,573
Securities and commodity contracts intermediation and brokerage	0	7,911	8,176	20,996

## APPENDIX

Monetary authorities and depository credit intermediation	0	25,999	70,712	128,612
Other financial investment activities	0	(5,342)	1,147	16,790
Direct life insurance carriers	0	1,466	2,654	4,176
Insurance carriers, except direct life	0	8,858	25,225	64,776
Insurance agencies, brokerages, and related activities	0	9,873	13,743	42,976
Funds, trusts, and other financial vehicles	0	1,742	2,198	18,065
Other real estate	1	32,731	80,271	250,049
Tenant-occupied housing	0	3,106	34,006	39,883
Owner-occupied dwellings	0	0	106,777	134,912
Automotive equipment rental and leasing	0	847	4,180	6,369
General and consumer goods rental except video tapes and discs	0	1,706	2,634	4,537
Video tape and disc rental	0	386	758	1,228
Commercial and industrial machinery and equipment rental and leasing	0	1,470	5,291	8,277
Lessors of nonfinancial intangible assets	0	9	3,025	3,967
Legal services	0	27,805	45,069	76,790
Accounting, tax preparation, bookkeeping, and payroll services	0	10,593	13,736	21,075
Architectural, engineering, and related services	0	11,952	13,811	28,071
Specialized design services	0	878	913	1,252
Custom computer programming services	0	4,634	5,373	8,350
Computer systems design services	0	5,913	6,100	8,361
Other computer related services, including facilities management	0	3,603	5,299	10,519
Management consulting services	0	28,003	27,473	48,020
Environmental and other technical consulting services	0	5,268	4,420	7,080
Scientific research and development services	9	515,885	704,198	1,787,371
Advertising, public relations, and related services	0	9,824	13,958	26,078
Photographic services	0	1,508	606	1,393
Veterinary services	0	1,093	1,502	2,572

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	1	40,386	34,982	56,764
Management of companies and enterprises	1	78,655	89,563	126,706
Office administrative services	0	9,303	4,424	11,104
Facilities support services	0	847	1,218	3,329
Employment services	1	36,680	62,810	108,023
Business support services	0	9,019	8,071	13,653
Travel arrangement and reservation services	0	677	969	2,738
Investigation and security services	0	3,706	3,874	6,005
Services to buildings	0	8,593	9,276	16,566
Landscape and horticultural services	0	4,452	4,922	9,190
Other support services	0	1,543	2,055	4,461
Waste management and remediation services	0	2,721	6,569	11,231
Elementary and secondary schools	0	3,149	2,814	3,507
Junior colleges, colleges, universities, and professional schools	0	3,301	4,678	7,503
Other educational services	0	2,841	2,654	5,231
Offices of physicians	0	37,875	45,443	67,717
Offices of dentists	0	6,930	8,952	13,834
Offices of other health practitioners	0	9,494	8,782	12,806
Outpatient care centers	0	5,941	6,232	11,513
Medical and diagnostic laboratories	0	1,870	2,929	4,684
Home health care services	0	8,554	6,756	9,208
Other ambulatory health care services	0	2,374	2,635	4,530
Hospitals	1	47,598	54,989	114,221
Nursing and community care facilities	0	9,340	10,509	19,810
Residential mental retardation, mental health, substance abuse and other facilities	0	3,011	3,171	5,054
Individual and family services	0	8,649	8,348	12,481
Child day care services	0	3,318	4,282	5,926
Community food, housing, and other relief services, including rehabilitation services	0	1,831	2,126	5,264
Performing arts companies	0	255	447	1,447

## APPENDIX

Commercial Sports Except Racing	0	421	633	1,955
Racing and Track Operation	0	227	454	767
Independent artists, writers, and performers	0	305	613	1,260
Promoters of performing arts and sports and agents for public figures	0	519	1,168	3,517
Museums, historical sites, zoos, and parks	0	311	366	692
Amusement parks and arcades	0	94	672	827
Gambling industries (except casino hotels)	0	673	1,334	3,232
Other amusement and recreation industries	0	1,153	1,630	3,188
Fitness and recreational sports centers	0	652	1,651	2,475
Bowling centers	0	141	259	500
Hotels and motels, including casino hotels	0	450	878	1,676
Other accommodations	0	155	214	322
Full-service restaurants	1	13,154	20,338	37,973
Limited-service restaurants	1	9,472	16,086	37,729
All other food and drinking places	0	8,852	11,858	18,934
Automotive repair and maintenance, except car washes	0	7,842	10,744	16,061
Car washes	0	3,727	6,392	9,513
Electronic and precision equipment repair and maintenance	0	2,027	2,986	5,384
Commercial and industrial machinery and equipment repair and maintenance	0	3,750	4,736	7,691
Personal and household goods repair and maintenance	0	3,248	2,920	3,957
Personal care services	0	4,105	3,827	5,023
Death care services	0	435	583	989
Dry-cleaning and laundry services	0	1,259	1,438	2,121
Other personal services	0	3,870	3,889	5,226
Religious organizations	0	9,676	5,275	20,043
Grantmaking, giving, and social advocacy organizations	0	1,936	5,819	10,516
Business and professional associations	0	2,144	3,400	7,093
Labor and civic organizations	0	1,130	2,650	5,943
Private households	0	1,210	1,210	1,210
Postal service	0	5,669	5,673	6,332
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	271	(404)	381
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	72	94	187
Local government passenger transit	0	3,708	219	4,341
Local government electric utilities	0	546	1,802	3,494
Other local government enterprises	0	6,900	17,689	35,431
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	4	542,008	715,746	941,173

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 378: Detailed M2M Program Impacts by Types of Impact, Arkansas.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1</i>	<i>75,267</i>	<i>115,383</i>	<i>242,712</i>
Oilseed farming	0	241	522	1,337
Grain farming	0	65	89	457
Vegetable and melon farming	0	5	6	25
Fruit farming	0	2	2	7
Tree nut farming	0	6	6	13

## APPENDIX

Greenhouse, nursery, and floriculture production	0	3	3	12
Tobacco farming	0	0	0	0
Cotton farming	0	9	9	33
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	9	8	31
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	13	21	119
Dairy cattle and milk production	0	1	1	9
Poultry and egg production	0	18	20	404
Animal production, except cattle and poultry and eggs	0	68	133	311
Forestry, forest products, and timber tract production	0	6	6	8
Commercial logging	0	24	25	37
Commercial fishing	0	(1)	4	4
Commercial hunting and trapping	0	0	2	3
Support activities for agriculture and forestry	0	106	105	124
Oil and gas extraction	0	30	141	428
Coal mining	0	0	1	3
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(5)	136	28
Other metal ore mining	0	2	3	5
Stone mining and quarrying	0	20	26	50
Sand and gravel mining	0	31	29	44
Other clay, ceramic, refractory minerals mining	0	1	1	2
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	4	4	8
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	1	2	5
Metal mining services	0	0	3	8

## APPENDIX

Other nonmetallic minerals services	0	0	0	2
Electric power generation - Hydroelectric	0	1	4	6
Electric power generation - Fossil fuel	0	46	167	400
Electric power generation - Nuclear	0	99	235	500
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	6	14	26
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	206	821	2,140
Natural gas distribution	0	76	228	455
Water, sewage and other systems	0	16	37	86
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	288	364	1,032



## APPENDIX

Maintenance and repair construction of residential structures	0	81	114	322
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	0
Dog and cat food manufacturing	0	9	37	161
Other animal food manufacturing	0	14	25	170
Flour milling	0	1	2	12
Rice milling	0	2	4	29
Malt manufacturing	0	0	0	0
Wet corn milling	0	8	22	152
Soybean and other oilseed processing	0	2	11	123
Fats and oils refining and blending	0	1	1	12
Breakfast cereal manufacturing	0	6	13	55
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	1
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	1	1	1
Frozen fruits, juices and vegetables manufacturing	0	3	5	21
Frozen specialties manufacturing	0	34	48	196
Canned fruits and vegetables manufacturing	0	5	8	32
Canned specialties	0	6	13	62
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	2	5	33
Fluid milk manufacturing	0	9	15	117
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	1	1	2
Frozen cakes and other pastries manufacturing	0	5	7	13
Poultry processing	0	97	133	661
Animal, except poultry, slaughtering	0	3	4	20
Meat processed from carcasses	0	17	20	153

## APPENDIX

Rendering and meat byproduct processing	0	3	3	16
Seafood product preparation and packaging	0	3	3	5
Bread and bakery product, except frozen, manufacturing	0	42	53	111
Cookie and cracker manufacturing	0	8	10	27
Dry pasta, mixes, and dough manufacturing	0	2	3	13
Tortilla manufacturing	0	4	5	16
Roasted nuts and peanut butter manufacturing	0	8	19	56
Other snack food manufacturing	0	11	23	89
Coffee and tea manufacturing	0	0	0	1
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	2	3	17
Spice and extract manufacturing	0	1	1	2
All other food manufacturing	0	2	2	8
Bottled and canned soft drinks & water	0	19	37	166
Manufactured ice	0	1	1	4
Breweries	0	3	11	37
Wineries	0	0	1	2
Distilleries	0	6	46	75
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	2
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	1	2	7
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	1
Carpet and rug mills	0	1	2	5
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	1	1	2
Rope, cordage, twine, tire cord and tire fabric mills	0	7	10	28
Other textile product mills	0	1	1	3
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	3	3	8
Cut and sew apparel contractors	0	1	1	2

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	1	1	2
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	1
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	2	3	11
Other leather and allied product manufacturing	0	0	0	1
Sawmills	0	26	45	132
Wood preservation	0	2	8	20
Veneer and plywood manufacturing	0	5	9	24
Engineered wood member and truss manufacturing	0	1	2	5
Reconstituted wood product manufacturing	0	2	8	24
Wood windows and door manufacturing	0	15	25	66
Cut stock, resawing lumber, and planing	0	4	10	24
Other millwork, including flooring	0	12	22	52
Wood container and pallet manufacturing	0	6	8	23
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	0	2
All other miscellaneous wood product manufacturing	0	5	7	18
Pulp mills	0	0	0	0
Paper mills	0	46	110	351
Paperboard mills	0	11	30	103
Paperboard container manufacturing	0	32	50	212
Paper bag and coated and treated paper manufacturing	0	17	30	114
Stationery product manufacturing	0	3	5	19
Sanitary paper product manufacturing	0	20	66	215

## APPENDIX

All other converted paper product manufacturing	0	1	1	5
Printing	0	128	190	399
Support activities for printing	0	15	22	36
Petroleum refineries	0	26	188	1,257
Asphalt paving mixture and block manufacturing	0	3	4	17
Asphalt shingle and coating materials manufacturing	0	2	4	14
Petroleum lubricating oil and grease manufacturing	0	2	8	31
All other petroleum and coal products manufacturing	0	2	5	20
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	1	3	14
Synthetic dye and pigment manufacturing	0	0	0	1
Other basic inorganic chemical manufacturing	0	4	8	32
Other basic organic chemical manufacturing	0	13	23	196
Plastics material and resin manufacturing	0	5	7	72
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	3	7	24
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	1	3
Pesticide and other agricultural chemical manufacturing	0	2	5	29
Medicinal and botanical manufacturing	0	0	1	3
Pharmaceutical preparation manufacturing	0	3	9	38
In-vitro diagnostic substance manufacturing	0	0	0	1
Biological product (except diagnostic) manufacturing	0	0	0	1
Paint and coating manufacturing	0	1	2	12
Adhesive manufacturing	0	1	1	5
Soap and other detergent manufacturing	0	1	4	31

## APPENDIX

Polish and other sanitation good manufacturing	0	1	2	12
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	15	42	126
Printing ink manufacturing	0	2	2	11
Explosives manufacturing	0	1	1	4
Custom compounding of purchased resins	0	1	1	6
Photographic film and chemical manufacturing	0	0	0	3
Other miscellaneous chemical product manufacturing	0	3	4	19
Plastics packaging materials and unlaminated film and sheet manufacturing	0	11	22	70
Unlaminated plastics profile shape manufacturing	0	4	11	27
Plastics pipe and pipe fitting manufacturing	0	3	10	24
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	2	4	8
Polystyrene foam product manufacturing	0	5	11	35
Urethane and other foam product (except polystyrene) manufacturing	0	3	6	20
Plastics bottle manufacturing	0	1	1	4
Other plastics product manufacturing	0	22	40	129
Tire manufacturing	0	13	22	83
Rubber and plastics hoses and belting manufacturing	0	7	13	32
Other rubber product manufacturing	0	33	59	185
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	1
Brick, tile, and other structural clay product manufacturing	0	5	8	21
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	1	1	3
Glass container manufacturing	0	2	3	8
Glass product manufacturing made of purchased glass	0	1	2	7

## APPENDIX

Cement manufacturing	0	1	3	8
Ready-mix concrete manufacturing	0	19	31	119
Concrete block and brick manufacturing	0	4	6	19
Concrete pipe manufacturing	0	1	2	5
Other concrete product manufacturing	0	4	5	15
Lime manufacturing	0	1	3	8
Gypsum product manufacturing	0	2	5	15
Abrasive product manufacturing	0	2	6	16
Cut stone and stone product manufacturing	0	3	3	9
Ground or treated mineral and earth manufacturing	0	1	3	7
Mineral wool manufacturing	0	2	4	11
Miscellaneous nonmetallic mineral products manufacturing	0	1	2	5
Iron and steel mills and ferroalloy manufacturing	0	28	67	211
Iron, steel pipe and tube manufacturing from purchased steel	0	5	10	31
Rolled steel shape manufacturing	0	(2)	0	7
Steel wire drawing	0	1	2	6
Alumina refining and primary aluminum production	0	1	3	17
Secondary smelting and alloying of aluminum	0	(0)	(0)	0
Aluminum sheet, plate, and foil manufacturing	0	1	4	14
Other aluminum rolling, drawing and extruding	0	(0)	0	3
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	1	2	15
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	(0)	0	1
Ferrous metal foundries	0	0	2	4
Nonferrous metal foundries	0	2	7	17
Custom roll forming	0	1	1	5
Crown and closure manufacturing and metal stamping	0	2	3	8

## APPENDIX

Iron and steel forging	0	1	1	3
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	1	3	7
Handtool manufacturing	0	3	8	14
Prefabricated metal buildings and components manufacturing	0	3	5	13
Fabricated structural metal manufacturing	0	10	20	48
Plate work manufacturing	0	1	1	4
Metal window and door manufacturing	0	4	8	18
Sheet metal work manufacturing	0	6	9	19
Ornamental and architectural metal work manufacturing	0	2	3	8
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	1	2
Metal cans manufacturing	0	1	4	12
Metal barrels, drums and pails manufacturing	0	1	1	3
Hardware manufacturing	0	2	4	10
Spring and wire product manufacturing	0	2	3	9
Machine shops	0	12	16	32
Turned product and screw, nut, and bolt manufacturing	0	1	2	5
Metal heat treating	0	0	1	2
Metal coating and nonprecious engraving	0	1	3	6
Electroplating, anodizing, and coloring metal	0	2	2	5
Valve and fittings, other than plumbing, manufacturing	0	4	8	19
Plumbing fixture fitting and trim manufacturing	0	5	28	62
Ball and roller bearing manufacturing	0	2	4	9
Small arms ammunition manufacturing	0	6	22	35
Ammunition, except for small arms, manufacturing	0	1	2	4
Small arms, ordnance, and accessories manufacturing	0	1	3	6

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	2	3	8
Other fabricated metal manufacturing	0	3	5	11
Farm machinery and equipment manufacturing	0	4	7	30
Lawn and garden equipment manufacturing	0	3	7	35
Construction machinery manufacturing	0	1	1	4
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	1	1	2
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	1	2	4
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	1	2	4
Air purification and ventilation equipment manufacturing	0	1	1	3
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4	10	26
Industrial mold manufacturing	0	0	0	1
Special tool, die, jig, and fixture manufacturing	0	0	1	1
Cutting tool and machine tool accessory manufacturing	0	0	0	1
Machine tool manufacturing	0	0	0	0



## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	1
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	1	1	3
Other engine equipment manufacturing	0	1	1	5
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	1	1	3
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	1
Power-driven handtool manufacturing	0	0	1	1
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	1
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	1
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0

## APPENDIX

Telephone apparatus manufacturing	0	0	0	1
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	1
Printed circuit assembly (electronic assembly) manufacturing	0	0	1	4
Bare printed circuit board manufacturing	0	0	0	1
Semiconductor and related device manufacturing	0	0	1	2
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1	2	3
Electronic connector manufacturing	0	21	41	88
Other electronic component manufacturing	0	0	0	1
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	1
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	0	0	1
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	2	2	7
Small electrical appliance manufacturing	0	0	0	1
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	1
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	1	1	2
Motor and generator manufacturing	0	7	9	32
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	1	2	5
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	1	1	3
Wiring device manufacturing	0	3	5	14
Carbon and graphite product manufacturing	0	1	2	7
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	2
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	1	1	5
Truck trailer manufacturing	0	0	0	1
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	7	7	38
Motor vehicle gasoline engine and engine parts manufacturing	0	5	7	47

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Motor vehicle electrical and electronic equipment manufacturing	0	1	2	11
Motor vehicle transmission and power train parts manufacturing	0	13	18	82
Motor vehicle seating and interior trim manufacturing	0	0	0	2
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	11	13	98
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	19	28	137
Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	0	1	3
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	1
Guided missile and space vehicle manufacturing	0	0	0	1
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	1	3
Ship building and repairing	0	0	1	1
Boat building	0	13	21	77
Motorcycle, bicycle, and parts manufacturing	0	0	2	3
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	6	15	45
Wood kitchen cabinet and countertop manufacturing	0	3	6	14
Upholstered household furniture manufacturing	0	5	8	23
Nonupholstered wood household furniture manufacturing	0	1	1	3
Other household nonupholstered furniture manufacturing	0	0	0	1
Institutional furniture manufacturing	0	0	0	1
Wood office furniture manufacturing	0	0	0	0

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Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	1	2	4
Mattress manufacturing	0	0	1	2
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	2	3	11
Surgical appliance and supplies manufacturing	0	1	1	4
Dental equipment and supplies manufacturing	0	0	0	1
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	1	1	2
Jewelry and silverware manufacturing	0	1	1	3
Sporting and athletic goods manufacturing	0	2	2	8
Doll, toy, and game manufacturing	0	1	0	3
Office supplies (except paper) manufacturing	0	3	3	9
Sign manufacturing	0	9	7	19
Gasket, packing, and sealing device manufacturing	0	0	0	2
Musical instrument manufacturing	0	1	1	2
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	1	1	4
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	2	2	8
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	52	159	315
Wholesale - Professional and commercial equipment and supplies	0	146	300	508
Wholesale - Household appliances and electrical and electronic goods	0	81	247	471
Wholesale - Machinery, equipment, and supplies	0	133	291	500
Wholesale - Other durable goods merchant wholesalers	0	142	271	507

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Wholesale - Drugs and druggists' sundries	0	116	442	795
Wholesale - Grocery and related product wholesalers	0	165	254	413
Wholesale - Petroleum and petroleum products	0	26	556	631
Wholesale - Other nondurable goods merchant wholesalers	0	282	701	1,206
Wholesale - Wholesale electronic markets and agents and brokers	0	203	133	149
Retail - Motor vehicle and parts dealers	0	201	349	500
Retail - Furniture and home furnishings stores	0	85	123	206
Retail - Electronics and appliance stores	0	93	116	193
Retail - Building material and garden equipment and supplies stores	0	115	250	362
Retail - Food and beverage stores	0	271	413	673
Retail - Health and personal care stores	0	232	297	452
Retail - Gasoline stores	0	93	200	376
Retail - Clothing and clothing accessories stores	0	107	197	405
Retail - Sporting goods, hobby, musical instrument and book stores	0	75	105	176
Retail - General merchandise stores	0	353	546	865
Retail - Miscellaneous store retailers	0	147	199	336
Retail - Nonstore retailers	0	82	367	813
Air transportation	0	52	95	194
Rail transportation	0	53	121	236
Water transportation	0	0	6	51
Truck transportation	0	571	698	1,461
Transit and ground passenger transportation	0	62	80	117
Pipeline transportation	0	28	64	90
Scenic and sightseeing transportation and support activities for transportation	0	506	614	1,340
Couriers and messengers	0	119	181	325
Warehousing and storage	0	231	265	551

## APPENDIX

Newspaper publishers	0	91	151	209
Periodical publishers	0	37	54	96
Book publishers	0	7	23	44
Directory, mailing list, and other publishers	0	2	3	11
Greeting card publishing	0	4	20	25
Software publishers	0	43	112	137
Motion picture and video industries	0	37	94	231
Sound recording industries	0	2	17	29
Radio and television broadcasting	0	223	265	795
Cable and other subscription programming	0	1	15	38
Wired telecommunications carriers	0	130	481	794
Wireless telecommunications carriers (except satellite)	0	63	546	930
Satellite, telecommunications resellers, and all other telecommunications	0	37	57	130
Data processing, hosting, and related services	0	188	395	868
News syndicates, libraries, archives and all other information services	0	10	16	33
Internet publishing and broadcasting and web search portals	0	59	165	590
Nondepository credit intermediation and related activities	0	167	241	440
Securities and commodity contracts intermediation and brokerage	0	336	341	819
Monetary authorities and depository credit intermediation	0	1,115	3,124	5,521
Other financial investment activities	0	(277)	58	673
Direct life insurance carriers	0	45	85	130
Insurance carriers, except direct life	0	334	980	2,417
Insurance agencies, brokerages, and related activities	0	380	530	1,610
Funds, trusts, and other financial vehicles	0	75	93	648
Other real estate	0	2,075	5,064	13,671
Tenant-occupied housing	0	130	1,344	1,554

## APPENDIX

Owner-occupied dwellings	0	0	4,182	5,284
Automotive equipment rental and leasing	0	46	184	269
General and consumer goods rental except video tapes and discs	0	75	108	174
Video tape and disc rental	0	14	27	43
Commercial and industrial machinery and equipment rental and leasing	0	79	242	367
Lessors of nonfinancial intangible assets	0	0	159	208
Legal services	0	1,524	2,574	4,273
Accounting, tax preparation, bookkeeping, and payroll services	0	517	673	1,006
Architectural, engineering, and related services	0	718	833	1,668
Specialized design services	0	43	45	60
Custom computer programming services	0	116	134	203
Computer systems design services	0	289	297	400
Other computer related services, including facilities management	0	211	298	565
Management consulting services	0	1,800	1,769	3,003
Environmental and other technical consulting services	0	319	270	426
Scientific research and development services	1	36,320	50,252	117,882
Advertising, public relations, and related services	0	477	674	1,200
Photographic services	0	65	28	60
Veterinary services	0	42	59	98
Marketing research and all other miscellaneous professional, scientific, and technical services	0	917	791	1,265
Management of companies and enterprises	0	4,313	4,959	6,795
Office administrative services	0	617	299	677
Facilities support services	0	45	65	166
Employment services	0	2,012	3,539	5,855
Business support services	0	405	370	606
Travel arrangement and reservation services	0	36	52	140
Investigation and security services	0	185	194	291
Services to buildings	0	470	509	864



## APPENDIX

Landscape and horticultural services	0	210	233	420
Other support services	0	70	94	202
Waste management and remediation services	0	129	314	528
Elementary and secondary schools	0	147	131	160
Junior colleges, colleges, universities, and professional schools	0	170	238	363
Other educational services	0	119	112	213
Offices of physicians	0	1,332	1,610	2,381
Offices of dentists	0	255	334	508
Offices of other health practitioners	0	334	312	454
Outpatient care centers	0	231	243	443
Medical and diagnostic laboratories	0	68	109	169
Home health care services	0	299	239	328
Other ambulatory health care services	0	87	97	164
Hospitals	0	1,872	2,154	4,365
Nursing and community care facilities	0	346	390	716
Residential mental retardation, mental health, substance abuse and other facilities	0	126	132	207
Individual and family services	0	354	347	516
Child day care services	0	128	167	226
Community food, housing, and other relief services, including rehabilitation services	0	80	94	225
Performing arts companies	0	12	21	61
Commercial Sports Except Racing	0	18	27	81
Racing and Track Operation	0	9	18	28
Independent artists, writers, and performers	0	17	34	67
Promoters of performing arts and sports and agents for public figures	0	25	52	145
Museums, historical sites, zoos, and parks	0	13	15	27
Amusement parks and arcades	0	4	24	30
Gambling industries (except casino hotels)	0	26	49	118
Other amusement and recreation industries	0	43	58	113

## APPENDIX

Fitness and recreational sports centers	0	28	65	96
Bowling centers	0	5	9	17
Hotels and motels, including casino hotels	0	26	48	90
Other accommodations	0	9	12	18
Full-service restaurants	0	540	840	1,533
Limited-service restaurants	0	373	630	1,426
All other food and drinking places	0	423	557	864
Automotive repair and maintenance, except car washes	0	318	419	622
Car washes	0	148	253	373
Electronic and precision equipment repair and maintenance	0	113	167	286
Commercial and industrial machinery and equipment repair and maintenance	0	163	202	326
Personal and household goods repair and maintenance	0	152	121	164
Personal care services	0	164	140	186
Death care services	0	18	23	39
Dry-cleaning and laundry services	0	56	63	93
Other personal services	0	175	154	212
Religious organizations	0	422	179	802
Grantmaking, giving, and social advocacy organizations	0	97	251	453
Business and professional associations	0	99	142	286
Labor and civic organizations	0	49	102	234
Private households	0	50	50	50
Postal service	0	246	247	275
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	13	(22)	18
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	2	2	4
Local government passenger transit	0	191	14	150
Local government electric utilities	0	27	80	150
Other local government enterprises	0	327	774	1,535

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 6. California

**Table 379: Detailed NASA Impacts by Types of Impact, California.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>69,725</i>	<i>6,295,641,448</i>	<i>9,811,283,346</i>	<i>16,603,640,061</i>
Oilseed farming	2	1,824,015	2,425,678	3,397,884
Grain farming	20	3,174,846	6,037,048	12,898,903
Vegetable and melon farming	38	2,804,966	4,441,823	8,643,327
Fruit farming	64	3,816,248	6,579,428	10,452,771
Tree nut farming	70	3,253,216	3,463,607	5,208,286
Greenhouse, nursery, and floriculture production	32	2,042,259	2,846,488	5,440,984
Tobacco farming	0	0	0	0
Cotton farming	3	199,154	281,211	522,194
Sugarcane and sugar beet farming	3	323,999	477,916	919,699
All other crop farming	68	1,636,975	2,044,833	4,049,470
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	70	4,286,581	7,349,028	22,650,301
Dairy cattle and milk production	23	2,023,731	3,401,943	17,055,304

## APPENDIX

Poultry and egg production	10	699,684	943,318	11,455,629
Animal production, except cattle and poultry and eggs	17	2,226,920	2,890,733	5,149,873
Forestry, forest products, and timber tract production	5	501,499	532,390	639,574
Commercial logging	16	1,149,394	1,202,107	1,735,270
Commercial fishing	8	360,612	802,926	884,813
Commercial hunting and trapping	1	40,537	289,328	304,954
Support activities for agriculture and forestry	220	10,168,987	10,039,187	11,686,894
Oil and gas extraction	119	4,952,461	28,981,881	55,878,371
Coal mining	9	243,986	463,130	2,128,322
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	2	201,558	649,801	1,002,164
Gold ore mining	6	622,751	996,067	2,244,386
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	1	96,090	157,200	364,174
Stone mining and quarrying	4	240,903	403,768	825,199
Sand and gravel mining	6	636,154	790,076	1,297,493
Other clay, ceramic, refractory minerals mining	1	72,820	91,927	175,533
Potash, soda, and borate mineral mining	1	94,205	136,452	263,871
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	3,178	4,883	17,558
Other nonmetallic minerals	2	212,277	245,176	415,385
Drilling oil and gas wells	0	2,195	4,052	10,470
Support activities for oil and gas operations	0	34,962	57,802	140,288
Metal mining services	4	105,828	668,683	1,452,284
Other nonmetallic minerals services	0	3,811	21,398	44,562
Electric power generation - Hydroelectric	3	525,672	1,449,939	2,235,451
Electric power generation - Fossil fuel	14	2,383,792	9,516,284	21,083,246
Electric power generation - Nuclear	5	1,180,883	2,881,209	5,476,666
Electric power generation - Solar	2	375,525	648,802	960,525
Electric power generation - Wind	2	403,266	1,963,507	3,204,572

## APPENDIX

Electric power generation - Geothermal	2	212,396	493,850	901,322
Electric power generation - Biomass	1	204,263	439,310	813,829
Electric power generation - All other	2	348,992	193,112	453,906
Electric power transmission and distribution	28	4,608,568	15,606,706	37,893,461
Natural gas distribution	47	8,825,202	25,429,968	44,632,428
Water, sewage and other systems	26	3,195,677	5,459,732	8,473,703
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	460	36,789,774	22,944,586	43,737,693
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	245	18,234,246	25,366,073	53,439,356
Maintenance and repair construction of residential structures	108	7,635,982	11,841,588	24,819,269
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	24,027	16,769	34,623
Dog and cat food manufacturing	14	1,232,683	4,566,924	19,129,969
Other animal food manufacturing	21	1,709,884	3,217,930	22,366,868
Flour milling	5	372,819	710,607	5,224,481
Rice milling	3	179,033	292,237	1,950,043
Malt manufacturing	0	7,051	12,607	122,531

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Wet corn milling	9	1,005,925	2,545,902	16,640,988
Soybean and other oilseed processing	5	416,635	2,113,428	24,034,797
Fats and oils refining and blending	4	310,581	601,535	5,772,183
Breakfast cereal manufacturing	4	363,091	821,656	3,726,732
Beet sugar manufacturing	3	218,582	421,694	1,920,962
Sugar cane mills and refining	3	257,096	556,495	2,843,359
Nonchocolate confectionery manufacturing	13	969,532	1,375,131	5,446,052
Chocolate and confectionery manufacturing from cacao beans	8	626,971	1,272,177	5,582,752
Confectionery manufacturing from purchased chocolate	15	848,414	1,125,871	5,089,564
Frozen fruits, juices and vegetables manufacturing	17	1,114,582	1,890,275	7,547,086
Frozen specialties manufacturing	31	2,096,640	3,012,832	12,110,335
Canned fruits and vegetables manufacturing	34	2,327,943	3,992,749	17,234,834
Canned specialties	3	276,933	605,495	2,877,197
Dehydrated food products manufacturing	8	538,729	914,017	3,692,309
Cheese manufacturing	37	2,629,931	3,797,844	33,962,692
Dry, condensed, and evaporated dairy product manufacturing	4	404,741	903,509	5,528,875
Fluid milk manufacturing	17	1,677,399	2,559,704	13,154,677
Creamery butter manufacturing	1	119,537	462,506	2,741,262
Ice cream and frozen dessert manufacturing	7	472,960	708,363	3,097,976
Frozen cakes and other pastries manufacturing	68	2,750,224	4,002,473	6,753,965
Poultry processing	66	3,021,356	3,922,451	19,931,108
Animal, except poultry, slaughtering	39	2,400,771	3,367,765	27,174,526
Meat processed from carcasses	43	2,768,883	3,142,828	22,272,327
Rendering and meat byproduct processing	5	410,142	431,794	2,028,031
Seafood product preparation and packaging	6	421,315	502,048	2,329,895
Bread and bakery product, except frozen, manufacturing	154	7,417,039	9,653,310	22,531,966
Cookie and cracker manufacturing	14	924,280	1,246,013	4,884,082
Dry pasta, mixes, and dough manufacturing	13	878,542	1,889,855	7,536,081
Tortilla manufacturing	9	555,153	669,142	2,152,858

## APPENDIX

Roasted nuts and peanut butter manufacturing	13	988,877	2,091,827	6,457,493
Other snack food manufacturing	22	1,689,157	2,988,789	11,460,496
Coffee and tea manufacturing	11	795,147	1,327,772	7,288,901
Flavoring syrup and concentrate manufacturing	10	1,909,215	11,391,702	31,808,717
Mayonnaise, dressing, and sauce manufacturing	9	730,277	1,287,779	5,431,129
Spice and extract manufacturing	11	1,020,350	1,483,601	6,467,161
All other food manufacturing	54	3,391,466	4,440,459	19,438,984
Bottled and canned soft drinks & water	29	2,537,666	4,781,437	21,724,979
Manufactured ice	2	167,537	92,565	303,506
Breweries	38	3,009,198	7,400,553	18,990,837
Wineries	77	5,906,595	9,654,184	28,445,481
Distilleries	6	763,619	4,211,519	7,854,768
Tobacco product manufacturing	1	78,645	2,247,019	3,513,208
Fiber, yarn, and thread mills	8	389,205	611,314	2,661,292
Broadwoven fabric mills	7	403,489	607,507	1,866,896
Narrow fabric mills and schiffli machine embroidery	2	98,378	111,464	301,467
Nonwoven fabric mills	2	132,071	247,426	940,783
Knit fabric mills	3	151,407	210,813	665,278
Textile and fabric finishing mills	15	830,039	1,104,361	3,998,090
Fabric coating mills	3	242,466	322,970	1,077,036
Carpet and rug mills	11	718,091	1,278,994	4,049,688
Curtain and linen mills	10	469,954	708,276	2,092,865
Textile bag and canvas mills	12	611,416	783,937	2,047,315
Rope, cordage, twine, tire cord and tire fabric mills	1	62,391	105,351	287,337
Other textile product mills	15	733,170	927,789	2,354,835
Hosiery and sock mills	5	232,844	295,399	575,119
Other apparel knitting mills	4	192,507	244,420	515,307
Cut and sew apparel contractors	45	1,471,647	1,547,285	2,940,114
Mens and boys cut and sew apparel manufacturing	16	997,807	1,187,930	2,694,811
Womens and girls cut and sew apparel manufacturing	24	1,463,063	1,971,910	5,633,215
Other cut and sew apparel manufacturing	13	618,890	759,168	1,735,660
Apparel accessories and other apparel manufacturing	12	503,941	615,059	1,415,865
Leather and hide tanning and finishing	1	18,415	30,372	184,914

## APPENDIX

Footwear manufacturing	4	219,078	247,454	728,823
Other leather and allied product manufacturing	6	237,673	249,678	666,005
Sawmills	14	987,991	1,579,051	4,336,213
Wood preservation	2	88,709	336,812	1,007,554
Veneer and plywood manufacturing	2	104,545	172,176	513,823
Engineered wood member and truss manufacturing	5	308,534	458,727	1,273,720
Reconstituted wood product manufacturing	1	66,612	199,790	603,860
Wood windows and door manufacturing	15	874,094	1,323,024	3,500,643
Cut stock, resawing lumber, and planing	3	166,146	332,436	828,796
Other millwork, including flooring	10	571,022	911,902	2,265,216
Wood container and pallet manufacturing	17	758,160	954,586	2,604,392
Manufactured home (mobile home) manufacturing	0	26,985	50,084	124,417
Prefabricated wood building manufacturing	2	91,875	111,384	308,830
All other miscellaneous wood product manufacturing	7	291,240	399,427	1,175,713
Pulp mills	0	50,692	78,177	308,829
Paper mills	12	1,302,770	2,779,802	9,372,601
Paperboard mills	5	557,180	1,229,147	4,249,869
Paperboard container manufacturing	61	5,458,350	7,970,613	30,807,604
Paper bag and coated and treated paper manufacturing	16	1,445,655	2,389,028	7,839,670
Stationery product manufacturing	3	280,959	383,269	1,365,465
Sanitary paper product manufacturing	8	739,299	2,103,310	6,285,573
All other converted paper product manufacturing	5	376,401	528,364	1,602,074
Printing	157	9,034,865	12,364,057	25,955,300
Support activities for printing	12	723,396	989,332	1,568,520
Petroleum refineries	37	9,022,157	66,712,109	306,387,895
Asphalt paving mixture and block manufacturing	1	86,666	138,419	545,432
Asphalt shingle and coating materials manufacturing	1	87,901	255,714	700,096
Petroleum lubricating oil and grease manufacturing	3	385,903	1,340,906	3,865,267



## APPENDIX

All other petroleum and coal products manufacturing	0	18,294	50,526	159,013
Petrochemical manufacturing	0	17,539	159,409	480,646
Industrial gas manufacturing	6	790,469	2,289,253	6,246,610
Synthetic dye and pigment manufacturing	3	251,873	634,461	2,357,287
Other basic inorganic chemical manufacturing	8	1,013,500	2,464,672	6,827,880
Other basic organic chemical manufacturing	8	766,744	1,774,846	11,635,883
Plastics material and resin manufacturing	12	1,141,745	2,142,092	15,639,237
Synthetic rubber manufacturing	1	132,231	226,354	1,197,285
Artificial and synthetic fibers and filaments manufacturing	1	89,214	148,113	922,659
Nitrogenous fertilizer manufacturing	3	320,363	827,675	2,759,643
Phosphatic fertilizer manufacturing	1	107,133	307,201	1,112,436
Fertilizer mixing	3	303,594	604,805	1,812,410
Pesticide and other agricultural chemical manufacturing	2	229,092	864,071	3,089,391
Medicinal and botanical manufacturing	19	3,273,520	6,269,360	13,416,535
Pharmaceutical preparation manufacturing	104	18,933,942	84,344,389	173,830,467
In-vitro diagnostic substance manufacturing	10	1,503,453	2,566,470	5,218,863
Biological product (except diagnostic) manufacturing	10	1,353,204	3,778,356	7,207,601
Paint and coating manufacturing	12	1,290,254	2,725,877	9,648,965
Adhesive manufacturing	7	878,807	1,585,070	5,063,088
Soap and other detergent manufacturing	11	1,582,144	6,073,977	15,243,249
Polish and other sanitation good manufacturing	13	2,391,382	5,270,530	11,264,817
Surface active agent manufacturing	0	69,721	243,378	568,935
Toilet preparation manufacturing	30	3,191,600	11,712,185	27,563,748
Printing ink manufacturing	4	430,240	467,704	1,911,806
Explosives manufacturing	1	91,072	109,900	383,171
Custom compounding of purchased resins	6	444,594	864,235	3,243,475
Photographic film and chemical manufacturing	5	432,240	1,027,689	3,577,881

## APPENDIX

Other miscellaneous chemical product manufacturing	14	1,458,869	2,388,171	8,504,837
Plastics packaging materials and unlaminated film and sheet manufacturing	33	2,493,679	4,031,212	14,650,880
Unlaminated plastics profile shape manufacturing	13	1,000,359	2,143,680	5,814,676
Plastics pipe and pipe fitting manufacturing	9	616,498	1,423,995	4,489,515
Laminated plastics plate, sheet (except packaging), and shape manufacturing	7	471,419	829,376	2,185,085
Polystyrene foam product manufacturing	13	848,091	1,369,765	4,557,864
Urethane and other foam product (except polystyrene) manufacturing	17	1,096,302	1,724,045	6,222,921
Plastics bottle manufacturing	19	1,422,774	2,344,889	8,436,623
Other plastics product manufacturing	123	8,848,947	12,863,264	36,202,267
Tire manufacturing	7	456,780	607,614	2,523,202
Rubber and plastics hoses and belting manufacturing	4	277,930	428,283	1,214,703
Other rubber product manufacturing	38	2,474,629	3,618,221	12,249,529
Pottery, ceramics, and plumbing fixture manufacturing	4	197,008	242,724	600,001
Brick, tile, and other structural clay product manufacturing	4	191,031	309,688	858,839
Flat glass manufacturing	3	204,745	388,837	1,038,245
Other pressed and blown glass and glassware manufacturing	11	765,003	1,059,367	2,617,386
Glass container manufacturing	8	667,242	1,097,802	2,883,101
Glass product manufacturing made of purchased glass	20	1,299,383	2,051,497	5,061,272
Cement manufacturing	2	244,254	539,219	1,537,632
Ready-mix concrete manufacturing	12	962,527	1,525,392	4,818,462
Concrete block and brick manufacturing	3	257,466	443,525	1,125,398
Concrete pipe manufacturing	1	89,893	138,501	343,302
Other concrete product manufacturing	10	688,975	961,818	2,338,445
Lime manufacturing	0	35,157	78,070	255,243
Gypsum product manufacturing	5	436,260	1,046,863	3,067,594

## APPENDIX

Abrasive product manufacturing	2	111,661	304,310	657,423
Cut stone and stone product manufacturing	4	205,078	235,385	523,233
Ground or treated mineral and earth manufacturing	2	148,711	379,004	956,523
Mineral wool manufacturing	3	249,574	543,848	1,339,118
Miscellaneous nonmetallic mineral products manufacturing	3	216,645	479,510	1,075,089
Iron and steel mills and ferroalloy manufacturing	17	2,111,055	3,028,407	16,652,712
Iron, steel pipe and tube manufacturing from purchased steel	7	720,844	933,070	3,100,617
Rolled steel shape manufacturing	3	218,280	354,219	1,874,152
Steel wire drawing	3	236,423	293,602	1,113,107
Alumina refining and primary aluminum production	3	398,648	669,943	2,439,589
Secondary smelting and alloying of aluminum	2	171,803	254,958	1,992,504
Aluminum sheet, plate, and foil manufacturing	4	354,271	564,727	3,136,970
Other aluminum rolling, drawing and extruding	9	711,007	904,693	4,003,763
Nonferrous metal (exc aluminum) smelting and refining	0	23,134	60,444	239,079
Copper rolling, drawing, extruding and alloying	2	167,252	211,172	1,721,377
Nonferrous metal, except copper and aluminum, shaping	6	504,191	614,726	2,563,480
Secondary processing of other nonferrous metals	1	107,309	248,512	1,373,073
Ferrous metal foundries	15	1,156,464	1,633,733	4,069,265
Nonferrous metal foundries	18	1,250,584	1,644,788	4,264,058
Custom roll forming	2	182,991	292,383	1,145,426
Crown and closure manufacturing and metal stamping	19	1,359,058	2,009,409	5,273,061
Iron and steel forging	8	617,656	864,501	2,557,064
Nonferrous forging	4	363,317	465,167	1,322,433
Cutlery, utensil, pot, and pan manufacturing	3	221,921	657,641	1,580,989
Handtool manufacturing	9	630,359	1,044,610	2,185,400
Prefabricated metal buildings and components manufacturing	5	385,787	560,532	1,445,232
Fabricated structural metal manufacturing	21	1,650,851	2,512,076	6,892,319

## APPENDIX

Plate work manufacturing	6	407,543	425,264	1,273,993
Metal window and door manufacturing	13	900,783	1,424,650	3,452,842
Sheet metal work manufacturing	27	1,904,391	2,498,242	5,965,616
Ornamental and architectural metal work manufacturing	11	846,614	1,139,016	2,621,736
Power boiler and heat exchanger manufacturing	0	41,679	59,149	145,351
Metal tank (heavy gauge) manufacturing	3	213,762	265,513	714,233
Metal cans manufacturing	7	680,971	1,608,789	6,025,956
Metal barrels, drums and pails manufacturing	3	262,785	331,611	1,078,144
Hardware manufacturing	9	720,770	1,227,614	3,153,514
Spring and wire product manufacturing	12	902,479	1,258,168	3,316,881
Machine shops	128	9,021,846	10,514,384	19,877,077
Turned product and screw, nut, and bolt manufacturing	26	2,027,837	2,895,573	6,731,768
Metal heat treating	10	758,778	1,217,969	2,697,072
Metal coating and nonprecious engraving	25	1,482,494	2,678,996	6,188,627
Electroplating, anodizing, and coloring metal	33	2,039,765	2,302,184	4,911,301
Valve and fittings, other than plumbing, manufacturing	12	1,158,821	1,936,162	4,432,983
Plumbing fixture fitting and trim manufacturing	5	403,137	1,311,313	3,291,461
Ball and roller bearing manufacturing	8	605,385	1,164,431	2,546,886
Small arms ammunition manufacturing	1	55,936	124,714	250,539
Ammunition, except for small arms, manufacturing	0	9,977	12,491	25,859
Small arms, ordnance, and accessories manufacturing	4	353,758	921,763	1,706,733
Fabricated pipe and pipe fitting manufacturing	3	194,175	228,584	573,771
Other fabricated metal manufacturing	18	1,442,978	1,944,480	4,392,095
Farm machinery and equipment manufacturing	1	97,782	157,646	562,506
Lawn and garden equipment manufacturing	0	20,924	42,031	213,836

## APPENDIX

Construction machinery manufacturing	0	13,751	31,971	103,099
Mining machinery and equipment manufacturing	0	3,271	4,275	12,346
Oil and gas field machinery and equipment manufacturing	0	22,684	28,776	87,347
Semiconductor machinery manufacturing	0	76,358	89,553	192,301
Food product machinery manufacturing	0	31,533	41,030	123,147
Sawmill, woodworking, and paper machinery	1	59,661	68,096	186,909
Printing machinery and equipment manufacturing	0	31,417	37,212	101,984
All other industrial machinery manufacturing	1	83,875	116,173	283,632
Optical instrument and lens manufacturing	3	423,771	764,113	1,496,792
Photographic and photocopying equipment manufacturing	1	91,376	151,300	416,405
Other commercial service industry machinery manufacturing	5	412,144	885,552	2,085,490
Air purification and ventilation equipment manufacturing	1	98,582	158,484	415,757
Heating equipment (except warm air furnaces) manufacturing	5	397,085	659,999	1,530,249
Air conditioning, refrigeration, and warm air heating equipment manufacturing	7	477,965	1,034,600	2,902,344
Industrial mold manufacturing	2	122,903	146,591	298,421
Special tool, die, jig, and fixture manufacturing	2	115,185	157,602	283,256
Cutting tool and machine tool accessory manufacturing	2	142,746	161,389	376,377
Machine tool manufacturing	1	87,931	102,611	266,318
Rolling mill and other metalworking machinery manufacturing	1	59,616	82,554	220,910
Turbine and turbine generator set units manufacturing	1	126,506	187,180	477,585
Speed changer, industrial high-speed drive, and gear manufacturing	2	218,351	354,177	736,165
Mechanical power transmission equipment manufacturing	2	142,529	237,449	549,527

## APPENDIX

Other engine equipment manufacturing	1	122,140	276,491	1,061,196
Pump and pumping equipment manufacturing	1	96,617	193,798	466,687
Air and gas compressor manufacturing	1	55,626	107,854	309,174
Elevator and moving stairway manufacturing	0	17,455	30,641	88,447
Conveyor and conveying equipment manufacturing	0	30,593	32,495	89,141
Overhead cranes, hoists, and monorail systems manufacturing	0	32,095	72,976	203,537
Industrial truck, trailer, and stacker manufacturing	0	27,905	48,430	169,901
Power-driven handtool manufacturing	1	28,947	86,642	253,273
Welding and soldering equipment manufacturing	1	78,562	112,266	280,939
Packaging machinery manufacturing	3	254,966	411,992	1,004,499
Industrial process furnace and oven manufacturing	0	23,385	30,759	70,290
Fluid power cylinder and actuator manufacturing	1	62,358	93,722	268,135
Fluid power pump and motor manufacturing	2	246,420	422,209	1,003,321
Scales, balances, and miscellaneous general purpose machinery manufacturing	1	95,391	132,127	327,444
Electronic computer manufacturing	12	4,540,583	9,337,999	18,517,493
Computer storage device manufacturing	3	619,301	1,660,210	5,263,074
Computer terminals and other computer peripheral equipment manufacturing	11	2,016,329	3,612,250	7,876,127
Telephone apparatus manufacturing	2	283,096	509,779	1,425,418
Broadcast and wireless communications equipment manufacturing	2	290,851	417,190	887,952
Other communications equipment manufacturing	3	290,684	460,707	1,239,310
Audio and video equipment manufacturing	6	868,986	1,516,664	3,786,886

## APPENDIX

Printed circuit assembly (electronic assembly) manufacturing	46	3,589,330	5,380,103	16,408,118
Bare printed circuit board manufacturing	14	1,009,823	1,310,888	3,413,296
Semiconductor and related device manufacturing	124	31,742,941	53,462,305	105,630,578
Capacitor, resistor, coil, transformer, and other inductor manufacturing	6	445,759	628,769	1,542,887
Electronic connector manufacturing	66	5,812,289	8,627,714	22,316,827
Other electronic component manufacturing	50	4,343,483	4,965,136	13,350,366
Electromedical and electrotherapeutic apparatus manufacturing	4	608,901	1,226,440	2,362,674
Search, detection, and navigation instruments manufacturing	1	122,666	194,691	374,887
Automatic environmental control manufacturing	7	786,240	1,031,853	1,930,720
Industrial process variable instruments manufacturing	4	358,229	517,223	1,120,314
Totalizing fluid meter and counting device manufacturing	1	105,237	219,174	489,092
Electricity and signal testing instruments manufacturing	5	812,208	1,155,533	2,668,245
Analytical laboratory instrument manufacturing	16	2,529,763	4,340,004	8,255,702
Irradiation apparatus manufacturing	0	33,391	64,129	154,235
Watch, clock, and other measuring and controlling device manufacturing	8	873,969	1,486,207	2,886,607
Blank magnetic and optical recording media manufacturing	2	324,826	882,151	2,389,711
Software and other prerecorded and record reproducing	5	588,988	844,660	1,554,961
Electric lamp bulb and part manufacturing	2	218,687	336,766	874,334
Lighting fixture manufacturing	23	2,076,474	2,916,700	7,623,705
Small electrical appliance manufacturing	1	149,641	270,666	753,626
Household cooking appliance manufacturing	3	205,114	417,527	1,321,544

## APPENDIX

Household refrigerator and home freezer manufacturing	3	215,663	522,711	1,875,435
Household laundry equipment manufacturing	6	451,735	841,559	3,472,526
Other major household appliance manufacturing	1	88,919	196,938	571,590
Power, distribution, and specialty transformer manufacturing	1	121,060	169,471	430,174
Motor and generator manufacturing	3	303,680	441,661	1,299,843
Switchgear and switchboard apparatus manufacturing	3	303,542	467,671	1,262,042
Relay and industrial control manufacturing	7	778,728	995,026	2,412,000
Storage battery manufacturing	8	738,167	1,094,050	3,130,735
Primary battery manufacturing	4	406,168	742,360	2,063,630
Fiber optic cable manufacturing	7	1,023,064	1,521,765	4,919,024
Other communication and energy wire manufacturing	2	141,768	232,492	933,443
Wiring device manufacturing	11	1,188,071	2,082,020	4,840,432
Carbon and graphite product manufacturing	6	487,033	664,854	2,108,479
All other miscellaneous electrical equipment and component manufacturing	5	627,660	695,461	1,637,118
Automobile manufacturing	14	1,511,685	3,359,473	20,798,082
Light truck and utility vehicle manufacturing	0	(983)	5,225	179,713
Heavy duty truck manufacturing	0	27,508	49,026	272,875
Motor vehicle body manufacturing	1	72,456	85,469	363,744
Truck trailer manufacturing	0	3,576	3,992	15,700
Motor home manufacturing	1	76,702	110,109	505,690
Travel trailer and camper manufacturing	14	873,057	924,180	4,416,605
Motor vehicle gasoline engine and engine parts manufacturing	12	895,914	1,127,079	6,819,507
Motor vehicle electrical and electronic equipment manufacturing	11	1,242,076	1,466,401	5,716,112
Motor vehicle transmission and power train parts manufacturing	7	532,864	708,915	4,203,854
Motor vehicle seating and interior trim manufacturing	2	93,892	113,049	919,283
Motor vehicle metal stamping	3	177,934	214,715	1,213,904



## APPENDIX

Other motor vehicle parts manufacturing	37	2,264,236	2,917,979	19,541,115
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	10	595,626	779,239	4,697,961
Aircraft manufacturing	1	97,426	194,076	526,097
Aircraft engine and engine parts manufacturing	1	74,080	175,336	436,167
Other aircraft parts and auxiliary equipment manufacturing	17	1,652,070	2,631,666	5,975,933
Guided missile and space vehicle manufacturing	4	720,218	959,116	1,982,288
Propulsion units and parts for space vehicles and guided missiles manufacturing	1	111,984	151,196	299,278
Railroad rolling stock manufacturing	0	45,169	69,409	290,356
Ship building and repairing	3	263,428	331,287	757,139
Boat building	6	476,191	652,740	1,931,387
Motorcycle, bicycle, and parts manufacturing	7	520,310	1,772,536	4,603,412
Military armored vehicle, tank, and tank component manufacturing	7	949,042	2,043,936	5,186,304
All other transportation equipment manufacturing	5	339,689	684,107	2,881,498
Wood kitchen cabinet and countertop manufacturing	46	2,397,794	3,114,275	6,756,498
Upholstered household furniture manufacturing	36	1,735,440	2,216,789	7,128,880
Nonupholstered wood household furniture manufacturing	13	603,978	668,407	1,747,495
Other household nonupholstered furniture manufacturing	5	265,392	371,773	1,290,006
Institutional furniture manufacturing	1	88,430	94,849	280,544
Wood office furniture manufacturing	1	45,076	59,326	162,819
Custom architectural woodwork and millwork	1	42,446	40,568	103,968
Office furniture, except wood, manufacturing	11	878,909	1,325,573	3,759,918
Showcase, partition, shelving, and locker manufacturing	5	277,290	361,790	938,192

## APPENDIX

Mattress manufacturing	8	449,177	814,683	2,939,921
Blind and shade manufacturing	3	159,925	166,299	608,161
Surgical and medical instrument manufacturing	12	1,682,730	3,038,956	6,210,287
Surgical appliance and supplies manufacturing	24	2,741,093	4,896,316	10,910,620
Dental equipment and supplies manufacturing	3	264,059	413,030	912,538
Ophthalmic goods manufacturing	12	1,132,259	2,081,707	4,236,499
Dental laboratories	31	1,822,066	1,730,442	2,935,885
Jewelry and silverware manufacturing	23	1,130,096	1,607,723	4,020,113
Sporting and athletic goods manufacturing	20	1,293,077	1,675,315	4,937,103
Doll, toy, and game manufacturing	6	726,967	1,041,820	2,157,243
Office supplies (except paper) manufacturing	5	352,283	442,195	1,234,901
Sign manufacturing	5	277,140	229,029	536,097
Gasket, packing, and sealing device manufacturing	5	436,373	525,317	1,231,955
Musical instrument manufacturing	2	172,188	173,759	331,440
Fasteners, buttons, needles, and pins manufacturing	2	110,679	130,534	305,100
Broom, brush, and mop manufacturing	3	169,864	230,937	748,630
Burial casket manufacturing	0	22,011	25,139	68,618
All other miscellaneous manufacturing	17	1,235,300	1,450,721	3,163,210
Wholesale - Motor vehicle and motor vehicle parts and supplies	55	4,444,304	10,421,119	21,717,542
Wholesale - Professional and commercial equipment and supplies	131	18,718,228	33,883,988	52,081,507
Wholesale - Household appliances and electrical and electronic goods	72	8,665,105	19,501,695	36,947,863
Wholesale - Machinery, equipment, and supplies	90	8,174,357	14,693,328	24,777,402
Wholesale - Other durable goods merchant wholesalers	204	16,778,190	27,207,497	50,490,013
Wholesale - Drugs and druggists' sundries	71	10,613,042	29,833,864	60,246,316
Wholesale - Grocery and related product wholesalers	208	15,661,262	21,333,546	40,735,313
Wholesale - Petroleum and petroleum products	34	3,490,194	62,313,119	68,490,479

## APPENDIX

Wholesale - Other nondurable goods merchant wholesalers	293	23,735,014	53,779,218	93,813,665
Wholesale - Wholesale electronic markets and agents and brokers	126	13,775,694	6,320,779	7,366,244
Retail - Motor vehicle and parts dealers	216	14,102,809	23,145,216	31,672,814
Retail - Furniture and home furnishings stores	153	8,064,792	11,048,743	16,413,520
Retail - Electronics and appliance stores	160	9,213,854	10,385,138	16,216,358
Retail - Building material and garden equipment and supplies stores	184	8,731,770	16,817,849	23,305,226
Retail - Food and beverage stores	636	26,410,828	37,028,956	55,427,875
Retail - Health and personal care stores	331	16,827,981	20,813,789	30,124,566
Retail - Gasoline stores	234	20,168,754	28,561,353	41,282,644
Retail - Clothing and clothing accessories stores	365	12,385,100	20,481,095	36,646,483
Retail - Sporting goods, hobby, musical instrument and book stores	195	6,852,890	9,221,650	13,471,184
Retail - General merchandise stores	625	21,757,979	33,968,971	51,024,007
Retail - Miscellaneous store retailers	377	13,191,525	16,016,338	22,962,865
Retail - Nonstore retailers	438	21,838,844	61,668,485	92,122,566
Air transportation	148	18,561,903	45,339,999	64,451,938
Rail transportation	44	5,598,497	8,386,697	19,136,460
Water transportation	25	2,715,554	5,374,627	18,415,515
Truck transportation	3,962	299,460,229	332,172,701	683,726,472
Transit and ground passenger transportation	593	16,033,644	23,101,644	31,321,701
Pipeline transportation	9	2,489,000	6,583,201	7,821,156
Scenic and sightseeing transportation and support activities for transportation	615	49,527,161	55,441,317	106,075,111
Couriers and messengers	425	18,512,445	25,402,840	45,597,531
Warehousing and storage	399	21,007,078	24,097,408	47,494,971
Newspaper publishers	24	1,578,881	2,578,320	3,261,395
Periodical publishers	24	3,061,833	4,665,071	6,425,095
Book publishers	15	1,462,792	4,761,101	7,661,177
Directory, mailing list, and other publishers	6	471,465	1,531,169	2,162,399
Greeting card publishing	1	81,033	301,807	429,870

## APPENDIX

Software publishers	137	38,725,816	102,230,836	110,306,242
Motion picture and video industries	102	15,645,612	35,473,777	45,670,717
Sound recording industries	9	753,673	6,702,987	7,615,884
Radio and television broadcasting	48	26,407,520	23,722,130	33,060,808
Cable and other subscription programming	20	8,000,690	32,354,476	54,957,665
Wired telecommunications carriers	104	12,587,693	30,255,893	55,925,008
Wireless telecommunications carriers (except satellite)	41	5,921,651	33,117,357	73,092,640
Satellite, telecommunications resellers, and all other telecommunications	28	4,997,883	6,083,085	11,507,660
Data processing, hosting, and related services	128	25,607,194	47,820,684	76,819,997
News syndicates, libraries, archives and all other information services	18	3,201,809	5,048,592	6,344,158
Internet publishing and broadcasting and web search portals	188	73,464,836	171,289,604	276,118,114
Nondepository credit intermediation and related activities	327	38,659,443	60,143,173	85,889,317
Securities and commodity contracts intermediation and brokerage	200	41,924,551	39,230,638	63,903,778
Monetary authorities and depository credit intermediation	429	48,816,680	179,487,502	237,655,372
Other financial investment activities	804	65,666,731	70,576,961	131,367,665
Direct life insurance carriers	43	6,315,704	10,209,449	15,253,478
Insurance carriers, except direct life	205	26,155,651	60,753,432	139,732,247
Insurance agencies, brokerages, and related activities	537	38,997,598	50,612,694	122,304,776
Funds, trusts, and other financial vehicles	160	8,946,020	12,568,421	55,276,624
Other real estate	2,714	135,590,354	374,236,914	689,069,187
Tenant-occupied housing	297	12,782,611	131,596,183	143,865,143
Owner-occupied dwellings	0	0	398,634,357	503,669,840
Automotive equipment rental and leasing	88	4,815,420	17,240,946	24,764,384

## APPENDIX

General and consumer goods rental except video tapes and discs	107	6,383,581	8,346,447	13,218,125
Video tape and disc rental	25	1,238,150	2,040,568	3,167,873
Commercial and industrial machinery and equipment rental and leasing	107	8,894,605	23,170,418	35,530,252
Lessors of nonfinancial intangible assets	10	1,104,226	24,844,448	28,802,326
Legal services	1,015	111,395,410	188,509,000	255,726,201
Accounting, tax preparation, bookkeeping, and payroll services	487	42,972,481	58,907,167	77,699,184
Architectural, engineering, and related services	783	82,819,941	100,015,524	163,323,919
Specialized design services	121	8,963,157	9,424,053	11,325,365
Custom computer programming services	136	21,018,239	23,458,039	30,318,450
Computer systems design services	139	21,059,959	21,905,423	27,014,046
Other computer related services, including facilities management	59	12,692,160	21,264,672	28,891,850
Management consulting services	1,932	197,386,512	195,516,950	283,620,460
Environmental and other technical consulting services	319	28,063,828	24,923,964	35,277,876
Scientific research and development services	12,606	2,052,870,908	3,025,826,386	4,634,376,159
Advertising, public relations, and related services	187	20,351,125	29,534,292	43,345,764
Photographic services	92	5,289,532	2,990,868	4,726,328
Veterinary services	75	4,073,078	5,999,006	8,818,010
Marketing research and all other miscellaneous professional, scientific, and technical services	1,139	78,599,910	73,759,350	102,399,061
Management of companies and enterprises	1,179	174,707,604	202,012,437	275,935,281
Office administrative services	407	33,099,428	12,503,697	27,742,324
Facilities support services	295	15,381,512	20,061,155	44,810,330
Employment services	2,183	108,490,572	170,702,019	249,965,709
Business support services	347	18,939,440	16,723,908	26,670,849
Travel arrangement and reservation services	116	7,707,813	10,361,681	22,786,178
Investigation and security services	348	15,127,575	15,517,894	21,747,232
Services to buildings	1,071	36,795,754	38,218,775	57,545,928
Landscape and horticultural services	425	16,593,639	17,527,701	27,602,665
Other support services	143	8,211,016	10,258,241	17,999,527

## APPENDIX

Waste management and remediation services	119	9,364,872	18,219,340	29,290,334
Elementary and secondary schools	266	14,943,242	12,930,385	15,301,682
Junior colleges, colleges, universities, and professional schools	356	23,822,911	31,908,033	41,912,498
Other educational services	401	12,371,995	11,371,904	20,965,474
Offices of physicians	650	70,179,794	85,343,385	123,477,375
Offices of dentists	303	18,930,136	24,786,761	37,625,519
Offices of other health practitioners	378	21,087,439	20,318,429	28,594,889
Outpatient care centers	246	27,486,809	28,989,495	43,789,438
Medical and diagnostic laboratories	76	7,509,101	12,433,637	17,805,142
Home health care services	365	18,738,972	15,190,265	19,892,087
Other ambulatory health care services	91	5,749,249	6,406,775	10,305,159
Hospitals	1,059	113,663,015	133,355,269	220,590,414
Nursing and community care facilities	455	21,698,486	23,656,434	38,664,461
Residential mental retardation, mental health, substance abuse and other facilities	186	8,921,954	9,291,796	13,418,378
Individual and family services	1,212	28,635,387	28,279,223	44,129,419
Child day care services	301	10,372,828	13,327,043	16,739,436
Community food, housing, and other relief services, including rehabilitation services	199	7,279,416	8,542,890	18,203,520
Performing arts companies	68	4,456,085	6,215,149	9,182,390
Commercial Sports Except Racing	63	7,526,195	7,935,700	10,623,861
Racing and Track Operation	15	694,343	1,085,310	1,755,710
Independent artists, writers, and performers	270	14,022,613	17,092,576	18,439,336
Promoters of performing arts and sports and agents for public figures	93	6,555,873	11,994,148	20,210,163
Museums, historical sites, zoos, and parks	43	2,356,103	2,681,078	4,254,788
Amusement parks and arcades	52	2,144,781	3,319,602	4,423,961
Gambling industries (except casino hotels)	124	5,916,310	12,974,235	19,673,206
Other amusement and recreation industries	163	5,183,057	5,614,008	9,363,207
Fitness and recreational sports centers	202	4,939,666	6,072,618	9,513,189

## APPENDIX

Bowling centers	19	564,158	740,563	1,223,624
Hotels and motels, including casino hotels	1,131	54,321,820	90,401,172	136,261,804
Other accommodations	316	18,740,600	23,658,665	30,284,636
Full-service restaurants	1,600	50,562,920	76,027,120	119,997,519
Limited-service restaurants	1,366	36,799,566	58,360,963	112,633,195
All other food and drinking places	1,009	37,233,973	48,086,308	68,811,903
Automotive repair and maintenance, except car washes	681	43,629,997	50,169,396	71,376,318
Car washes	274	15,778,123	24,317,185	34,982,662
Electronic and precision equipment repair and maintenance	765	65,383,447	93,467,767	140,015,057
Commercial and industrial machinery and equipment repair and maintenance	111	9,524,170	11,022,440	16,465,667
Personal and household goods repair and maintenance	166	12,729,935	10,021,659	12,303,621
Personal care services	603	18,016,958	13,222,323	17,552,446
Death care services	26	1,464,661	1,760,452	2,573,801
Dry-cleaning and laundry services	100	3,948,116	4,311,010	6,129,494
Other personal services	591	19,865,505	12,498,994	17,696,929
Religious organizations	506	27,970,644	8,918,323	42,963,491
Grantmaking, giving, and social advocacy organizations	163	10,942,021	26,814,445	40,717,880
Business and professional associations	60	6,092,914	8,325,864	13,080,209
Labor and civic organizations	202	7,479,384	15,464,489	25,614,194
Private households	321	6,071,767	6,071,767	6,071,767
Postal service	188	17,752,268	17,773,510	19,523,942
Federal electric utilities	0	0	0	0
Other federal government enterprises	118	5,248,044	2,318,572	21,381,719
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	57	6,888,882	(7,315,638)	865,693
Local government electric utilities	40	6,894,534	14,277,383	25,286,369
Other local government enterprises	311	33,706,552	52,091,550	101,338,011
* Not an industry (Used and secondhand goods)	0	0	0	0

## APPENDIX

* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	1	82,949	95,552	95,552
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	16,981	19,598	19,598
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1,706	311,948,960	353,070,386	731,491,365

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 380: Detailed M2M Program Impacts by Types of Impact, California.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>6,107</i>	<i>640,762,142</i>	<i>1,015,288,766</i>	<i>1,602,156,417</i>
Oilseed farming	0	163,817	316,239	501,349
Grain farming	2	270,828	573,385	1,115,120
Vegetable and melon farming	3	282,388	468,715	860,740
Fruit farming	7	504,127	878,604	1,318,359
Tree nut farming	13	667,221	708,109	1,051,494
Greenhouse, nursery, and floriculture production	3	173,962	250,662	468,017
Tobacco farming	0	0	0	0
Cotton farming	0	16,511	23,266	42,723
Sugarcane and sugar beet farming	0	24,739	37,928	67,022
All other crop farming	5	132,194	171,813	330,575
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	5	410,380	679,018	1,856,749
Dairy cattle and milk production	2	236,523	410,301	1,798,655
Poultry and egg production	1	57,771	79,445	945,794
Animal production, except cattle and poultry and eggs	1	149,661	217,052	397,670
Forestry, forest products, and timber tract production	0	54,401	57,502	66,155



## APPENDIX

Commercial logging	1	97,417	101,529	135,627
Commercial fishing	1	46,318	77,866	86,674
Commercial hunting and trapping	0	4,095	27,479	25,608
Support activities for agriculture and forestry	20	975,328	955,994	1,108,293
Oil and gas extraction	5	155,073	1,156,622	2,224,397
Coal mining	0	11,918	19,718	100,564
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	125,059	109,775	136,800
Gold ore mining	0	38,554	51,301	125,487
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	9,003	11,508	28,869
Stone mining and quarrying	0	34,216	29,048	60,831
Sand and gravel mining	0	117,399	72,910	100,239
Other clay, ceramic, refractory minerals mining	0	7,077	6,995	13,481
Potash, soda, and borate mineral mining	0	8,693	11,632	23,721
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	390	413	1,358
Other nonmetallic minerals	0	38,234	24,152	38,067
Drilling oil and gas wells	0	133	258	667
Support activities for oil and gas operations	0	1,393	2,386	5,739
Metal mining services	0	5,311	42,263	90,546
Other nonmetallic minerals services	0	212	1,504	3,029
Electric power generation - Hydroelectric	0	41,966	106,541	153,104
Electric power generation - Fossil fuel	1	147,173	571,957	1,203,648
Electric power generation - Nuclear	0	75,977	198,156	364,423
Electric power generation - Solar	0	19,584	32,452	46,547
Electric power generation - Wind	0	19,318	90,067	138,165
Electric power generation - Geothermal	0	22,021	46,292	85,655
Electric power generation - Biomass	0	22,878	38,829	72,861
Electric power generation - All other	0	41,113	18,107	36,860

## APPENDIX

Electric power transmission and distribution	1	210,918	745,425	1,741,780
Natural gas distribution	4	957,387	2,853,084	4,409,289
Water, sewage and other systems	1	173,093	272,095	378,313
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	20	1,537,040	2,147,340	4,394,048
Maintenance and repair construction of residential structures	10	750,148	1,170,574	2,373,840
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	2,263	1,532	3,148
Dog and cat food manufacturing	1	105,203	404,391	1,624,774
Other animal food manufacturing	2	172,168	339,359	2,242,052
Flour milling	0	31,313	60,350	450,023
Rice milling	0	25,587	40,122	275,372
Malt manufacturing	0	645	1,284	9,574
Wet corn milling	1	119,346	328,020	2,160,129
Soybean and other oilseed processing	1	55,912	287,341	3,217,024
Fats and oils refining and blending	0	38,706	77,452	683,372
Breakfast cereal manufacturing	0	29,176	64,628	291,152
Beet sugar manufacturing	0	15,055	27,603	126,580

## APPENDIX

Sugar cane mills and refining	0	33,336	72,602	368,288
Nonchocolate confectionery manufacturing	1	114,926	160,984	583,971
Chocolate and confectionery manufacturing from cacao beans	1	123,333	252,053	1,024,062
Confectionery manufacturing from purchased chocolate	1	93,990	126,029	526,512
Frozen fruits, juices and vegetables manufacturing	2	135,830	232,101	865,222
Frozen specialties manufacturing	3	248,637	354,618	1,341,349
Canned fruits and vegetables manufacturing	5	323,090	555,443	2,358,811
Canned specialties	0	28,859	62,222	295,166
Dehydrated food products manufacturing	1	78,128	131,120	488,934
Cheese manufacturing	4	299,412	431,840	3,939,439
Dry, condensed, and evaporated dairy product manufacturing	0	53,366	122,461	667,598
Fluid milk manufacturing	2	172,751	269,959	1,328,634
Creamery butter manufacturing	0	15,311	56,495	322,610
Ice cream and frozen dessert manufacturing	1	52,101	80,785	312,569
Frozen cakes and other pastries manufacturing	7	290,568	417,819	688,587
Poultry processing	5	250,496	343,418	1,651,699
Animal, except poultry, slaughtering	3	195,636	279,138	2,202,665
Meat processed from carcasses	4	279,776	322,252	2,210,423
Rendering and meat byproduct processing	1	49,083	51,002	238,683
Seafood product preparation and packaging	0	37,083	45,899	190,105
Bread and bakery product, except frozen, manufacturing	15	758,827	989,315	2,262,934
Cookie and cracker manufacturing	1	101,915	146,090	519,963
Dry pasta, mixes, and dough manufacturing	2	100,803	212,096	868,526
Tortilla manufacturing	1	53,426	63,995	201,566
Roasted nuts and peanut butter manufacturing	1	119,997	283,081	760,663
Other snack food manufacturing	2	177,340	315,414	1,164,315
Coffee and tea manufacturing	1	88,243	149,926	780,715
Flavoring syrup and concentrate manufacturing	2	294,930	1,664,779	4,758,796

## APPENDIX

Mayonnaise, dressing, and sauce manufacturing	1	86,355	148,673	597,901
Spice and extract manufacturing	2	153,837	228,398	904,301
All other food manufacturing	6	430,934	566,626	2,338,019
Bottled and canned soft drinks & water	3	236,522	463,297	2,012,407
Manufactured ice	0	16,258	9,898	26,953
Breweries	4	296,437	753,028	1,860,780
Wineries	16	1,272,936	2,077,820	5,983,702
Distilleries	1	83,750	481,893	809,018
Tobacco product manufacturing	0	7,204	272,054	370,853
Fiber, yarn, and thread mills	1	34,506	60,289	233,904
Broadwoven fabric mills	1	33,430	55,539	166,537
Narrow fabric mills and schiffli machine embroidery	0	13,419	15,405	38,460
Nonwoven fabric mills	0	16,271	32,485	111,686
Knit fabric mills	1	27,935	39,694	124,096
Textile and fabric finishing mills	3	173,028	230,280	802,084
Fabric coating mills	0	36,760	47,599	144,937
Carpet and rug mills	1	88,339	169,271	459,131
Curtain and linen mills	1	55,288	87,030	240,188
Textile bag and canvas mills	1	61,960	80,666	202,790
Rope, cordage, twine, tire cord and tire fabric mills	0	4,287	7,599	19,289
Other textile product mills	2	81,988	105,723	252,763
Hosiery and sock mills	0	23,311	31,608	53,756
Other apparel knitting mills	1	28,568	34,840	67,194
Cut and sew apparel contractors	7	252,625	263,153	475,012
Mens and boys cut and sew apparel manufacturing	2	150,321	181,404	355,778
Womens and girls cut and sew apparel manufacturing	4	288,129	385,014	966,301
Other cut and sew apparel manufacturing	2	95,835	115,973	236,675
Apparel accessories and other apparel manufacturing	2	80,711	98,763	198,290
Leather and hide tanning and finishing	0	1,670	2,854	16,759
Footwear manufacturing	0	24,832	28,704	79,220
Other leather and allied product manufacturing	1	34,466	36,291	88,980
Sawmills	1	72,693	121,264	316,090
Wood preservation	0	5,527	22,705	65,244

## APPENDIX

Veneer and plywood manufacturing	0	6,898	11,663	34,780
Engineered wood member and truss manufacturing	0	21,623	33,233	90,354
Reconstituted wood product manufacturing	0	4,249	13,355	40,255
Wood windows and door manufacturing	1	69,859	109,574	281,985
Cut stock, resawing lumber, and planing	0	14,350	30,845	71,566
Other millwork, including flooring	1	47,845	80,179	186,142
Wood container and pallet manufacturing	1	58,090	75,295	200,586
Manufactured home (mobile home) manufacturing	0	50	104	247
Prefabricated wood building manufacturing	0	4,798	5,882	15,840
All other miscellaneous wood product manufacturing	1	29,961	42,888	113,754
Pulp mills	0	3,467	5,146	20,876
Paper mills	1	96,270	179,502	662,013
Paperboard mills	0	43,254	88,946	323,272
Paperboard container manufacturing	6	564,324	800,468	3,070,840
Paper bag and coated and treated paper manufacturing	1	133,127	201,322	681,003
Stationery product manufacturing	0	28,750	36,468	117,112
Sanitary paper product manufacturing	1	60,304	154,717	487,146
All other converted paper product manufacturing	0	40,773	54,059	164,698
Printing	13	802,725	1,095,215	2,211,645
Support activities for printing	1	83,525	111,847	175,677
Petroleum refineries	2	473,765	3,096,652	14,516,211
Asphalt paving mixture and block manufacturing	0	6,826	10,450	38,127
Asphalt shingle and coating materials manufacturing	0	6,551	17,393	48,708
Petroleum lubricating oil and grease manufacturing	0	38,025	125,901	354,561
All other petroleum and coal products manufacturing	0	990	2,591	8,202
Petrochemical manufacturing	0	941	8,504	25,730
Industrial gas manufacturing	0	30,942	95,671	249,845

## APPENDIX

Synthetic dye and pigment manufacturing	0	25,937	67,139	268,895
Other basic inorganic chemical manufacturing	1	82,800	215,303	577,807
Other basic organic chemical manufacturing	1	64,607	151,144	1,026,071
Plastics material and resin manufacturing	1	99,293	190,123	1,452,626
Synthetic rubber manufacturing	0	11,357	19,543	107,794
Artificial and synthetic fibers and filaments manufacturing	0	19,895	32,701	197,713
Nitrogenous fertilizer manufacturing	0	35,691	98,564	304,966
Phosphatic fertilizer manufacturing	0	7,620	22,172	81,947
Fertilizer mixing	0	28,643	60,080	177,849
Pesticide and other agricultural chemical manufacturing	0	19,923	76,801	272,350
Medicinal and botanical manufacturing	2	535,224	1,119,010	2,018,313
Pharmaceutical preparation manufacturing	15	3,100,475	14,625,444	27,142,394
In-vitro diagnostic substance manufacturing	3	382,073	656,949	1,324,104
Biological product (except diagnostic) manufacturing	2	306,372	902,300	1,580,087
Paint and coating manufacturing	1	125,769	283,946	983,526
Adhesive manufacturing	1	97,983	191,104	564,008
Soap and other detergent manufacturing	1	140,072	673,319	1,385,894
Polish and other sanitation good manufacturing	1	269,742	699,048	1,227,070
Surface active agent manufacturing	0	4,948	20,286	42,640
Toilet preparation manufacturing	4	404,305	1,698,601	3,622,025
Printing ink manufacturing	1	53,311	58,726	235,736
Explosives manufacturing	0	8,478	10,349	37,247
Custom compounding of purchased resins	1	46,341	96,386	358,221
Photographic film and chemical manufacturing	0	41,538	108,929	343,400
Other miscellaneous chemical product manufacturing	1	132,995	231,031	830,683
Plastics packaging materials and unlaminated film and sheet manufacturing	4	295,818	472,008	1,683,426

## APPENDIX

Unlaminated plastics profile shape manufacturing	1	106,945	225,301	602,279
Plastics pipe and pipe fitting manufacturing	1	53,708	125,584	392,912
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	45,403	79,730	208,292
Polystyrene foam product manufacturing	1	81,266	129,388	427,457
Urethane and other foam product (except polystyrene) manufacturing	2	114,384	177,221	635,741
Plastics bottle manufacturing	2	182,905	298,067	1,050,623
Other plastics product manufacturing	11	856,612	1,241,141	3,311,778
Tire manufacturing	0	17,453	23,416	104,015
Rubber and plastics hoses and belting manufacturing	0	25,130	37,775	104,970
Other rubber product manufacturing	4	262,450	380,852	1,328,334
Pottery, ceramics, and plumbing fixture manufacturing	0	15,804	18,570	48,334
Brick, tile, and other structural clay product manufacturing	0	13,668	21,150	61,232
Flat glass manufacturing	0	16,409	29,129	81,582
Other pressed and blown glass and glassware manufacturing	1	97,155	132,929	327,174
Glass container manufacturing	1	67,361	103,633	285,551
Glass product manufacturing made of purchased glass	2	131,714	202,096	497,846
Cement manufacturing	0	16,414	34,459	99,584
Ready-mix concrete manufacturing	1	69,490	106,163	336,762
Concrete block and brick manufacturing	0	16,057	26,266	67,511
Concrete pipe manufacturing	0	3,206	4,831	12,341
Other concrete product manufacturing	1	39,199	53,196	130,512
Lime manufacturing	0	2,310	5,241	17,478
Gypsum product manufacturing	1	47,330	109,342	327,399
Abrasive product manufacturing	0	13,076	34,053	75,180
Cut stone and stone product manufacturing	0	17,082	19,468	42,834
Ground or treated mineral and earth manufacturing	0	12,483	30,775	80,096
Mineral wool manufacturing	0	23,651	48,213	119,614

## APPENDIX

Miscellaneous nonmetallic mineral products manufacturing	0	11,599	24,344	53,520
Iron and steel mills and ferroalloy manufacturing	1	159,086	204,595	1,189,679
Iron, steel pipe and tube manufacturing from purchased steel	1	76,726	89,409	295,155
Rolled steel shape manufacturing	0	16,341	24,563	143,848
Steel wire drawing	0	23,328	22,711	95,428
Alumina refining and primary aluminum production	0	69,193	106,154	369,119
Secondary smelting and alloying of aluminum	0	24,829	30,031	246,107
Aluminum sheet, plate, and foil manufacturing	0	28,522	40,906	253,807
Other aluminum rolling, drawing and extruding	1	87,074	98,461	459,507
Nonferrous metal (exc aluminum) smelting and refining	0	1,389	3,105	13,406
Copper rolling, drawing, extruding and alloying	0	16,334	19,528	154,789
Nonferrous metal, except copper and aluminum, shaping	1	73,721	82,828	374,473
Secondary processing of other nonferrous metals	0	11,734	17,056	120,654
Ferrous metal foundries	1	92,707	109,406	301,671
Nonferrous metal foundries	2	150,742	178,618	479,222
Custom roll forming	0	22,719	35,894	129,353
Crown and closure manufacturing and metal stamping	2	158,568	235,367	603,206
Iron and steel forging	1	82,190	115,390	331,330
Nonferrous forging	1	53,583	69,270	185,384
Cutlery, utensil, pot, and pan manufacturing	0	27,740	87,629	199,665
Handtool manufacturing	1	86,282	143,632	300,023
Prefabricated metal buildings and components manufacturing	0	13,984	20,474	51,216
Fabricated structural metal manufacturing	2	143,310	219,175	591,612
Plate work manufacturing	1	36,414	38,065	110,017
Metal window and door manufacturing	1	73,223	116,131	275,469
Sheet metal work manufacturing	2	179,383	236,058	544,662
Ornamental and architectural metal work manufacturing	1	69,174	93,512	205,702



## APPENDIX

Power boiler and heat exchanger manufacturing	0	3,936	5,714	14,462
Metal tank (heavy gauge) manufacturing	0	13,284	16,576	43,623
Metal cans manufacturing	1	65,767	158,066	581,364
Metal barrels, drums and pails manufacturing	0	26,683	33,734	101,134
Hardware manufacturing	1	68,552	117,093	292,651
Spring and wire product manufacturing	1	96,857	133,958	345,727
Machine shops	13	943,071	1,102,438	2,038,601
Turned product and screw, nut, and bolt manufacturing	3	221,343	315,309	706,823
Metal heat treating	1	79,470	127,172	281,688
Metal coating and nonprecious engraving	2	123,593	223,507	516,135
Electroplating, anodizing, and coloring metal	3	223,880	253,060	530,462
Valve and fittings, other than plumbing, manufacturing	1	109,108	181,056	412,395
Plumbing fixture fitting and trim manufacturing	0	39,110	130,382	312,103
Ball and roller bearing manufacturing	1	90,699	174,613	368,622
Small arms ammunition manufacturing	0	3,154	6,993	14,198
Ammunition, except for small arms, manufacturing	0	885	1,110	2,301
Small arms, ordnance, and accessories manufacturing	0	37,190	94,957	164,309
Fabricated pipe and pipe fitting manufacturing	0	14,392	17,011	42,715
Other fabricated metal manufacturing	2	143,915	194,294	417,168
Farm machinery and equipment manufacturing	0	11,701	20,421	63,352
Lawn and garden equipment manufacturing	0	2,504	4,948	22,992
Construction machinery manufacturing	0	3,500	8,703	26,402
Mining machinery and equipment manufacturing	0	178	235	661
Oil and gas field machinery and equipment manufacturing	0	1,381	1,765	5,321

## APPENDIX

Semiconductor machinery manufacturing	0	15,007	17,590	34,441
Food product machinery manufacturing	0	4,725	6,224	18,336
Sawmill, woodworking, and paper machinery	0	7,979	9,236	22,856
Printing machinery and equipment manufacturing	0	3,681	4,409	10,880
All other industrial machinery manufacturing	0	9,700	13,468	32,264
Optical instrument and lens manufacturing	0	17,828	31,251	60,089
Photographic and photocopying equipment manufacturing	0	17,224	28,869	75,994
Other commercial service industry machinery manufacturing	0	24,964	57,466	129,538
Air purification and ventilation equipment manufacturing	0	9,217	15,330	38,751
Heating equipment (except warm air furnaces) manufacturing	1	48,255	83,815	169,949
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	38,607	85,659	233,837
Industrial mold manufacturing	0	13,566	16,454	32,111
Special tool, die, jig, and fixture manufacturing	0	15,952	22,073	38,026
Cutting tool and machine tool accessory manufacturing	0	16,165	18,355	42,320
Machine tool manufacturing	0	12,905	15,203	37,436
Rolling mill and other metalworking machinery manufacturing	0	17,331	24,345	64,626
Turbine and turbine generator set units manufacturing	0	12,632	19,672	41,491
Speed changer, industrial high-speed drive, and gear manufacturing	0	27,313	45,768	85,665
Mechanical power transmission equipment manufacturing	0	15,009	25,140	57,768
Other engine equipment manufacturing	0	12,016	26,172	96,035
Pump and pumping equipment manufacturing	0	8,542	17,981	40,035
Air and gas compressor manufacturing	0	1,159	2,103	6,589

## APPENDIX

Elevator and moving stairway manufacturing	0	1,762	3,223	8,860
Conveyor and conveying equipment manufacturing	0	2,381	2,546	6,927
Overhead cranes, hoists, and monorail systems manufacturing	0	228	533	1,524
Industrial truck, trailer, and stacker manufacturing	0	2,082	3,703	12,937
Power-driven handtool manufacturing	0	6,648	20,107	52,346
Welding and soldering equipment manufacturing	0	8,757	12,748	27,510
Packaging machinery manufacturing	1	45,735	75,763	180,748
Industrial process furnace and oven manufacturing	0	3,186	4,192	9,339
Fluid power cylinder and actuator manufacturing	0	4,210	6,528	19,256
Fluid power pump and motor manufacturing	0	33,873	60,927	131,172
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	10,287	14,524	33,662
Electronic computer manufacturing	1	595,013	1,201,431	2,324,572
Computer storage device manufacturing	1	105,058	279,299	871,890
Computer terminals and other computer peripheral equipment manufacturing	1	272,317	482,763	1,034,040
Telephone apparatus manufacturing	0	26,379	46,816	131,057
Broadcast and wireless communications equipment manufacturing	0	44,970	63,249	130,880
Other communications equipment manufacturing	0	25,894	40,477	114,881
Audio and video equipment manufacturing	1	171,926	293,816	688,066
Printed circuit assembly (electronic assembly) manufacturing	4	326,415	485,273	1,453,987
Bare printed circuit board manufacturing	2	107,011	137,973	384,349
Semiconductor and related device manufacturing	9	2,474,977	4,098,260	7,817,360

## APPENDIX

Capacitor, resistor, coil, transformer, and other inductor manufacturing	1	56,457	78,244	185,148
Electronic connector manufacturing	7	628,099	925,026	2,435,733
Other electronic component manufacturing	4	368,617	420,079	1,093,883
Electromedical and electrotherapeutic apparatus manufacturing	1	98,418	193,093	359,799
Search, detection, and navigation instruments manufacturing	0	13,035	20,606	38,970
Automatic environmental control manufacturing	1	151,450	195,243	336,892
Industrial process variable instruments manufacturing	0	39,829	56,563	121,646
Totalizing fluid meter and counting device manufacturing	0	9,361	19,645	43,633
Electricity and signal testing instruments manufacturing	1	100,425	142,678	312,133
Analytical laboratory instrument manufacturing	1	264,562	467,484	802,553
Irradiation apparatus manufacturing	0	5,201	9,808	23,057
Watch, clock, and other measuring and controlling device manufacturing	1	99,583	164,062	296,450
Blank magnetic and optical recording media manufacturing	1	156,990	415,877	884,128
Software and other prerecorded and record reproducing	0	72,146	103,477	172,915
Electric lamp bulb and part manufacturing	0	25,030	39,076	100,111
Lighting fixture manufacturing	2	227,714	309,267	793,246
Small electrical appliance manufacturing	0	19,437	34,473	90,409
Household cooking appliance manufacturing	0	20,135	42,825	136,182
Household refrigerator and home freezer manufacturing	0	21,453	54,750	205,132
Household laundry equipment manufacturing	1	45,851	89,014	365,633
Other major household appliance manufacturing	0	8,779	20,515	59,403

## APPENDIX

Power, distribution, and specialty transformer manufacturing	0	19,618	27,624	67,646
Motor and generator manufacturing	0	31,955	44,943	137,525
Switchgear and switchboard apparatus manufacturing	0	35,964	54,644	148,589
Relay and industrial control manufacturing	1	108,358	138,552	322,347
Storage battery manufacturing	1	97,099	136,206	395,954
Primary battery manufacturing	1	49,513	72,723	229,999
Fiber optic cable manufacturing	1	167,091	246,828	706,372
Other communication and energy wire manufacturing	0	13,646	21,708	85,529
Wiring device manufacturing	1	140,325	245,744	533,326
Carbon and graphite product manufacturing	1	44,936	60,602	202,604
All other miscellaneous electrical equipment and component manufacturing	1	160,181	180,943	457,118
Automobile manufacturing	1	158,594	305,246	2,045,143
Light truck and utility vehicle manufacturing	0	(55)	327	10,387
Heavy duty truck manufacturing	0	1,717	3,086	16,140
Motor vehicle body manufacturing	0	6,112	7,255	31,904
Truck trailer manufacturing	0	222	242	953
Motor home manufacturing	0	4,319	6,497	27,880
Travel trailer and camper manufacturing	1	72,132	76,569	366,776
Motor vehicle gasoline engine and engine parts manufacturing	1	65,218	82,454	527,644
Motor vehicle electrical and electronic equipment manufacturing	1	100,151	117,059	419,661
Motor vehicle transmission and power train parts manufacturing	1	63,798	86,648	446,356
Motor vehicle seating and interior trim manufacturing	0	5,617	7,051	55,176
Motor vehicle metal stamping	0	11,678	14,285	78,989
Other motor vehicle parts manufacturing	3	145,626	171,818	1,293,367
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	1	44,212	62,681	354,320
Aircraft manufacturing	0	5,992	12,832	33,425

## APPENDIX

Aircraft engine and engine parts manufacturing	0	14,492	33,284	88,572
Other aircraft parts and auxiliary equipment manufacturing	1	61,895	98,444	223,822
Guided missile and space vehicle manufacturing	0	60,649	79,494	155,265
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	9,102	12,369	23,058
Railroad rolling stock manufacturing	0	3,318	5,245	20,162
Ship building and repairing	0	31,037	39,863	88,094
Boat building	0	36,954	51,010	147,633
Motorcycle, bicycle, and parts manufacturing	1	80,416	260,396	617,485
Military armored vehicle, tank, and tank component manufacturing	1	111,230	245,906	521,746
All other transportation equipment manufacturing	1	34,796	72,957	302,537
Wood kitchen cabinet and countertop manufacturing	4	231,275	274,396	611,020
Upholstered household furniture manufacturing	5	269,043	341,858	1,085,068
Nonupholstered wood household furniture manufacturing	1	65,325	69,781	176,602
Other household nonupholstered furniture manufacturing	1	31,910	44,130	144,418
Institutional furniture manufacturing	0	13,189	14,199	42,136
Wood office furniture manufacturing	0	2,991	3,982	10,884
Custom architectural woodwork and millwork	0	3,665	3,475	8,574
Office furniture, except wood, manufacturing	1	104,070	156,201	463,069
Showcase, partition, shelving, and locker manufacturing	0	26,861	32,342	86,852
Mattress manufacturing	1	43,909	70,587	277,804
Blind and shade manufacturing	0	12,729	13,093	52,367
Surgical and medical instrument manufacturing	1	194,210	340,363	654,410
Surgical appliance and supplies manufacturing	3	379,192	686,105	1,430,723
Dental equipment and supplies manufacturing	0	35,599	54,448	114,772

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Ophthalmic goods manufacturing	1	131,383	247,182	504,109
Dental laboratories	4	238,582	226,664	378,173
Jewelry and silverware manufacturing	2	125,025	175,124	420,922
Sporting and athletic goods manufacturing	2	130,150	163,936	469,433
Doll, toy, and game manufacturing	1	96,056	129,123	238,471
Office supplies (except paper) manufacturing	1	44,558	56,372	144,126
Sign manufacturing	0	21,310	18,037	39,351
Gasket, packing, and sealing device manufacturing	0	38,116	44,998	103,280
Musical instrument manufacturing	0	37,960	38,088	55,972
Fasteners, buttons, needles, and pins manufacturing	0	14,424	16,937	35,663
Broom, brush, and mop manufacturing	0	19,603	30,537	80,681
Burial casket manufacturing	0	1,443	1,652	4,407
All other miscellaneous manufacturing	2	122,318	142,684	300,380
Wholesale - Motor vehicle and motor vehicle parts and supplies	5	376,608	882,261	1,839,151
Wholesale - Professional and commercial equipment and supplies	13	1,904,921	3,453,581	5,191,419
Wholesale - Household appliances and electrical and electronic goods	6	726,789	1,633,624	3,060,448
Wholesale - Machinery, equipment, and supplies	7	669,795	1,208,135	2,028,619
Wholesale - Other durable goods merchant wholesalers	18	1,482,346	2,406,696	4,432,417
Wholesale - Drugs and druggists' sundries	6	1,026,030	2,838,440	5,598,309
Wholesale - Grocery and related product wholesalers	19	1,462,335	1,975,448	3,771,687
Wholesale - Petroleum and petroleum products	1	150,931	3,141,999	3,390,887
Wholesale - Other nondurable goods merchant wholesalers	27	2,200,230	5,147,918	8,800,389
Wholesale - Wholesale electronic markets and agents and brokers	11	1,217,762	529,487	617,468
Retail - Motor vehicle and parts dealers	18	1,229,888	2,029,996	2,755,040
Retail - Furniture and home furnishings stores	14	760,865	1,041,959	1,522,146

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Retail - Electronics and appliance stores	14	860,023	973,133	1,490,172
Retail - Building material and garden equipment and supplies stores	15	755,603	1,454,896	1,992,789
Retail - Food and beverage stores	58	2,593,246	3,597,072	5,256,580
Retail - Health and personal care stores	30	1,533,485	1,908,282	2,752,288
Retail - Gasoline stores	11	1,183,195	1,538,110	2,074,741
Retail - Clothing and clothing accessories stores	33	1,207,266	1,980,633	3,439,817
Retail - Sporting goods, hobby, musical instrument and book stores	17	632,273	853,304	1,223,463
Retail - General merchandise stores	53	1,865,857	2,934,752	4,376,637
Retail - Miscellaneous store retailers	33	1,278,165	1,537,233	2,127,569
Retail - Nonstore retailers	38	2,087,671	5,968,140	8,483,196
Air transportation	14	1,738,138	4,353,378	6,092,660
Rail transportation	3	317,533	419,164	1,021,109
Water transportation	3	349,309	673,538	2,253,499
Truck transportation	39	3,244,184	3,494,245	6,957,272
Transit and ground passenger transportation	65	2,058,313	2,998,095	3,804,144
Pipeline transportation	0	102,215	298,224	362,160
Scenic and sightseeing transportation and support activities for transportation	38	2,986,008	3,384,943	6,479,231
Couriers and messengers	24	1,049,756	1,489,083	2,610,752
Warehousing and storage	30	1,589,741	1,820,278	3,555,929
Newspaper publishers	2	139,893	222,030	276,709
Periodical publishers	2	354,385	529,935	672,531
Book publishers	1	141,147	439,656	704,247
Directory, mailing list, and other publishers	0	37,883	125,023	175,851
Greeting card publishing	0	5,571	21,937	30,894
Software publishers	14	4,838,263	12,118,329	12,712,562
Motion picture and video industries	9	1,976,962	4,527,129	4,842,567
Sound recording industries	1	97,258	817,420	855,276
Radio and television broadcasting	4	3,579,678	3,514,944	3,321,933
Cable and other subscription programming	2	1,114,357	3,591,956	5,064,738
Wired telecommunications carriers	9	1,210,301	2,693,137	4,836,303



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Wireless telecommunications carriers (except satellite)	4	761,207	3,484,176	7,464,477
Satellite, telecommunications resellers, and all other telecommunications	2	607,471	621,935	1,038,390
Data processing, hosting, and related services	11	2,622,685	4,600,170	7,049,313
News syndicates, libraries, archives and all other information services	2	393,626	617,345	729,472
Internet publishing and broadcasting and web search portals	22	11,632,052	25,870,033	36,029,682
Nondepository credit intermediation and related activities	29	3,938,011	6,214,960	8,356,419
Securities and commodity contracts intermediation and brokerage	17	4,099,031	3,769,719	5,749,118
Monetary authorities and depository credit intermediation	36	4,201,666	16,022,187	20,568,959
Other financial investment activities	72	8,436,567	8,815,227	13,085,027
Direct life insurance carriers	3	511,691	854,376	1,245,860
Insurance carriers, except direct life	16	2,125,687	5,069,500	11,236,080
Insurance agencies, brokerages, and related activities	43	3,256,759	4,251,369	9,961,207
Funds, trusts, and other financial vehicles	14	1,013,182	1,398,253	5,196,985
Other real estate	242	15,383,245	42,184,380	67,429,950
Tenant-occupied housing	27	1,426,400	13,845,679	14,917,939
Owner-occupied dwellings	0	0	41,211,916	52,070,772
Automotive equipment rental and leasing	7	526,377	1,548,107	2,129,566
General and consumer goods rental except video tapes and discs	7	508,745	625,506	929,045
Video tape and disc rental	2	121,300	192,843	291,953
Commercial and industrial machinery and equipment rental and leasing	7	720,953	1,618,570	2,407,752
Lessors of nonfinancial intangible assets	1	103,213	2,297,219	2,646,368
Legal services	96	10,980,674	19,344,290	25,589,287
Accounting, tax preparation, bookkeeping, and payroll services	42	3,990,883	5,491,638	7,067,405

## APPENDIX

Architectural, engineering, and related services	89	9,756,726	11,834,632	19,036,005
Specialized design services	11	861,712	907,621	1,068,780
Custom computer programming services	11	1,855,729	2,056,961	2,594,555
Computer systems design services	13	2,055,973	2,130,506	2,583,005
Other computer related services, including facilities management	5	1,402,033	2,263,294	2,934,089
Management consulting services	135	14,816,363	14,700,667	20,733,588
Environmental and other technical consulting services	25	2,307,959	2,068,299	2,884,655
Scientific research and development services	1,304	249,411,300	372,601,278	527,458,024
Advertising, public relations, and related services	15	1,877,984	2,712,671	3,800,558
Photographic services	8	482,820	287,382	428,890
Veterinary services	7	389,501	581,769	832,393
Marketing research and all other miscellaneous professional, scientific, and technical services	122	8,875,419	8,309,733	11,350,329
Management of companies and enterprises	103	16,609,744	19,384,926	25,653,626
Office administrative services	41	3,876,997	1,492,072	2,997,014
Facilities support services	33	1,972,486	2,546,204	5,299,786
Employment services	183	9,878,037	15,947,901	22,486,306
Business support services	28	1,587,369	1,429,938	2,207,756
Travel arrangement and reservation services	11	782,693	1,060,667	2,240,006
Investigation and security services	30	1,432,046	1,472,544	2,001,253
Services to buildings	67	2,586,909	2,694,130	3,863,121
Landscape and horticultural services	36	1,558,054	1,649,169	2,502,476
Other support services	12	678,073	849,039	1,478,781
Waste management and remediation services	11	871,790	1,706,938	2,705,941
Elementary and secondary schools	29	1,813,443	1,562,147	1,818,110
Junior colleges, colleges, universities, and professional schools	39	3,191,963	4,236,737	5,287,161
Other educational services	40	1,323,443	1,220,109	2,167,884
Offices of physicians	59	6,522,356	7,994,041	11,475,296
Offices of dentists	29	1,847,442	2,444,746	3,659,509
Offices of other health practitioners	35	1,966,760	1,910,316	2,682,230
Outpatient care centers	24	2,824,660	2,991,080	4,450,439

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Medical and diagnostic laboratories	6	668,421	1,132,959	1,575,077
Home health care services	35	1,735,376	1,422,865	1,876,205
Other ambulatory health care services	9	556,046	623,398	986,521
Hospitals	104	11,786,211	13,771,085	22,229,568
Nursing and community care facilities	42	2,145,167	2,342,335	3,728,623
Residential mental retardation, mental health, substance abuse and other facilities	19	985,878	1,027,311	1,453,414
Individual and family services	131	3,082,730	3,098,034	4,805,886
Child day care services	28	1,046,518	1,364,486	1,672,341
Community food, housing, and other relief services, including rehabilitation services	22	836,439	993,887	2,046,676
Performing arts companies	6	507,928	685,201	919,679
Commercial Sports Except Racing	6	710,550	746,710	979,814
Racing and Track Operation	1	73,558	109,254	170,028
Independent artists, writers, and performers	24	1,609,778	1,913,118	1,973,029
Promoters of performing arts and sports and agents for public figures	8	731,671	1,226,356	1,934,333
Museums, historical sites, zoos, and parks	4	252,386	283,927	436,666
Amusement parks and arcades	5	231,607	312,843	421,320
Gambling industries (except casino hotels)	12	615,885	1,273,095	1,906,334
Other amusement and recreation industries	14	481,155	499,582	830,885
Fitness and recreational sports centers	19	525,625	603,826	933,106
Bowling centers	2	53,709	67,982	111,071
Hotels and motels, including casino hotels	129	6,758,093	10,762,776	15,984,153
Other accommodations	40	2,674,107	3,320,973	4,162,382
Full-service restaurants	145	4,793,519	7,250,205	11,200,524
Limited-service restaurants	126	3,657,213	5,765,891	10,735,604
All other food and drinking places	94	3,825,072	4,859,253	6,758,749
Automotive repair and maintenance, except car washes	50	3,390,235	3,755,686	5,314,301
Car washes	26	1,535,293	2,358,495	3,367,821
Electronic and precision equipment repair and maintenance	20	1,969,881	2,819,768	4,003,402

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Commercial and industrial machinery and equipment repair and maintenance	8	717,251	815,551	1,213,205
Personal and household goods repair and maintenance	14	1,204,438	849,112	1,042,654
Personal care services	61	1,906,769	1,280,633	1,718,812
Death care services	3	162,074	184,191	267,904
Dry-cleaning and laundry services	9	365,018	392,449	556,837
Other personal services	59	2,115,374	1,166,711	1,699,360
Religious organizations	57	3,216,870	798,379	4,534,362
Grantmaking, giving, and social advocacy organizations	18	1,447,613	3,043,321	4,620,967
Business and professional associations	5	626,800	775,951	1,174,011
Labor and civic organizations	22	859,044	1,570,799	2,656,347
Private households	31	662,661	662,661	662,661
Postal service	14	1,317,784	1,319,448	1,446,603
Federal electric utilities	0	0	0	0
Other federal government enterprises	11	770,853	407,247	2,391,858
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	5	749,229	(1,004,062)	63,723
Local government electric utilities	3	620,922	1,176,222	2,029,680
Other local government enterprises	27	3,228,305	4,615,978	8,911,070
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0

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* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	162	31,399,570	33,376,587	69,789,345

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 7. Colorado

**Table 381: Detailed NASA Impacts by Types of Impact, Colorado.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	22,851	1,595,055,195	2,414,350,528	4,514,736,969
Oilseed farming	0	54,891	96,124	217,468
Grain farming	32	1,576,688	2,342,778	10,889,910
Vegetable and melon farming	13	505,540	578,991	1,614,856
Fruit farming	4	118,865	140,487	358,704
Tree nut farming	0	469	475	570
Greenhouse, nursery, and floriculture production	16	575,218	625,776	1,355,788
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	3	140,645	168,734	457,332
All other crop farming	33	478,209	500,310	1,083,359
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	59	1,021,663	1,831,967	10,792,345
Dairy cattle and milk production	9	310,825	441,949	3,616,360
Poultry and egg production	2	98,406	106,262	1,373,048
Animal production, except cattle and poultry and eggs	22	901,706	1,725,727	3,717,947
Forestry, forest products, and timber tract production	1	63,151	68,620	89,108
Commercial logging	5	109,163	124,326	292,122
Commercial fishing	0	0	0	0
Commercial hunting and trapping	4	3,550	49,846	125,410
Support activities for agriculture and forestry	70	2,314,948	2,279,969	2,810,447
Oil and gas extraction	68	12,732,864	17,256,280	32,707,763
Coal mining	3	376,434	1,093,500	1,592,555
Copper, nickel, lead, and zinc mining	4	(36,389)	1,867,491	3,855,262
Iron ore mining	0	0	0	0

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Gold ore mining	6	573,405	1,536,218	2,696,838
Silver ore mining	1	160,890	340,966	654,854
Uranium-radium-vanadium ore mining	3	296,059	11,654,403	651,844
Other metal ore mining	0	36,308	89,783	124,746
Stone mining and quarrying	3	(53,034)	217,168	585,271
Sand and gravel mining	4	(124,905)	62,638	451,735
Other clay, ceramic, refractory minerals mining	0	1,137	12,664	36,332
Potash, soda, and borate mineral mining	0	24,605	41,987	58,696
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	1	(12,014)	64,037	166,380
Drilling oil and gas wells	0	2,768	3,968	9,148
Support activities for oil and gas operations	1	123,601	166,292	363,676
Metal mining services	4	582,138	880,424	1,858,759
Other nonmetallic minerals services	0	25,114	37,367	76,856
Electric power generation - Hydroelectric	1	41,236	124,934	431,921
Electric power generation - Fossil fuel	7	752,232	2,714,105	8,642,959
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	3	201,144	436,338	788,643
Electric power generation - Wind	5	314,678	1,973,944	4,668,361
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	20,333	62,964	184,139
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	37	5,212,551	17,511,921	46,331,431
Natural gas distribution	14	1,345,569	3,491,378	9,270,188
Water, sewage and other systems	4	219,047	466,198	935,281
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0

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Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	1	52,390	33,730	67,233
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	114	7,687,986	10,476,769	23,592,869
Maintenance and repair construction of residential structures	35	2,225,887	3,347,284	7,548,190
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	9,802	7,108	15,150
Dog and cat food manufacturing	3	303,350	1,304,821	4,986,284
Other animal food manufacturing	4	316,316	549,753	4,084,658
Flour milling	1	104,756	222,677	1,337,403
Rice milling	0	0	0	0
Malt manufacturing	0	20,456	47,703	487,615
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	8,239	51,372	692,475
Fats and oils refining and blending	0	5,833	12,837	189,159
Breakfast cereal manufacturing	3	252,367	690,357	2,768,428
Beet sugar manufacturing	3	192,962	419,849	1,867,375
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	2	119,722	186,615	935,447
Chocolate and confectionery manufacturing from cacao beans	0	1,783	4,148	48,183
Confectionery manufacturing from purchased chocolate	3	149,027	217,360	1,162,753
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	3	91,291	143,837	896,970

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Canned fruits and vegetables manufacturing	1	31,737	59,113	450,750
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	1	33,419	64,677	330,775
Cheese manufacturing	5	400,981	597,236	4,441,584
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	5	471,002	787,324	3,796,267
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	1	72,228	118,579	493,016
Frozen cakes and other pastries manufacturing	14	491,846	768,400	1,344,112
Poultry processing	1	49,107	66,405	261,733
Animal, except poultry, slaughtering	25	1,411,453	2,030,850	16,951,838
Meat processed from carcasses	11	592,173	652,756	5,417,859
Rendering and meat byproduct processing	0	26,566	31,566	135,934
Seafood product preparation and packaging	2	65,350	83,856	595,136
Bread and bakery product, except frozen, manufacturing	31	1,432,071	1,985,315	4,574,727
Cookie and cracker manufacturing	0	9,307	12,745	132,926
Dry pasta, mixes, and dough manufacturing	2	163,472	413,703	1,340,264
Tortilla manufacturing	3	136,277	170,053	584,437
Roasted nuts and peanut butter manufacturing	2	109,912	210,051	916,762
Other snack food manufacturing	5	281,244	621,400	2,380,046
Coffee and tea manufacturing	2	96,110	191,745	1,219,138
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	1	65,120	132,504	635,471
Spice and extract manufacturing	1	63,217	101,547	525,577
All other food manufacturing	7	325,553	457,999	2,338,066
Bottled and canned soft drinks & water	8	612,506	1,340,500	6,326,379
Manufactured ice	1	29,046	14,960	80,394
Breweries	13	938,432	2,564,701	6,606,174
Wineries	0	7,275	13,708	75,491
Distilleries	2	107,059	779,303	2,002,695
Tobacco product manufacturing	0	1,048	33,870	68,249



## APPENDIX

Fiber, yarn, and thread mills	0	(3,778)	(2,796)	68,380
Broadwoven fabric mills	0	(314)	(173)	8,710
Narrow fabric mills and schiffli machine embroidery	0	1,030	1,180	7,004
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	3,201	4,054	18,806
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	23,007	36,273	155,061
Curtain and linen mills	0	19,843	27,086	75,679
Textile bag and canvas mills	2	115,539	139,123	392,245
Rope, cordage, twine, tire cord and tire fabric mills	1	74,355	111,229	374,169
Other textile product mills	2	50,752	61,318	216,656
Hosiery and sock mills	0	4,034	6,148	18,261
Other apparel knitting mills	0	2,775	4,896	13,241
Cut and sew apparel contractors	2	10,916	13,565	69,479
Mens and boys cut and sew apparel manufacturing	1	22,028	27,741	89,652
Womens and girls cut and sew apparel manufacturing	0	5,865	9,160	50,139
Other cut and sew apparel manufacturing	1	10,795	14,472	51,958
Apparel accessories and other apparel manufacturing	1	6,903	9,483	42,702
Leather and hide tanning and finishing	0	1,513	2,610	22,798
Footwear manufacturing	0	428	542	9,491
Other leather and allied product manufacturing	0	1,813	1,925	11,180
Sawmills	3	92,288	138,376	730,960
Wood preservation	1	48,157	152,453	464,440
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	1	78,779	108,247	317,451
Reconstituted wood product manufacturing	0	9,284	23,872	91,186
Wood windows and door manufacturing	7	431,671	602,272	1,575,413
Cut stock, resawing lumber, and planing	0	15,594	27,949	100,778
Other millwork, including flooring	4	175,209	256,330	758,029
Wood container and pallet manufacturing	3	121,196	145,285	466,363

## APPENDIX

Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	1	20,605	24,276	103,865
All other miscellaneous wood product manufacturing	1	31,894	41,444	191,723
Pulp mills	0	0	0	0
Paper mills	0	6,117	19,999	238,054
Paperboard mills	0	0	0	0
Paperboard container manufacturing	8	557,341	764,986	3,656,977
Paper bag and coated and treated paper manufacturing	1	4,960	41,303	476,361
Stationery product manufacturing	0	(9,811)	(1,386)	138,028
Sanitary paper product manufacturing	0	3,304	10,836	101,789
All other converted paper product manufacturing	0	(5,338)	698	65,743
Printing	52	2,857,595	4,078,722	8,623,497
Support activities for printing	2	130,200	187,110	282,362
Petroleum refineries	3	585,423	10,475,864	31,608,949
Asphalt paving mixture and block manufacturing	0	1,127	30,758	245,738
Asphalt shingle and coating materials manufacturing	0	29,317	193,565	384,658
Petroleum lubricating oil and grease manufacturing	0	14,376	144,347	327,578
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	2,530	10,461	140,914
Industrial gas manufacturing	1	95,660	167,662	707,767
Synthetic dye and pigment manufacturing	0	2,785	2,725	11,430
Other basic inorganic chemical manufacturing	1	112,111	172,548	689,886
Other basic organic chemical manufacturing	1	51,151	76,322	748,651
Plastics material and resin manufacturing	0	54,913	68,387	602,894
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	31,502	32,691	113,604
Phosphatic fertilizer manufacturing	0	0	0	0

## APPENDIX

Fertilizer mixing	0	34,313	40,219	146,155
Pesticide and other agricultural chemical manufacturing	0	26,697	56,706	457,216
Medicinal and botanical manufacturing	2	178,898	216,363	884,846
Pharmaceutical preparation manufacturing	3	288,415	700,285	2,780,709
In-vitro diagnostic substance manufacturing	0	3,245	3,981	12,777
Biological product (except diagnostic) manufacturing	0	44,088	75,890	187,206
Paint and coating manufacturing	1	123,512	131,500	476,272
Adhesive manufacturing	1	129,875	161,844	656,780
Soap and other detergent manufacturing	2	405,512	563,412	2,267,612
Polish and other sanitation good manufacturing	3	459,597	530,353	1,995,840
Surface active agent manufacturing	0	61,055	116,917	404,596
Toilet preparation manufacturing	2	303,066	415,496	1,680,390
Printing ink manufacturing	0	37,561	37,932	98,770
Explosives manufacturing	0	1,469	1,455	3,210
Custom compounding of purchased resins	0	49,766	62,311	188,672
Photographic film and chemical manufacturing	4	412,139	635,675	2,929,794
Other miscellaneous chemical product manufacturing	2	380,677	446,671	1,518,019
Plastics packaging materials and unlaminated film and sheet manufacturing	1	95,304	158,479	567,807
Unlaminated plastics profile shape manufacturing	2	131,660	292,382	895,977
Plastics pipe and pipe fitting manufacturing	1	59,104	140,918	417,209
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	121,448	222,623	529,622
Polystyrene foam product manufacturing	1	80,380	135,820	390,970
Urethane and other foam product (except polystyrene) manufacturing	3	160,975	261,644	935,971
Plastics bottle manufacturing	1	66,198	111,563	468,697
Other plastics product manufacturing	20	1,268,850	1,895,214	5,749,274

## APPENDIX

Tire manufacturing	5	789,164	1,078,714	2,660,807
Rubber and plastics hoses and belting manufacturing	0	7,584	12,323	26,015
Other rubber product manufacturing	7	528,297	792,265	2,474,508
Pottery, ceramics, and plumbing fixture manufacturing	2	147,139	212,774	395,020
Brick, tile, and other structural clay product manufacturing	2	136,875	292,515	578,463
Flat glass manufacturing	1	58,267	151,935	305,384
Other pressed and blown glass and glassware manufacturing	2	105,582	153,088	458,644
Glass container manufacturing	2	180,240	383,093	836,416
Glass product manufacturing made of purchased glass	5	245,386	441,756	1,154,183
Cement manufacturing	1	63,017	199,751	489,612
Ready-mix concrete manufacturing	5	372,868	758,436	2,100,249
Concrete block and brick manufacturing	1	87,435	199,289	448,243
Concrete pipe manufacturing	0	20,115	40,116	87,053
Other concrete product manufacturing	2	155,120	265,827	599,702
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	1	60,894	211,291	457,563
Abrasive product manufacturing	0	8,195	33,660	60,123
Cut stone and stone product manufacturing	3	141,780	176,293	382,953
Ground or treated mineral and earth manufacturing	0	24,162	95,514	191,979
Mineral wool manufacturing	0	10,515	32,982	74,574
Miscellaneous nonmetallic mineral products manufacturing	0	17,987	58,432	128,891
Iron and steel mills and ferroalloy manufacturing	4	401,847	716,970	3,669,749
Iron, steel pipe and tube manufacturing from purchased steel	1	36,902	58,040	242,898
Rolled steel shape manufacturing	0	24,297	54,672	188,542
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	1	99,459	203,170	713,458

## APPENDIX

Other aluminum rolling, drawing and extruding	0	9,457	14,156	65,921
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	9,444	13,709	101,549
Nonferrous metal, except copper and aluminum, shaping	0	7,036	9,465	28,970
Secondary processing of other nonferrous metals	0	158	839	11,353
Ferrous metal foundries	0	5,812	11,335	27,489
Nonferrous metal foundries	1	44,272	70,602	174,471
Custom roll forming	0	10,872	17,318	96,524
Crown and closure manufacturing and metal stamping	1	72,505	105,545	293,968
Iron and steel forging	0	18,168	24,927	95,647
Nonferrous forging	1	31,063	39,461	138,491
Cutlery, utensil, pot, and pan manufacturing	0	48,070	148,910	279,612
Handtool manufacturing	0	25,217	41,449	89,297
Prefabricated metal buildings and components manufacturing	1	37,298	52,735	157,358
Fabricated structural metal manufacturing	5	346,162	519,948	1,501,951
Plate work manufacturing	1	43,908	45,589	141,515
Metal window and door manufacturing	1	66,669	102,286	270,472
Sheet metal work manufacturing	4	215,777	279,809	742,174
Ornamental and architectural metal work manufacturing	4	222,084	292,955	785,152
Power boiler and heat exchanger manufacturing	0	5,944	8,381	21,470
Metal tank (heavy gauge) manufacturing	0	17,658	21,697	65,486
Metal cans manufacturing	2	205,696	476,598	1,862,580
Metal barrels, drums and pails manufacturing	1	36,969	46,520	197,016
Hardware manufacturing	2	149,285	251,257	642,273
Spring and wire product manufacturing	1	82,603	114,348	349,466
Machine shops	16	991,010	1,146,431	2,310,734
Turned product and screw, nut, and bolt manufacturing	2	139,728	196,904	509,287
Metal heat treating	0	11,145	17,002	41,603

## APPENDIX

Metal coating and nonprecious engraving	3	176,763	309,157	754,402
Electroplating, anodizing, and coloring metal	2	114,596	127,913	273,740
Valve and fittings, other than plumbing, manufacturing	1	118,796	195,535	443,175
Plumbing fixture fitting and trim manufacturing	1	75,783	236,433	620,147
Ball and roller bearing manufacturing	1	39,383	74,894	193,229
Small arms ammunition manufacturing	0	17,002	28,676	74,690
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	31,225	80,156	178,723
Fabricated pipe and pipe fitting manufacturing	0	28,238	32,597	75,822
Other fabricated metal manufacturing	2	146,297	193,337	527,633
Farm machinery and equipment manufacturing	0	21,001	28,956	138,130
Lawn and garden equipment manufacturing	0	1,463	2,443	15,263
Construction machinery manufacturing	0	1,161	2,089	8,150
Mining machinery and equipment manufacturing	0	1,745	2,078	9,189
Oil and gas field machinery and equipment manufacturing	0	8,220	9,555	35,781
Semiconductor machinery manufacturing	0	2,387	2,652	9,222
Food product machinery manufacturing	0	1,235	1,441	4,768
Sawmill, woodworking, and paper machinery	0	4,666	5,181	23,530
Printing machinery and equipment manufacturing	0	4,523	5,012	17,130
All other industrial machinery manufacturing	0	2,985	3,617	11,663
Optical instrument and lens manufacturing	0	15,869	23,586	65,810
Photographic and photocopying equipment manufacturing	0	1,888	2,594	9,175

## APPENDIX

Other commercial service industry machinery manufacturing	1	42,702	71,527	215,736
Air purification and ventilation equipment manufacturing	2	96,734	135,741	401,446
Heating equipment (except warm air furnaces) manufacturing	0	21,143	29,002	85,738
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	117,520	197,111	604,891
Industrial mold manufacturing	0	19,396	21,434	46,132
Special tool, die, jig, and fixture manufacturing	0	2,605	3,125	6,942
Cutting tool and machine tool accessory manufacturing	0	5,462	5,845	14,660
Machine tool manufacturing	0	6,257	6,793	16,829
Rolling mill and other metalworking machinery manufacturing	0	4,815	5,622	14,172
Turbine and turbine generator set units manufacturing	0	31,528	40,688	170,730
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	15,520	26,312	131,383
Pump and pumping equipment manufacturing	0	890	1,424	5,796
Air and gas compressor manufacturing	0	1,265	1,815	6,640
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	16,790	17,358	43,940
Overhead cranes, hoists, and monorail systems manufacturing	0	1,442	2,428	7,391
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	5,838	12,960	33,883
Welding and soldering equipment manufacturing	0	3,344	4,109	9,526
Packaging machinery manufacturing	0	1,491	2,039	6,305

## APPENDIX

Industrial process furnace and oven manufacturing	0	896	1,032	2,284
Fluid power cylinder and actuator manufacturing	0	40,318	51,601	127,052
Fluid power pump and motor manufacturing	0	5,684	7,968	23,159
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	6,262	7,620	22,269
Electronic computer manufacturing	0	51,368	107,961	247,702
Computer storage device manufacturing	0	43,310	118,154	402,376
Computer terminals and other computer peripheral equipment manufacturing	1	215,217	387,314	874,982
Telephone apparatus manufacturing	0	7,376	13,550	35,030
Broadcast and wireless communications equipment manufacturing	0	2,687	3,972	10,355
Other communications equipment manufacturing	1	102,414	161,761	363,113
Audio and video equipment manufacturing	0	583	1,497	11,803
Printed circuit assembly (electronic assembly) manufacturing	1	61,461	95,494	293,940
Bare printed circuit board manufacturing	1	30,323	40,038	116,973
Semiconductor and related device manufacturing	1	76,271	138,015	534,892
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,433	2,220	7,879
Electronic connector manufacturing	0	4,891	8,430	28,089
Other electronic component manufacturing	0	8,729	10,444	50,578
Electromedical and electrotherapeutic apparatus manufacturing	0	30,302	62,479	134,202
Search, detection, and navigation instruments manufacturing	0	22,627	35,736	63,385
Automatic environmental control manufacturing	0	3,211	5,981	26,494



## APPENDIX

Industrial process variable instruments manufacturing	0	44,097	64,731	138,982
Totalizing fluid meter and counting device manufacturing	0	10,043	22,055	54,457
Electricity and signal testing instruments manufacturing	0	29,551	42,704	112,538
Analytical laboratory instrument manufacturing	4	479,941	838,530	1,824,380
Irradiation apparatus manufacturing	0	22	72	367
Watch, clock, and other measuring and controlling device manufacturing	0	5,855	10,795	30,302
Blank magnetic and optical recording media manufacturing	0	1,243	7,411	56,521
Software and other prerecorded and record reproducing	0	59,610	87,608	149,666
Electric lamp bulb and part manufacturing	0	4,555	13,670	35,061
Lighting fixture manufacturing	1	91,465	219,730	481,554
Small electrical appliance manufacturing	0	2,263	9,463	25,495
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	543	1,269	3,744
Motor and generator manufacturing	0	31,112	76,533	135,027
Switchgear and switchboard apparatus manufacturing	0	27,823	76,298	157,257
Relay and industrial control manufacturing	0	5,320	10,970	39,066
Storage battery manufacturing	0	34,302	88,836	190,393
Primary battery manufacturing	0	32,272	220,296	328,685
Fiber optic cable manufacturing	0	14,209	35,589	113,138
Other communication and energy wire manufacturing	0	4,639	14,274	42,096
Wiring device manufacturing	0	5,574	22,446	61,135

## APPENDIX

Carbon and graphite product manufacturing	0	5,089	13,227	75,186
All other miscellaneous electrical equipment and component manufacturing	1	84,067	116,267	357,389
Automobile manufacturing	0	755	(235)	18,863
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	3,699	3,204	17,102
Truck trailer manufacturing	0	521	421	2,651
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	4	314,727	314,027	1,333,723
Motor vehicle gasoline engine and engine parts manufacturing	0	17,537	14,546	139,564
Motor vehicle electrical and electronic equipment manufacturing	1	57,058	59,804	418,066
Motor vehicle transmission and power train parts manufacturing	1	59,510	47,244	456,112
Motor vehicle seating and interior trim manufacturing	0	25,898	18,912	162,301
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	2	145,023	89,333	1,035,723
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	1	109,666	81,540	636,031
Aircraft manufacturing	0	131	380	1,290
Aircraft engine and engine parts manufacturing	0	1,200	3,504	7,298
Other aircraft parts and auxiliary equipment manufacturing	0	6,706	12,176	26,639
Guided missile and space vehicle manufacturing	1	111,016	165,838	350,981
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	3,403	5,187	10,460
Railroad rolling stock manufacturing	0	98	315	3,785
Ship building and repairing	0	0	0	0
Boat building	1	72,988	115,363	371,879
Motorcycle, bicycle, and parts manufacturing	1	16,098	114,636	367,269

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	(4,615)	(2,240)	54,656
Wood kitchen cabinet and countertop manufacturing	6	229,223	437,452	872,217
Upholstered household furniture manufacturing	0	5,286	9,067	52,562
Nonupholstered wood household furniture manufacturing	3	78,828	105,149	326,256
Other household nonupholstered furniture manufacturing	0	4,044	8,282	53,315
Institutional furniture manufacturing	0	2,846	3,367	11,357
Wood office furniture manufacturing	0	11,286	21,733	50,868
Custom architectural woodwork and millwork	0	12,040	12,090	34,929
Office furniture, except wood, manufacturing	2	104,116	260,399	702,672
Showcase, partition, shelving, and locker manufacturing	1	50,140	94,062	203,786
Mattress manufacturing	2	106,727	367,454	836,306
Blind and shade manufacturing	1	95,850	103,719	252,914
Surgical and medical instrument manufacturing	1	163,001	417,099	801,423
Surgical appliance and supplies manufacturing	1	103,852	271,926	601,368
Dental equipment and supplies manufacturing	0	7,611	16,811	42,068
Ophthalmic goods manufacturing	0	8,268	24,299	55,679
Dental laboratories	1	54,466	54,216	110,053
Jewelry and silverware manufacturing	3	50,215	106,456	411,663
Sporting and athletic goods manufacturing	3	87,996	163,277	618,145
Doll, toy, and game manufacturing	2	88,761	212,838	542,598
Office supplies (except paper) manufacturing	0	(4,712)	(3,017)	35,160
Sign manufacturing	6	88,433	81,244	484,212
Gasket, packing, and sealing device manufacturing	2	89,900	135,805	349,003
Musical instrument manufacturing	0	(5,787)	(5,570)	11,792
Fasteners, buttons, needles, and pins manufacturing	0	(6,087)	(4,920)	23,132

## APPENDIX

Broom, brush, and mop manufacturing	0	(598)	5,565	39,509
Burial casket manufacturing	0	(476)	(113)	4,938
All other miscellaneous manufacturing	3	142,313	195,104	518,559
Wholesale - Motor vehicle and motor vehicle parts and supplies	16	1,214,767	2,777,858	6,061,361
Wholesale - Professional and commercial equipment and supplies	44	5,894,103	9,895,496	16,060,715
Wholesale - Household appliances and electrical and electronic goods	19	2,357,921	5,260,230	9,940,174
Wholesale - Machinery, equipment, and supplies	36	3,281,418	5,652,640	9,721,964
Wholesale - Other durable goods merchant wholesalers	63	5,193,816	8,011,613	15,168,825
Wholesale - Drugs and druggists' sundries	20	2,836,882	7,719,394	16,385,764
Wholesale - Grocery and related product wholesalers	55	4,173,882	5,620,521	10,785,936
Wholesale - Petroleum and petroleum products	12	1,203,675	9,993,714	11,981,663
Wholesale - Other nondurable goods merchant wholesalers	92	7,858,445	14,571,146	27,142,096
Wholesale - Wholesale electronic markets and agents and brokers	30	3,422,146	1,450,149	1,700,635
Retail - Motor vehicle and parts dealers	69	4,406,154	6,803,373	9,529,121
Retail - Furniture and home furnishings stores	48	2,293,855	3,041,593	4,732,723
Retail - Electronics and appliance stores	51	2,447,895	2,760,184	4,617,724
Retail - Building material and garden equipment and supplies stores	57	2,303,122	4,369,467	6,358,327
Retail - Food and beverage stores	207	7,028,905	10,010,184	15,938,847
Retail - Health and personal care stores	90	3,978,321	4,733,411	7,272,466
Retail - Gasoline stores	79	2,595,232	4,739,948	8,688,538
Retail - Clothing and clothing accessories stores	99	2,623,979	4,348,116	8,742,083
Retail - Sporting goods, hobby, musical instrument and book stores	63	1,954,434	2,520,389	3,888,040

## APPENDIX

Retail - General merchandise stores	219	6,827,788	10,093,831	16,051,004
Retail - Miscellaneous store retailers	128	3,604,452	4,266,584	6,624,194
Retail - Nonstore retailers	163	3,767,302	11,849,422	23,777,409
Air transportation	54	6,092,716	14,187,906	21,100,282
Rail transportation	14	1,767,462	4,119,806	7,271,355
Water transportation	1	38,453	39,980	344,540
Truck transportation	684	47,276,164	55,747,492	116,486,503
Transit and ground passenger transportation	164	2,869,625	3,384,832	5,826,589
Pipeline transportation	2	5,113,890	6,166,951	6,103,407
Scenic and sightseeing transportation and support activities for transportation	140	9,082,247	10,032,509	21,535,580
Couriers and messengers	97	4,040,778	5,231,988	9,855,200
Warehousing and storage	69	3,406,020	3,801,656	7,824,662
Newspaper publishers	22	1,091,908	1,653,984	2,296,784
Periodical publishers	17	1,186,443	1,708,873	3,041,652
Book publishers	7	462,737	1,322,248	2,639,956
Directory, mailing list, and other publishers	16	1,497,419	4,155,135	5,789,878
Greeting card publishing	1	109,694	352,491	515,716
Software publishers	56	9,190,964	20,518,013	24,362,088
Motion picture and video industries	30	1,340,313	2,486,242	6,531,754
Sound recording industries	3	131,650	605,968	1,104,682
Radio and television broadcasting	30	3,280,628	1,920,633	9,541,521
Cable and other subscription programming	20	1,958,416	13,750,284	38,222,237
Wired telecommunications carriers	63	3,369,246	13,622,246	29,382,200
Wireless telecommunications carriers (except satellite)	10	(1,173,726)	5,774,995	16,051,624
Satellite, telecommunications resellers, and all other telecommunications	17	(1,327,055)	(185,184)	3,712,240
Data processing, hosting, and related services	57	6,681,307	15,555,806	28,575,781
News syndicates, libraries, archives and all other information services	3	192,477	302,876	486,483
Internet publishing and broadcasting and web search portals	32	4,424,550	12,119,108	30,746,308

## APPENDIX

Nondepository credit intermediation and related activities	122	11,496,315	15,604,330	25,462,269
Securities and commodity contracts intermediation and brokerage	88	11,405,519	11,519,965	23,223,628
Monetary authorities and depository credit intermediation	187	17,115,675	42,258,832	70,734,450
Other financial investment activities	264	11,097,255	13,113,722	34,477,559
Direct life insurance carriers	27	4,089,146	6,630,014	9,765,641
Insurance carriers, except direct life	110	11,653,717	28,822,863	71,534,477
Insurance agencies, brokerages, and related activities	192	12,201,313	16,606,543	42,308,274
Funds, trusts, and other financial vehicles	43	1,204,976	1,884,011	13,190,551
Other real estate	1,590	42,948,489	111,803,723	294,599,315
Tenant-occupied housing	83	2,391,010	33,741,579	37,134,833
Owner-occupied dwellings	0	0	97,942,316	123,748,966
Automotive equipment rental and leasing	31	1,337,000	4,565,029	7,235,450
General and consumer goods rental except video tapes and discs	40	1,806,156	2,369,656	4,189,637
Video tape and disc rental	9	426,380	661,213	1,057,367
Commercial and industrial machinery and equipment rental and leasing	32	1,988,037	5,601,109	9,347,914
Lessors of nonfinancial intangible assets	5	389,531	9,010,162	10,976,266
Legal services	374	37,248,037	54,132,542	79,324,873
Accounting, tax preparation, bookkeeping, and payroll services	187	13,951,297	19,816,068	27,060,026
Architectural, engineering, and related services	206	21,045,785	25,856,894	42,499,374
Specialized design services	47	2,689,627	2,834,744	3,598,073
Custom computer programming services	52	6,182,997	7,129,086	9,743,197
Computer systems design services	76	9,115,881	9,508,006	12,323,045
Other computer related services, including facilities management	22	2,254,853	5,763,306	8,543,092
Management consulting services	538	47,394,416	46,973,460	71,783,110
Environmental and other technical consulting services	95	7,799,103	6,885,830	9,983,519

## APPENDIX

Scientific research and development services	6,047	610,517,651	829,896,407	1,594,492,369
Advertising, public relations, and related services	137	10,475,164	15,147,635	25,561,350
Photographic services	44	1,904,354	1,010,819	1,826,770
Veterinary services	30	1,438,988	2,162,788	3,292,940
Marketing research and all other miscellaneous professional, scientific, and technical services	486	30,000,388	26,742,371	39,189,512
Management of companies and enterprises	515	70,884,173	80,175,586	112,603,562
Office administrative services	89	4,819,466	2,350,805	5,703,041
Facilities support services	55	3,015,812	3,927,081	8,554,112
Employment services	587	29,734,686	44,870,277	66,192,398
Business support services	181	8,958,484	7,557,051	12,766,484
Travel arrangement and reservation services	38	2,469,760	3,245,354	7,282,033
Investigation and security services	105	4,386,670	4,487,200	6,360,349
Services to buildings	299	9,023,536	9,366,672	14,780,214
Landscape and horticultural services	193	8,115,694	8,536,141	13,100,806
Other support services	53	4,477,712	5,708,942	8,586,321
Waste management and remediation services	45	3,290,461	6,215,613	10,446,602
Elementary and secondary schools	37	1,605,549	1,413,240	1,738,738
Junior colleges, colleges, universities, and professional schools	91	4,210,001	5,811,963	8,339,967
Other educational services	137	3,878,997	3,598,627	6,864,808
Offices of physicians	199	22,935,679	27,296,799	38,974,204
Offices of dentists	77	5,004,742	6,383,562	9,659,943
Offices of other health practitioners	115	6,231,198	5,836,913	8,351,358
Outpatient care centers	74	6,049,221	6,330,586	10,767,185
Medical and diagnostic laboratories	22	1,730,403	2,696,297	4,272,129
Home health care services	123	5,809,942	4,213,120	5,785,548
Other ambulatory health care services	25	1,573,933	1,728,836	2,802,482
Hospitals	318	26,063,645	30,306,931	56,550,992
Nursing and community care facilities	146	6,265,529	6,949,508	11,766,391
Residential mental retardation, mental health, substance abuse and other facilities	33	1,573,969	1,648,744	2,383,537

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Individual and family services	239	7,150,126	6,648,162	9,758,275
Child day care services	113	3,257,638	3,987,336	5,274,163
Community food, housing, and other relief services, including rehabilitation services	45	1,770,435	1,996,389	4,159,405
Performing arts companies	28	953,456	1,516,098	2,818,396
Commercial Sports Except Racing	32	4,169,506	4,430,213	5,786,144
Racing and Track Operation	4	146,931	226,882	425,227
Independent artists, writers, and performers	169	4,673,576	5,491,386	6,450,953
Promoters of performing arts and sports and agents for public figures	35	1,444,455	3,511,008	6,703,596
Museums, historical sites, zoos, and parks	12	534,832	662,248	1,097,946
Amusement parks and arcades	8	253,116	796,636	958,270
Gambling industries (except casino hotels)	50	2,049,836	6,690,349	9,407,293
Other amusement and recreation industries	60	2,274,778	3,279,307	4,659,346
Fitness and recreational sports centers	52	1,638,170	2,675,816	3,518,045
Bowling centers	8	259,165	400,949	602,799
Hotels and motels, including casino hotels	80	2,874,103	5,395,446	8,647,651
Other accommodations	18	656,815	895,787	1,269,490
Full-service restaurants	570	16,180,252	23,905,131	39,557,749
Limited-service restaurants	427	9,502,484	15,644,412	32,547,828
All other food and drinking places	319	8,962,483	12,455,870	19,000,073
Automotive repair and maintenance, except car washes	209	12,180,428	14,001,810	20,497,422
Car washes	85	4,826,749	7,357,552	10,680,019
Electronic and precision equipment repair and maintenance	37	2,969,945	4,241,367	6,491,010
Commercial and industrial machinery and equipment repair and maintenance	37	2,980,212	3,618,319	5,433,820
Personal and household goods repair and maintenance	62	3,606,299	2,992,257	3,853,512
Personal care services	162	5,024,612	3,408,451	4,574,899
Death care services	6	255,073	323,020	520,970
Dry-cleaning and laundry services	29	1,044,759	1,147,304	1,666,696
Other personal services	169	5,125,268	3,874,711	5,352,424
Religious organizations	161	9,458,781	4,542,703	15,394,880
Grantmaking, giving, and social advocacy organizations	33	2,030,400	5,946,036	8,766,627



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Business and professional associations	34	2,706,902	4,062,908	6,775,361
Labor and civic organizations	50	1,981,988	4,707,083	7,255,648
Private households	95	1,479,960	1,479,960	1,479,960
Postal service	60	5,679,105	5,684,882	6,246,865
Federal electric utilities	0	0	0	0
Other federal government enterprises	132	6,201,585	(3,676,666)	11,354,878
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	12	1,025,510	(585,761)	573,523
Local government electric utilities	8	1,094,980	2,861,791	5,095,779
Other local government enterprises	57	5,170,723	9,409,664	18,479,754
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	57	8,943,737	11,696,658	19,002,859

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 382: Detailed M2M Program Impacts by Types of Impact, Colorado.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	10,069	736,328,887	1,094,239,463	2,016,103,413

## APPENDIX

Oilseed farming	0	351	442	754
Grain farming	1	115,160	142,634	414,718
Vegetable and melon farming	3	105,451	122,983	336,336
Fruit farming	0	13,080	16,068	40,900
Tree nut farming	0	50	51	62
Greenhouse, nursery, and floriculture production	3	122,627	134,018	275,460
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	4,908	5,348	10,456
All other crop farming	5	74,750	78,302	163,130
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	5	150,178	218,489	930,958
Dairy cattle and milk production	1	39,300	50,798	374,276
Poultry and egg production	0	11,006	12,452	135,154
Animal production, except cattle and poultry and eggs	3	210,803	277,431	413,843
Forestry, forest products, and timber tract production	0	8,162	8,994	11,606
Commercial logging	0	7,687	8,972	21,162
Commercial fishing	0	0	0	0
Commercial hunting and trapping	1	661	14,610	36,778
Support activities for agriculture and forestry	15	479,249	486,031	602,601
Oil and gas extraction	6	1,039,356	1,304,552	2,710,464
Coal mining	0	8,675	29,039	43,687
Copper, nickel, lead, and zinc mining	0	(665)	50,508	107,434
Iron ore mining	0	0	0	0
Gold ore mining	1	39,972	116,340	250,702
Silver ore mining	0	6,646	24,089	48,024
Uranium-radium-vanadium ore mining	2	(168,176)	(50,454)	228,890
Other metal ore mining	0	5,790	15,765	25,845
Stone mining and quarrying	1	(10,113)	56,673	138,642
Sand and gravel mining	1	(29,098)	16,876	130,825
Other clay, ceramic, refractory minerals mining	0	85	1,104	3,228
Potash, soda, and borate mineral mining	0	867	1,295	2,011
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0

## APPENDIX

Other nonmetallic minerals	0	(2,336)	16,074	43,605
Drilling oil and gas wells	0	349	468	1,051
Support activities for oil and gas operations	0	8,135	10,845	23,579
Metal mining services	1	95,789	120,865	247,791
Other nonmetallic minerals services	0	7,213	9,117	19,001
Electric power generation - Hydroelectric	0	11,160	29,496	99,665
Electric power generation - Fossil fuel	2	183,564	674,096	2,023,499
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	1	47,905	111,229	191,632
Electric power generation - Wind	1	72,135	467,993	1,093,637
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	6,742	18,509	55,611
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	12	1,674,926	5,755,279	14,896,677
Natural gas distribution	4	374,084	959,233	2,594,013
Water, sewage and other systems	1	91,009	176,020	343,272
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0

## APPENDIX

Maintenance and repair construction of nonresidential structures	45	3,010,741	4,166,934	9,352,390
Maintenance and repair construction of residential structures	15	935,824	1,428,421	3,211,743
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	2,938	2,152	4,575
Dog and cat food manufacturing	0	14,034	59,888	254,383
Other animal food manufacturing	1	43,170	79,200	594,921
Flour milling	0	9,108	19,958	117,971
Rice milling	0	0	0	0
Malt manufacturing	0	503	1,529	16,483
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	303	1,734	28,512
Fats and oils refining and blending	0	365	800	11,672
Breakfast cereal manufacturing	0	3,959	10,496	54,889
Beet sugar manufacturing	0	3,329	7,786	34,510
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	9,057	14,038	74,732
Chocolate and confectionery manufacturing from cacao beans	0	135	301	3,299
Confectionery manufacturing from purchased chocolate	0	8,640	13,171	72,994
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	11,698	18,737	117,873
Canned fruits and vegetables manufacturing	0	3,232	5,993	48,134
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	4,517	8,939	49,170
Cheese manufacturing	0	21,621	32,347	223,845
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	1	114,302	201,803	866,762
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	11,354	18,916	77,451
Frozen cakes and other pastries manufacturing	2	71,197	112,305	189,263
Poultry processing	0	5,181	7,186	27,873

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Animal, except poultry, slaughtering	2	98,788	144,498	1,228,154
Meat processed from carcasses	1	61,077	69,451	578,700
Rendering and meat byproduct processing	0	2,396	2,953	12,182
Seafood product preparation and packaging	0	5,769	7,813	66,322
Bread and bakery product, except frozen, manufacturing	6	284,194	407,776	934,914
Cookie and cracker manufacturing	0	1,009	1,454	16,897
Dry pasta, mixes, and dough manufacturing	0	14,347	36,393	116,307
Tortilla manufacturing	1	31,340	39,393	137,768
Roasted nuts and peanut butter manufacturing	0	21,372	44,477	182,363
Other snack food manufacturing	1	43,445	94,672	344,392
Coffee and tea manufacturing	0	5,938	12,614	84,816
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	6,180	12,753	59,768
Spice and extract manufacturing	0	3,417	5,636	29,402
All other food manufacturing	1	31,005	44,134	232,913
Bottled and canned soft drinks & water	3	186,491	416,972	1,913,599
Manufactured ice	0	8,278	4,398	22,106
Breweries	2	175,970	520,839	1,269,176
Wineries	0	530	996	4,874
Distilleries	0	1,150	9,815	24,775
Tobacco product manufacturing	0	132	3,633	7,512
Fiber, yarn, and thread mills	0	(13)	(9)	269
Broadwoven fabric mills	0	(3)	(1)	75
Narrow fabric mills and schiffli machine embroidery	0	22	25	155
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	129	162	837
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	862	1,336	5,810
Curtain and linen mills	0	1,227	1,602	4,643
Textile bag and canvas mills	0	9,141	10,920	30,869
Rope, cordage, twine, tire cord and tire fabric mills	0	3,353	5,048	17,286
Other textile product mills	0	3,387	3,997	14,313

## APPENDIX

Hosiery and sock mills	0	198	331	863
Other apparel knitting mills	0	234	406	1,026
Cut and sew apparel contractors	0	1,483	1,813	8,862
Mens and boys cut and sew apparel manufacturing	0	1,610	1,989	5,654
Womens and girls cut and sew apparel manufacturing	0	824	1,182	6,278
Other cut and sew apparel manufacturing	0	981	1,250	4,053
Apparel accessories and other apparel manufacturing	0	663	870	3,478
Leather and hide tanning and finishing	0	9	14	173
Footwear manufacturing	0	10	12	223
Other leather and allied product manufacturing	0	66	70	378
Sawmills	0	9,167	13,781	73,170
Wood preservation	0	6,158	18,988	60,744
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	10,840	15,054	44,909
Reconstituted wood product manufacturing	0	792	1,896	6,872
Wood windows and door manufacturing	2	96,489	135,114	382,965
Cut stock, resawing lumber, and planing	0	1,804	3,357	12,309
Other millwork, including flooring	1	45,066	68,321	202,957
Wood container and pallet manufacturing	1	20,286	25,135	83,875
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	3,544	4,172	17,216
All other miscellaneous wood product manufacturing	0	5,275	7,214	32,917
Pulp mills	0	0	0	0
Paper mills	0	195	661	7,681
Paperboard mills	0	0	0	0
Paperboard container manufacturing	1	66,768	91,332	438,839
Paper bag and coated and treated paper manufacturing	0	218	1,806	22,010
Stationery product manufacturing	0	(1,067)	(151)	16,416

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Sanitary paper product manufacturing	0	178	610	5,682
All other converted paper product manufacturing	0	(336)	44	4,313
Printing	11	564,290	758,779	1,713,691
Support activities for printing	0	13,328	17,824	29,148
Petroleum refineries	0	83,644	1,412,958	4,307,723
Asphalt paving mixture and block manufacturing	0	297	7,453	65,463
Asphalt shingle and coating materials manufacturing	0	9,424	59,923	116,352
Petroleum lubricating oil and grease manufacturing	0	2,802	25,255	61,417
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	31	132	1,720
Industrial gas manufacturing	0	24,412	48,905	209,143
Synthetic dye and pigment manufacturing	0	69	76	321
Other basic inorganic chemical manufacturing	0	5,962	9,982	37,466
Other basic organic chemical manufacturing	0	1,047	1,662	14,582
Plastics material and resin manufacturing	0	933	1,255	10,848
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	1,068	1,251	5,211
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1,169	1,782	6,755
Pesticide and other agricultural chemical manufacturing	0	2,008	4,469	39,385
Medicinal and botanical manufacturing	0	3,693	5,500	18,838
Pharmaceutical preparation manufacturing	0	10,696	30,620	106,708
In-vitro diagnostic substance manufacturing	0	163	216	654
Biological product (except diagnostic) manufacturing	0	865	1,648	3,813
Paint and coating manufacturing	0	8,016	10,301	38,477
Adhesive manufacturing	0	7,301	10,625	43,683

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Soap and other detergent manufacturing	0	31,575	54,177	248,817
Polish and other sanitation good manufacturing	0	57,238	80,380	285,482
Surface active agent manufacturing	0	2,291	4,828	20,344
Toilet preparation manufacturing	0	24,235	46,987	183,053
Printing ink manufacturing	0	1,860	1,917	6,067
Explosives manufacturing	0	112	114	247
Custom compounding of purchased resins	0	2,501	3,552	11,045
Photographic film and chemical manufacturing	0	25,423	43,401	230,792
Other miscellaneous chemical product manufacturing	0	32,986	42,998	157,210
Plastics packaging materials and unlaminated film and sheet manufacturing	0	4,299	6,986	26,571
Unlaminated plastics profile shape manufacturing	0	8,150	17,231	54,000
Plastics pipe and pipe fitting manufacturing	0	8,060	18,778	56,226
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	7,215	12,933	30,015
Polystyrene foam product manufacturing	0	7,509	12,097	35,772
Urethane and other foam product (except polystyrene) manufacturing	0	15,908	25,350	87,918
Plastics bottle manufacturing	0	4,819	7,775	32,409
Other plastics product manufacturing	2	103,315	151,453	447,434
Tire manufacturing	0	47,436	62,564	142,758
Rubber and plastics hoses and belting manufacturing	0	425	670	1,482
Other rubber product manufacturing	1	94,018	137,741	434,835
Pottery, ceramics, and plumbing fixture manufacturing	0	15,640	21,935	40,883
Brick, tile, and other structural clay product manufacturing	0	29,311	61,721	122,946
Flat glass manufacturing	0	6,085	15,876	34,008
Other pressed and blown glass and glassware manufacturing	0	15,390	21,503	66,540
Glass container manufacturing	0	14,275	29,632	63,935



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Glass product manufacturing made of purchased glass	1	39,839	68,325	179,685
Cement manufacturing	0	17,431	55,478	135,764
Ready-mix concrete manufacturing	2	147,272	300,630	828,649
Concrete block and brick manufacturing	0	28,817	66,539	150,466
Concrete pipe manufacturing	0	6,393	12,980	28,361
Other concrete product manufacturing	1	55,346	95,391	219,171
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	15,186	51,813	112,390
Abrasive product manufacturing	0	674	2,565	5,059
Cut stone and stone product manufacturing	1	49,540	61,092	130,793
Ground or treated mineral and earth manufacturing	0	1,461	5,544	12,572
Mineral wool manufacturing	0	1,919	6,114	14,037
Miscellaneous nonmetallic mineral products manufacturing	0	5,009	16,391	35,374
Iron and steel mills and ferroalloy manufacturing	0	17,288	29,405	176,971
Iron, steel pipe and tube manufacturing from purchased steel	0	2,253	3,360	13,500
Rolled steel shape manufacturing	0	937	2,049	7,219
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	387	740	3,530
Other aluminum rolling, drawing and extruding	0	371	527	2,454
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	35	51	407
Nonferrous metal, except copper and aluminum, shaping	0	168	219	766
Secondary processing of other nonferrous metals	0	4	19	256
Ferrous metal foundries	0	142	276	691
Nonferrous metal foundries	0	771	1,146	3,216
Custom roll forming	0	594	940	5,032

## APPENDIX

Crown and closure manufacturing and metal stamping	0	3,885	5,735	16,198
Iron and steel forging	0	1,207	1,671	6,224
Nonferrous forging	0	2,825	3,621	12,491
Cutlery, utensil, pot, and pan manufacturing	0	600	2,117	4,020
Handtool manufacturing	0	496	813	1,888
Prefabricated metal buildings and components manufacturing	0	6,493	9,193	28,397
Fabricated structural metal manufacturing	1	55,511	84,030	240,911
Plate work manufacturing	0	3,375	3,512	10,797
Metal window and door manufacturing	0	11,741	17,975	48,062
Sheet metal work manufacturing	0	26,893	35,131	95,160
Ornamental and architectural metal work manufacturing	1	42,888	57,387	155,382
Power boiler and heat exchanger manufacturing	0	131	190	477
Metal tank (heavy gauge) manufacturing	0	639	788	2,341
Metal cans manufacturing	0	15,008	35,267	127,480
Metal barrels, drums and pails manufacturing	0	2,351	2,954	11,901
Hardware manufacturing	0	5,979	10,001	26,010
Spring and wire product manufacturing	0	9,101	12,652	38,841
Machine shops	2	115,005	133,224	268,405
Turned product and screw, nut, and bolt manufacturing	0	8,415	11,892	30,056
Metal heat treating	0	713	1,088	2,564
Metal coating and nonprecious engraving	0	10,318	18,065	45,655
Electroplating, anodizing, and coloring metal	0	9,996	11,163	23,959
Valve and fittings, other than plumbing, manufacturing	0	14,887	24,448	53,467
Plumbing fixture fitting and trim manufacturing	0	10,819	31,725	81,195
Ball and roller bearing manufacturing	0	2,370	4,413	11,212
Small arms ammunition manufacturing	0	827	1,371	4,082
Ammunition, except for small arms, manufacturing	0	0	0	0

## APPENDIX

Small arms, ordnance, and accessories manufacturing	0	1,682	4,443	9,813
Fabricated pipe and pipe fitting manufacturing	0	3,321	3,863	8,989
Other fabricated metal manufacturing	0	20,741	27,916	74,884
Farm machinery and equipment manufacturing	0	5,371	7,263	36,926
Lawn and garden equipment manufacturing	0	31	51	362
Construction machinery manufacturing	0	50	89	432
Mining machinery and equipment manufacturing	0	44	55	226
Oil and gas field machinery and equipment manufacturing	0	409	481	1,790
Semiconductor machinery manufacturing	0	469	524	1,771
Food product machinery manufacturing	0	55	67	228
Sawmill, woodworking, and paper machinery	0	119	133	626
Printing machinery and equipment manufacturing	0	114	130	511
All other industrial machinery manufacturing	0	209	267	815
Optical instrument and lens manufacturing	0	485	709	1,830
Photographic and photocopying equipment manufacturing	0	91	129	447
Other commercial service industry machinery manufacturing	0	4,379	7,179	20,528
Air purification and ventilation equipment manufacturing	0	1,471	2,009	6,031
Heating equipment (except warm air furnaces) manufacturing	0	1,618	2,336	6,523
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	7,802	13,314	40,756
Industrial mold manufacturing	0	808	918	2,157
Special tool, die, jig, and fixture manufacturing	0	62	79	182
Cutting tool and machine tool accessory manufacturing	0	101	110	291
Machine tool manufacturing	0	258	288	748

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	299	373	1,084
Turbine and turbine generator set units manufacturing	0	1,453	1,879	7,337
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	116	207	1,144
Pump and pumping equipment manufacturing	0	28	46	190
Air and gas compressor manufacturing	0	122	185	650
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	245	255	658
Overhead cranes, hoists, and monorail systems manufacturing	0	99	180	541
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	172	361	999
Welding and soldering equipment manufacturing	0	85	110	283
Packaging machinery manufacturing	0	51	74	229
Industrial process furnace and oven manufacturing	0	15	18	42
Fluid power cylinder and actuator manufacturing	0	657	871	2,090
Fluid power pump and motor manufacturing	0	95	138	379
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	260	329	958
Electronic computer manufacturing	0	3,997	8,388	20,483
Computer storage device manufacturing	0	1,617	4,131	12,740
Computer terminals and other computer peripheral equipment manufacturing	0	10,131	17,244	46,184

## APPENDIX

Telephone apparatus manufacturing	0	278	507	1,233
Broadcast and wireless communications equipment manufacturing	0	149	214	539
Other communications equipment manufacturing	0	7,043	10,723	23,712
Audio and video equipment manufacturing	0	37	87	617
Printed circuit assembly (electronic assembly) manufacturing	0	1,136	1,787	5,115
Bare printed circuit board manufacturing	0	1,100	1,441	4,083
Semiconductor and related device manufacturing	0	3,277	5,694	20,376
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	23	33	130
Electronic connector manufacturing	0	191	316	1,180
Other electronic component manufacturing	0	189	222	998
Electromedical and electrotherapeutic apparatus manufacturing	0	1,611	3,237	6,709
Search, detection, and navigation instruments manufacturing	0	458	764	1,322
Automatic environmental control manufacturing	0	31	54	263
Industrial process variable instruments manufacturing	0	1,007	1,422	3,217
Totalizing fluid meter and counting device manufacturing	0	253	521	1,290
Electricity and signal testing instruments manufacturing	0	746	1,043	2,553
Analytical laboratory instrument manufacturing	1	66,597	111,521	267,274
Irradiation apparatus manufacturing	0	0	1	7
Watch, clock, and other measuring and controlling device manufacturing	0	366	658	1,634
Blank magnetic and optical recording media manufacturing	0	622	3,681	27,072

## APPENDIX

Software and other prerecorded and record reproducing	0	1,847	2,605	4,552
Electric lamp bulb and part manufacturing	0	121	337	1,110
Lighting fixture manufacturing	0	5,119	11,591	27,837
Small electrical appliance manufacturing	0	27	106	356
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	7	16	49
Motor and generator manufacturing	0	545	1,233	2,250
Switchgear and switchboard apparatus manufacturing	0	1,156	2,817	6,180
Relay and industrial control manufacturing	0	53	104	393
Storage battery manufacturing	0	3,057	7,152	15,814
Primary battery manufacturing	0	1,476	7,599	12,204
Fiber optic cable manufacturing	0	1,400	3,083	9,689
Other communication and energy wire manufacturing	0	184	492	1,629
Wiring device manufacturing	0	262	951	2,616
Carbon and graphite product manufacturing	0	428	1,038	5,881
All other miscellaneous electrical equipment and component manufacturing	0	396	545	1,705
Automobile manufacturing	0	119	(41)	2,818
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	233	198	1,151
Truck trailer manufacturing	0	56	47	286
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	1	31,149	31,069	160,976
Motor vehicle gasoline engine and engine parts manufacturing	0	185	150	1,575

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	5,268	5,827	41,762
Motor vehicle transmission and power train parts manufacturing	0	338	259	2,912
Motor vehicle seating and interior trim manufacturing	0	1,133	896	7,395
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	7,471	4,855	59,892
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	7,131	5,399	47,191
Aircraft manufacturing	0	14	38	137
Aircraft engine and engine parts manufacturing	0	69	191	458
Other aircraft parts and auxiliary equipment manufacturing	0	875	1,533	3,365
Guided missile and space vehicle manufacturing	0	15,660	23,466	47,142
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	233	357	692
Railroad rolling stock manufacturing	0	5	16	195
Ship building and repairing	0	0	0	0
Boat building	0	9,131	13,533	46,715
Motorcycle, bicycle, and parts manufacturing	0	984	8,082	28,236
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	(139)	(60)	2,055
Wood kitchen cabinet and countertop manufacturing	1	24,561	45,075	89,145
Upholstered household furniture manufacturing	0	352	570	3,486
Nonupholstered wood household furniture manufacturing	0	7,486	9,943	30,467
Other household nonupholstered furniture manufacturing	0	409	761	5,635
Institutional furniture manufacturing	0	258	302	1,012
Wood office furniture manufacturing	0	59	110	280

## APPENDIX

Custom architectural woodwork and millwork	0	2,116	2,128	6,056
Office furniture, except wood, manufacturing	0	105	254	772
Showcase, partition, shelving, and locker manufacturing	0	3,106	5,621	12,455
Mattress manufacturing	0	11,243	36,100	88,478
Blind and shade manufacturing	0	16,520	17,831	43,569
Surgical and medical instrument manufacturing	0	19,134	46,039	89,416
Surgical appliance and supplies manufacturing	0	4,483	11,207	25,826
Dental equipment and supplies manufacturing	0	659	1,443	3,354
Ophthalmic goods manufacturing	0	885	2,549	5,582
Dental laboratories	0	4,596	4,566	9,196
Jewelry and silverware manufacturing	0	6,401	14,084	58,938
Sporting and athletic goods manufacturing	0	9,029	16,595	64,223
Doll, toy, and game manufacturing	0	16,102	43,704	109,372
Office supplies (except paper) manufacturing	0	(188)	(119)	1,424
Sign manufacturing	2	27,588	25,210	164,136
Gasket, packing, and sealing device manufacturing	0	13,532	20,733	55,033
Musical instrument manufacturing	0	(1,009)	(973)	2,193
Fasteners, buttons, needles, and pins manufacturing	0	(526)	(426)	2,480
Broom, brush, and mop manufacturing	0	(78)	852	5,954
Burial casket manufacturing	0	(38)	(9)	470
All other miscellaneous manufacturing	1	29,274	38,022	113,323
Wholesale - Motor vehicle and motor vehicle parts and supplies	5	373,146	854,938	1,888,212
Wholesale - Professional and commercial equipment and supplies	15	2,051,195	3,424,851	5,517,417
Wholesale - Household appliances and electrical and electronic goods	6	743,117	1,682,103	3,171,992
Wholesale - Machinery, equipment, and supplies	11	962,664	1,663,083	2,871,672
Wholesale - Other durable goods merchant wholesalers	19	1,520,869	2,359,962	4,495,238



## APPENDIX

Wholesale - Drugs and druggists' sundries	6	836,130	2,264,470	4,961,581
Wholesale - Grocery and related product wholesalers	17	1,198,230	1,621,026	3,162,804
Wholesale - Petroleum and petroleum products	2	239,887	2,277,749	2,692,290
Wholesale - Other nondurable goods merchant wholesalers	26	2,047,281	3,927,562	7,425,379
Wholesale - Wholesale electronic markets and agents and brokers	7	779,179	313,525	371,274
Retail - Motor vehicle and parts dealers	29	1,870,251	2,957,052	4,083,039
Retail - Furniture and home furnishings stores	21	979,601	1,317,202	2,037,360
Retail - Electronics and appliance stores	22	997,248	1,170,833	1,956,795
Retail - Building material and garden equipment and supplies stores	22	913,692	1,793,597	2,570,616
Retail - Food and beverage stores	84	3,000,056	4,340,432	6,759,540
Retail - Health and personal care stores	39	1,683,853	2,032,984	3,128,233
Retail - Gasoline stores	19	773,183	1,355,327	2,319,732
Retail - Clothing and clothing accessories stores	42	1,008,624	1,766,245	3,622,222
Retail - Sporting goods, hobby, musical instrument and book stores	27	822,625	1,081,908	1,663,803
Retail - General merchandise stores	90	2,824,675	4,288,795	6,730,980
Retail - Miscellaneous store retailers	54	1,433,723	1,763,466	2,756,130
Retail - Nonstore retailers	62	1,051,877	3,963,638	8,387,558
Air transportation	17	1,899,829	4,579,519	6,724,998
Rail transportation	2	299,701	575,802	1,113,525
Water transportation	0	11,571	12,071	102,021
Truck transportation	33	2,297,429	2,643,609	5,568,845
Transit and ground passenger transportation	63	887,966	1,094,975	2,005,741
Pipeline transportation	0	475,174	607,147	637,994
Scenic and sightseeing transportation and support activities for transportation	48	3,195,977	3,508,083	7,470,673
Couriers and messengers	26	991,385	1,298,219	2,544,428
Warehousing and storage	18	909,466	1,020,731	2,094,898

## APPENDIX

Newspaper publishers	7	331,240	505,834	711,174
Periodical publishers	6	332,009	468,367	910,035
Book publishers	2	116,781	329,384	712,146
Directory, mailing list, and other publishers	3	313,404	843,132	1,166,253
Greeting card publishing	0	12,592	37,723	56,265
Software publishers	22	3,021,605	6,976,680	8,478,895
Motion picture and video industries	8	267,038	458,046	1,395,064
Sound recording industries	1	29,107	116,199	232,168
Radio and television broadcasting	10	856,867	485,990	2,800,278
Cable and other subscription programming	7	587,198	3,761,279	11,824,933
Wired telecommunications carriers	25	1,143,228	4,894,824	11,029,725
Wireless telecommunications carriers (except satellite)	4	(262,601)	2,148,705	6,126,500
Satellite, telecommunications resellers, and all other telecommunications	7	(353,006)	(59,837)	1,446,779
Data processing, hosting, and related services	20	2,382,145	5,307,508	9,958,443
News syndicates, libraries, archives and all other information services	1	52,501	76,557	119,606
Internet publishing and broadcasting and web search portals	9	1,100,944	2,895,415	7,814,095
Nondepository credit intermediation and related activities	50	4,548,545	5,707,708	9,708,956
Securities and commodity contracts intermediation and brokerage	27	2,623,776	2,630,691	6,161,709
Monetary authorities and depository credit intermediation	74	6,442,940	13,211,491	24,224,093
Other financial investment activities	100	3,385,395	3,875,803	11,895,764
Direct life insurance carriers	7	895,638	1,311,043	2,094,607
Insurance carriers, except direct life	37	3,801,982	8,051,994	22,348,661
Insurance agencies, brokerages, and related activities	56	3,435,545	4,345,059	11,740,978
Funds, trusts, and other financial vehicles	17	505,402	802,165	5,269,343
Other real estate	762	21,633,895	55,091,622	142,850,646
Tenant-occupied housing	32	992,872	14,954,543	16,255,439

## APPENDIX

Owner-occupied dwellings	0	0	47,522,553	60,044,188
Automotive equipment rental and leasing	10	492,697	1,530,103	2,426,306
General and consumer goods rental except video tapes and discs	14	614,446	808,701	1,443,901
Video tape and disc rental	3	182,473	278,671	438,540
Commercial and industrial machinery and equipment rental and leasing	9	554,364	1,529,268	2,581,253
Lessors of nonfinancial intangible assets	2	168,185	3,416,272	4,157,761
Legal services	189	17,710,574	24,758,426	37,403,743
Accounting, tax preparation, bookkeeping, and payroll services	74	5,206,536	7,660,903	10,530,096
Architectural, engineering, and related services	106	11,236,770	14,060,312	22,641,196
Specialized design services	17	868,233	909,093	1,187,750
Custom computer programming services	13	1,503,572	1,722,834	2,360,103
Computer systems design services	28	3,366,741	3,485,811	4,518,897
Other computer related services, including facilities management	7	782,612	2,113,085	3,021,380
Management consulting services	311	24,707,900	24,530,143	38,835,684
Environmental and other technical consulting services	44	3,437,320	3,078,335	4,506,199
Scientific research and development services	3,794	392,350,463	534,341,859	1,015,233,796
Advertising, public relations, and related services	44	2,838,480	4,333,864	7,696,641
Photographic services	18	706,922	421,494	755,120
Veterinary services	12	599,159	927,792	1,393,504
Marketing research and all other miscellaneous professional, scientific, and technical services	297	15,416,164	14,040,036	21,624,225
Management of companies and enterprises	194	25,752,869	28,891,117	41,132,054
Office administrative services	37	1,874,549	968,317	2,347,535
Facilities support services	9	526,384	705,423	1,464,174
Employment services	266	13,529,882	20,633,942	30,268,135
Business support services	63	2,912,025	2,464,895	4,268,797
Travel arrangement and reservation services	14	916,299	1,208,288	2,735,385
Investigation and security services	43	1,802,985	1,832,209	2,605,868
Services to buildings	136	4,021,357	4,145,594	6,612,819

## APPENDIX

Landscape and horticultural services	61	2,576,045	2,693,941	4,141,509
Other support services	17	1,417,795	1,799,060	2,727,987
Waste management and remediation services	18	1,310,753	2,439,864	4,142,056
Elementary and secondary schools	13	584,689	516,885	635,436
Junior colleges, colleges, universities, and professional schools	29	1,373,317	1,940,460	2,752,130
Other educational services	49	1,438,311	1,335,268	2,509,824
Offices of physicians	82	9,199,636	10,999,026	15,836,614
Offices of dentists	33	2,095,417	2,695,793	4,088,003
Offices of other health practitioners	48	2,517,589	2,351,062	3,410,581
Outpatient care centers	28	2,369,723	2,475,831	4,176,409
Medical and diagnostic laboratories	9	671,140	1,056,568	1,679,407
Home health care services	47	2,316,147	1,726,634	2,332,708
Other ambulatory health care services	10	612,278	673,836	1,086,285
Hospitals	115	9,247,184	10,911,313	20,401,734
Nursing and community care facilities	58	2,494,467	2,756,890	4,672,982
Residential mental retardation, mental health, substance abuse and other facilities	11	527,616	551,078	804,093
Individual and family services	79	2,249,546	2,079,571	3,108,661
Child day care services	45	1,300,229	1,568,222	2,075,513
Community food, housing, and other relief services, including rehabilitation services	16	645,545	720,007	1,493,440
Performing arts companies	10	322,761	476,256	947,550
Commercial Sports Except Racing	11	1,401,065	1,457,938	1,935,043
Racing and Track Operation	1	49,059	70,276	137,194
Independent artists, writers, and performers	51	1,236,221	1,433,481	1,722,647
Promoters of performing arts and sports and agents for public figures	12	457,589	1,029,148	2,137,017
Museums, historical sites, zoos, and parks	4	173,740	208,907	356,677
Amusement parks and arcades	3	74,238	238,412	291,209
Gambling industries (except casino hotels)	18	736,166	2,495,866	3,469,805
Other amusement and recreation industries	22	870,149	1,222,343	1,723,450

## APPENDIX

Fitness and recreational sports centers	21	646,298	1,006,664	1,368,658
Bowling centers	3	97,658	146,307	216,542
Hotels and motels, including casino hotels	3	109,743	199,560	318,983
Other accommodations	1	25,783	34,428	48,064
Full-service restaurants	249	7,154,241	10,595,895	17,426,745
Limited-service restaurants	187	4,285,843	7,080,299	14,485,985
All other food and drinking places	131	3,722,792	5,132,060	7,825,049
Automotive repair and maintenance, except car washes	70	4,243,463	4,860,522	7,043,320
Car washes	32	1,879,094	2,892,666	4,152,169
Electronic and precision equipment repair and maintenance	15	1,228,423	1,722,092	2,640,280
Commercial and industrial machinery and equipment repair and maintenance	12	991,228	1,202,692	1,816,290
Personal and household goods repair and maintenance	25	1,377,343	1,123,953	1,475,451
Personal care services	65	1,996,794	1,345,747	1,815,473
Death care services	2	94,374	119,415	190,260
Dry-cleaning and laundry services	12	433,793	476,175	695,685
Other personal services	74	2,179,717	1,599,929	2,264,060
Religious organizations	47	2,927,388	1,326,036	4,504,364
Grantmaking, giving, and social advocacy organizations	11	641,663	1,979,132	2,912,917
Business and professional associations	11	802,304	1,287,885	2,170,838
Labor and civic organizations	17	740,984	1,800,798	2,659,456
Private households	40	612,887	612,887	612,887
Postal service	19	1,763,439	1,765,134	1,937,349
Federal electric utilities	0	0	0	0
Other federal government enterprises	1	83,994	(99,128)	136,094
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	5	406,305	(240,068)	240,205
Local government electric utilities	2	352,923	883,031	1,560,414
Other local government enterprises	21	2,055,606	3,744,871	7,139,166

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	6	982,853	1,280,122	2,649,267

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 8. Connecticut

**Table 383: Detailed NASA Impacts by Types of Impact, Connecticut.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	316	28,148,360	44,490,053	75,706,511
Oilseed farming	0	(0)	(1)	120
Grain farming	0	192	982	3,962
Vegetable and melon farming	0	1,308	2,234	5,353
Fruit farming	0	880	1,779	3,695
Tree nut farming	0	3	3	3
Greenhouse, nursery, and floriculture production	0	4,994	6,711	12,824
Tobacco farming	0	2,793	2,906	5,022
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	1,017	1,374	2,602
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	43	1,332	5,836

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Dairy cattle and milk production	0	274	989	5,983
Poultry and egg production	0	276	410	4,119
Animal production, except cattle and poultry and eggs	1	1,994	16,376	30,749
Forestry, forest products, and timber tract production	0	4,856	5,138	6,155
Commercial logging	0	2,481	2,529	4,232
Commercial fishing	0	3,159	2,572	2,835
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	14,703	12,457	15,031
Oil and gas extraction	1	72,435	80,007	375,353
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	(118)	8,797	18,730
Sand and gravel mining	0	1,765	6,315	9,183
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	(47)	245	710
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	1	1	4
Support activities for oil and gas operations	0	71	69	253
Metal mining services	0	131	135	812
Other nonmetallic minerals services	0	13	12	72
Electric power generation - Hydroelectric	0	1,119	5,424	10,410
Electric power generation - Fossil fuel	0	9,321	57,116	136,963
Electric power generation - Nuclear	0	29,344	89,812	163,397
Electric power generation - Solar	0	1,392	4,642	8,895
Electric power generation - Wind	0	0	0	0

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	534	2,873	7,801
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	59,855	306,295	589,789
Natural gas distribution	0	17,783	68,955	124,517
Water, sewage and other systems	0	4,633	13,161	19,617
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	7	527,491	550,120	1,307,059
Maintenance and repair construction of residential structures	0	34,071	37,273	91,356
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	57	32	72
Dog and cat food manufacturing	0	134	423	2,765
Other animal food manufacturing	0	1,836	4,275	20,808
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0



## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	1,960	3,839	62,961
Breakfast cereal manufacturing	0	57	118	453
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	192	274	1,503
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	578	749	4,812
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	2,574	3,722	14,233
Canned fruits and vegetables manufacturing	0	834	1,415	5,972
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	472	666	7,529
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	1,898	2,936	18,721
Creamery butter manufacturing	0	34	78	1,118
Ice cream and frozen dessert manufacturing	0	724	1,082	5,316
Frozen cakes and other pastries manufacturing	0	2,269	3,047	5,606
Poultry processing	0	236	301	1,159
Animal, except poultry, slaughtering	0	607	928	5,425
Meat processed from carcasses	0	1,722	2,104	15,718
Rendering and meat byproduct processing	0	621	1,028	3,495
Seafood product preparation and packaging	0	714	812	3,179
Bread and bakery product, except frozen, manufacturing	0	9,366	11,818	28,922
Cookie and cracker manufacturing	0	115	118	629
Dry pasta, mixes, and dough manufacturing	0	528	1,186	4,100
Tortilla manufacturing	0	0	0	0

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	977	1,770	6,122
Other snack food manufacturing	0	2,434	5,073	19,854
Coffee and tea manufacturing	0	625	1,066	4,481
Flavoring syrup and concentrate manufacturing	0	1,092	7,071	11,064
Mayonnaise, dressing, and sauce manufacturing	0	60	99	421
Spice and extract manufacturing	0	69	97	408
All other food manufacturing	0	357	434	2,431
Bottled and canned soft drinks & water	0	3,868	7,506	35,901
Manufactured ice	0	274	173	653
Breweries	0	1,740	4,194	15,490
Wineries	0	107	175	1,016
Distilleries	0	1,908	7,082	12,044
Tobacco product manufacturing	0	1,893	41,810	76,558
Fiber, yarn, and thread mills	0	29	39	161
Broadwoven fabric mills	0	164	245	757
Narrow fabric mills and schiffli machine embroidery	0	507	568	1,281
Nonwoven fabric mills	0	369	670	2,091
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	134	171	430
Fabric coating mills	0	765	1,023	3,907
Carpet and rug mills	0	21	36	134
Curtain and linen mills	0	334	458	1,208
Textile bag and canvas mills	0	1,439	1,784	4,063
Rope, cordage, twine, tire cord and tire fabric mills	0	246	374	936
Other textile product mills	0	229	264	574
Hosiery and sock mills	0	38	50	107
Other apparel knitting mills	0	34	47	103
Cut and sew apparel contractors	0	99	119	254
Mens and boys cut and sew apparel manufacturing	0	28	41	180
Womens and girls cut and sew apparel manufacturing	0	41	80	450
Other cut and sew apparel manufacturing	0	21	31	78
Apparel accessories and other apparel manufacturing	0	102	159	293
Leather and hide tanning and finishing	0	0	0	0

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	136	149	317
Sawmills	0	1,349	1,988	8,396
Wood preservation	0	212	636	1,859
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	228	308	794
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	671	947	3,763
Cut stock, resawing lumber, and planing	0	62	108	404
Other millwork, including flooring	0	2,670	3,808	10,874
Wood container and pallet manufacturing	0	1,109	1,316	3,742
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	604	717	2,549
All other miscellaneous wood product manufacturing	0	662	842	2,988
Pulp mills	0	0	0	0
Paper mills	0	6,954	9,165	47,209
Paperboard mills	0	636	913	4,821
Paperboard container manufacturing	0	9,451	11,202	55,265
Paper bag and coated and treated paper manufacturing	0	3,944	4,822	19,241
Stationery product manufacturing	0	150	182	995
Sanitary paper product manufacturing	0	694	974	3,853
All other converted paper product manufacturing	0	464	533	1,728
Printing	0	34,218	42,078	83,580
Support activities for printing	0	1,101	1,341	2,055
Petroleum refineries	0	1,383	28,333	99,930
Asphalt paving mixture and block manufacturing	0	2,622	6,711	18,968
Asphalt shingle and coating materials manufacturing	0	182	1,191	2,335
Petroleum lubricating oil and grease manufacturing	4	202,677	1,552,435	4,799,473

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	5,228	8,754	25,451
Industrial gas manufacturing	0	7,390	8,796	15,913
Synthetic dye and pigment manufacturing	0	1,497	1,466	2,095
Other basic inorganic chemical manufacturing	0	18,813	18,941	34,906
Other basic organic chemical manufacturing	0	11,673	14,129	68,440
Plastics material and resin manufacturing	0	9,392	9,987	31,034
Synthetic rubber manufacturing	0	844	948	3,262
Artificial and synthetic fibers and filaments manufacturing	0	60,911	62,569	91,618
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	2,829	2,325	3,543
Pesticide and other agricultural chemical manufacturing	0	13,549	13,381	17,728
Medicinal and botanical manufacturing	0	2,054	1,928	3,517
Pharmaceutical preparation manufacturing	0	4,486	6,431	20,452
In-vitro diagnostic substance manufacturing	0	1,366	1,489	3,043
Biological product (except diagnostic) manufacturing	0	3,773	4,428	7,979
Paint and coating manufacturing	0	13,748	12,262	19,441
Adhesive manufacturing	0	27,392	27,224	57,430
Soap and other detergent manufacturing	0	26,312	22,863	31,873
Polish and other sanitation good manufacturing	0	15,429	13,049	17,781
Surface active agent manufacturing	0	7,959	7,263	6,755
Toilet preparation manufacturing	0	13,436	10,775	17,762
Printing ink manufacturing	0	1,108	1,117	1,439
Explosives manufacturing	0	625	665	1,558
Custom compounding of purchased resins	1	148,564	168,763	441,175
Photographic film and chemical manufacturing	0	7,399	7,364	11,900
Other miscellaneous chemical product manufacturing	0	16,318	15,773	25,018

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,499	2,269	7,092
Unlaminated plastics profile shape manufacturing	0	1,748	3,413	10,701
Plastics pipe and pipe fitting manufacturing	0	101	213	734
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	751	1,290	4,816
Polystyrene foam product manufacturing	0	1,193	1,883	6,468
Urethane and other foam product (except polystyrene) manufacturing	0	1,293	1,944	6,925
Plastics bottle manufacturing	0	1,088	1,707	8,117
Other plastics product manufacturing	0	16,239	22,686	68,848
Tire manufacturing	0	194	298	2,134
Rubber and plastics hoses and belting manufacturing	0	98	151	447
Other rubber product manufacturing	0	4,540	6,417	20,353
Pottery, ceramics, and plumbing fixture manufacturing	0	41	49	153
Brick, tile, and other structural clay product manufacturing	0	621	912	2,904
Flat glass manufacturing	0	3	5	31
Other pressed and blown glass and glassware manufacturing	0	124	163	592
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	462	663	1,825
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	3,141	4,458	15,033
Concrete block and brick manufacturing	0	548	821	2,123
Concrete pipe manufacturing	0	76	105	265
Other concrete product manufacturing	0	4,036	5,154	12,000
Lime manufacturing	0	1,093	2,041	5,894
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	1,546	3,391	5,750
Cut stone and stone product manufacturing	0	2,336	2,643	6,235

## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	113	200	583
Miscellaneous nonmetallic mineral products manufacturing	0	72	132	361
Iron and steel mills and ferroalloy manufacturing	0	1,781	2,354	11,568
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	2,831	3,896	18,435
Steel wire drawing	0	1,148	1,270	5,162
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	1,938	2,558	10,078
Other aluminum rolling, drawing and extruding	0	414	500	2,275
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	3,984	4,817	33,746
Nonferrous metal, except copper and aluminum, shaping	0	1,051	1,235	4,559
Secondary processing of other nonferrous metals	0	75	131	949
Ferrous metal foundries	0	2,198	2,679	6,898
Nonferrous metal foundries	0	697	856	2,143
Custom roll forming	0	353	539	2,373
Crown and closure manufacturing and metal stamping	0	9,255	13,043	32,735
Iron and steel forging	0	1,655	2,250	6,732
Nonferrous forging	0	618	764	2,204
Cutlery, utensil, pot, and pan manufacturing	0	4,950	13,847	25,196
Handtool manufacturing	0	2,042	3,180	5,462
Prefabricated metal buildings and components manufacturing	0	214	290	810
Fabricated structural metal manufacturing	0	2,642	3,829	10,043
Plate work manufacturing	0	1,671	1,778	5,112
Metal window and door manufacturing	0	1,369	2,020	4,226

## APPENDIX

Sheet metal work manufacturing	0	5,157	6,474	14,293
Ornamental and architectural metal work manufacturing	0	3,889	4,970	10,140
Power boiler and heat exchanger manufacturing	0	84	110	277
Metal tank (heavy gauge) manufacturing	0	56	68	189
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	7,003	8,757	30,363
Hardware manufacturing	0	10,049	15,969	31,258
Spring and wire product manufacturing	0	2,933	3,893	8,319
Machine shops	0	26,010	29,691	50,912
Turned product and screw, nut, and bolt manufacturing	0	9,111	12,477	30,022
Metal heat treating	0	3,134	4,733	10,638
Metal coating and nonprecious engraving	0	7,010	11,754	24,096
Electroplating, anodizing, and coloring metal	0	6,729	7,510	15,183
Valve and fittings, other than plumbing, manufacturing	0	4,375	6,930	16,578
Plumbing fixture fitting and trim manufacturing	0	1,555	4,554	11,363
Ball and roller bearing manufacturing	0	2,797	5,014	11,635
Small arms ammunition manufacturing	0	23	28	47
Ammunition, except for small arms, manufacturing	0	2	2	4
Small arms, ordnance, and accessories manufacturing	0	1,748	4,101	7,567
Fabricated pipe and pipe fitting manufacturing	0	1,574	1,819	3,609
Other fabricated metal manufacturing	0	1,875	2,424	5,277
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	136	208	990
Construction machinery manufacturing	0	8	12	40
Mining machinery and equipment manufacturing	0	0	0	0

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	55	64	186
Semiconductor machinery manufacturing	0	143	158	480
Food product machinery manufacturing	0	5	6	22
Sawmill, woodworking, and paper machinery	0	34	38	129
Printing machinery and equipment manufacturing	0	11	12	31
All other industrial machinery manufacturing	0	10,105	12,088	30,677
Optical instrument and lens manufacturing	0	55	71	171
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	847	1,242	2,897
Air purification and ventilation equipment manufacturing	0	192	242	572
Heating equipment (except warm air furnaces) manufacturing	0	351	446	1,258
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	173	251	983
Industrial mold manufacturing	0	452	488	940
Special tool, die, jig, and fixture manufacturing	0	848	952	1,657
Cutting tool and machine tool accessory manufacturing	0	374	398	885
Machine tool manufacturing	0	408	440	1,063
Rolling mill and other metalworking machinery manufacturing	0	35,736	42,173	89,778
Turbine and turbine generator set units manufacturing	0	135	164	490
Speed changer, industrial high-speed drive, and gear manufacturing	0	312	390	1,000
Mechanical power transmission equipment manufacturing	0	1,463	1,771	4,113
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	125	181	591



## APPENDIX

Air and gas compressor manufacturing	0	4	6	24
Elevator and moving stairway manufacturing	0	1	1	4
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	5	8	34
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	45	83	259
Welding and soldering equipment manufacturing	0	123	146	390
Packaging machinery manufacturing	0	60	77	212
Industrial process furnace and oven manufacturing	0	157	174	463
Fluid power cylinder and actuator manufacturing	0	119	146	409
Fluid power pump and motor manufacturing	0	50	65	187
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	251	293	771
Electronic computer manufacturing	0	10	32	187
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	4,098	9,285	28,658
Telephone apparatus manufacturing	0	41	92	290
Broadcast and wireless communications equipment manufacturing	0	39	66	163
Other communications equipment manufacturing	0	357	648	1,610
Audio and video equipment manufacturing	0	6	22	128
Printed circuit assembly (electronic assembly) manufacturing	0	1,694	3,002	9,897
Bare printed circuit board manufacturing	0	1,072	1,539	4,087

## APPENDIX

Semiconductor and related device manufacturing	0	360	743	2,181
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	800	1,254	3,027
Electronic connector manufacturing	0	1,657	2,851	7,214
Other electronic component manufacturing	0	557	684	2,181
Electromedical and electrotherapeutic apparatus manufacturing	0	23	59	133
Search, detection, and navigation instruments manufacturing	0	2,698	4,933	10,337
Automatic environmental control manufacturing	0	334	490	1,015
Industrial process variable instruments manufacturing	0	1,035	1,684	3,444
Totalizing fluid meter and counting device manufacturing	0	164	428	1,061
Electricity and signal testing instruments manufacturing	0	909	1,527	4,844
Analytical laboratory instrument manufacturing	2	225,435	453,179	809,538
Irradiation apparatus manufacturing	0	43	98	191
Watch, clock, and other measuring and controlling device manufacturing	0	219	440	936
Blank magnetic and optical recording media manufacturing	0	406	1,463	5,158
Software and other prerecorded and record reproducing	0	(1)	(0)	6
Electric lamp bulb and part manufacturing	0	1,400	2,249	3,471
Lighting fixture manufacturing	0	2,434	3,507	6,699
Small electrical appliance manufacturing	0	160	302	562
Household cooking appliance manufacturing	0	629	1,351	2,542
Household refrigerator and home freezer manufacturing	0	627	1,589	2,833
Household laundry equipment manufacturing	0	1,042	2,053	5,101

## APPENDIX

Other major household appliance manufacturing	0	239	552	960
Power, distribution, and specialty transformer manufacturing	0	7	10	24
Motor and generator manufacturing	0	834	1,243	2,984
Switchgear and switchboard apparatus manufacturing	0	471	768	1,905
Relay and industrial control manufacturing	0	3,027	3,992	10,023
Storage battery manufacturing	0	178	275	799
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	2,344	3,771	16,518
Other communication and energy wire manufacturing	0	542	939	3,213
Wiring device manufacturing	0	5,541	10,441	24,395
Carbon and graphite product manufacturing	0	467	643	1,670
All other miscellaneous electrical equipment and component manufacturing	0	194	221	509
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	4	11	31
Motor vehicle body manufacturing	0	3	5	26
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	815	1,692	5,535
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	1,215	1,944	7,059
Motor vehicle electrical and electronic equipment manufacturing	0	4,639	6,897	23,195
Motor vehicle transmission and power train parts manufacturing	0	953	1,698	7,975
Motor vehicle seating and interior trim manufacturing	0	49	75	361
Motor vehicle metal stamping	0	811	1,167	3,456
Other motor vehicle parts manufacturing	0	11,434	20,121	69,182
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	7,116	12,560	40,578

## APPENDIX

Aircraft manufacturing	0	290	437	1,298
Aircraft engine and engine parts manufacturing	0	3,955	6,650	16,167
Other aircraft parts and auxiliary equipment manufacturing	0	26,972	36,172	83,697
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	8	10	43
Ship building and repairing	0	2,691	3,039	6,255
Boat building	0	497	622	2,275
Motorcycle, bicycle, and parts manufacturing	0	26	54	265
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	14	22	111
Wood kitchen cabinet and countertop manufacturing	0	2,915	2,890	6,495
Upholstered household furniture manufacturing	0	373	384	1,055
Nonupholstered wood household furniture manufacturing	0	405	405	912
Other household nonupholstered furniture manufacturing	0	26	28	82
Institutional furniture manufacturing	0	28,042	28,738	88,764
Wood office furniture manufacturing	0	14	14	32
Custom architectural woodwork and millwork	0	235	220	542
Office furniture, except wood, manufacturing	0	9	9	23
Showcase, partition, shelving, and locker manufacturing	0	208	201	570
Mattress manufacturing	0	752	652	4,005
Blind and shade manufacturing	0	91	92	304
Surgical and medical instrument manufacturing	0	3,169	11,520	19,260
Surgical appliance and supplies manufacturing	0	1,100	4,214	7,315

## APPENDIX

Dental equipment and supplies manufacturing	0	77	238	448
Ophthalmic goods manufacturing	0	83	346	637
Dental laboratories	0	116	121	360
Jewelry and silverware manufacturing	0	117	358	1,178
Sporting and athletic goods manufacturing	0	(177)	71	1,246
Doll, toy, and game manufacturing	0	(475)	(185)	813
Office supplies (except paper) manufacturing	0	(268)	(134)	687
Sign manufacturing	0	(802)	(781)	2,512
Gasket, packing, and sealing device manufacturing	0	606	1,354	3,194
Musical instrument manufacturing	0	(251)	(244)	157
Fasteners, buttons, needles, and pins manufacturing	0	115	518	1,476
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	(79)	(14)	350
All other miscellaneous manufacturing	0	986	1,754	4,025
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	14,087	51,243	88,864
Wholesale - Professional and commercial equipment and supplies	1	77,007	176,590	261,946
Wholesale - Household appliances and electrical and electronic goods	0	38,452	131,930	202,571
Wholesale - Machinery, equipment, and supplies	0	45,429	106,621	155,934
Wholesale - Other durable goods merchant wholesalers	1	82,501	172,098	278,467
Wholesale - Drugs and druggists' sundries	0	39,016	174,864	274,474
Wholesale - Grocery and related product wholesalers	1	64,809	111,081	186,276
Wholesale - Petroleum and petroleum products	0	9,914	154,928	171,046
Wholesale - Other nondurable goods merchant wholesalers	1	149,220	367,461	528,708
Wholesale - Wholesale electronic markets and agents and brokers	0	54,521	47,448	50,244
Retail - Motor vehicle and parts dealers	1	65,020	93,008	131,537

## APPENDIX

Retail - Furniture and home furnishings stores	1	39,665	50,807	76,737
Retail - Electronics and appliance stores	1	44,005	41,668	67,931
Retail - Building material and garden equipment and supplies stores	2	82,555	131,460	188,427
Retail - Food and beverage stores	3	121,963	157,378	252,566
Retail - Health and personal care stores	2	75,270	87,135	130,166
Retail - Gasoline stores	1	30,195	45,021	76,496
Retail - Clothing and clothing accessories stores	2	71,931	93,014	161,191
Retail - Sporting goods, hobby, musical instrument and book stores	1	32,457	41,369	62,269
Retail - General merchandise stores	3	76,367	111,340	181,679
Retail - Miscellaneous store retailers	2	60,409	68,373	104,154
Retail - Nonstore retailers	2	126,562	252,744	386,238
Air transportation	0	23,834	53,156	71,233
Rail transportation	0	32,624	14,127	115,210
Water transportation	0	23,824	34,079	116,654
Truck transportation	1	87,040	98,824	191,429
Transit and ground passenger transportation	2	86,255	100,782	135,088
Pipeline transportation	0	221,967	104,413	103,547
Scenic and sightseeing transportation and support activities for transportation	1	147,535	155,484	233,337
Couriers and messengers	1	43,494	49,452	95,478
Warehousing and storage	1	62,440	70,831	143,230
Newspaper publishers	0	15,072	23,624	31,330
Periodical publishers	0	20,432	30,067	44,669
Book publishers	0	4,950	14,704	25,967
Directory, mailing list, and other publishers	0	4,781	14,035	21,081
Greeting card publishing	0	336	1,127	1,684
Software publishers	8	1,537,452	3,521,513	4,050,847
Motion picture and video industries	0	60,041	165,674	202,751
Sound recording industries	0	2,521	18,402	21,879
Radio and television broadcasting	0	33,163	17,775	83,349

## APPENDIX

Cable and other subscription programming	0	71,076	421,649	793,704
Wired telecommunications carriers	1	87,331	177,442	328,421
Wireless telecommunications carriers (except satellite)	0	8,627	35,912	108,493
Satellite, telecommunications resellers, and all other telecommunications	0	4,499	5,957	19,512
Data processing, hosting, and related services	0	41,632	98,912	195,586
News syndicates, libraries, archives and all other information services	0	9,098	19,466	32,411
Internet publishing and broadcasting and web search portals	0	58,660	217,552	451,578
Nondepository credit intermediation and related activities	1	133,341	174,232	234,541
Securities and commodity contracts intermediation and brokerage	1	228,944	201,189	299,731
Monetary authorities and depository credit intermediation	2	257,150	629,568	977,062
Other financial investment activities	3	430,711	414,919	660,178
Direct life insurance carriers	1	121,965	224,114	288,149
Insurance carriers, except direct life	1	252,779	758,367	1,226,896
Insurance agencies, brokerages, and related activities	1	141,369	210,218	395,256
Funds, trusts, and other financial vehicles	0	18,598	20,570	78,582
Other real estate	19	417,610	1,511,272	3,715,673
Tenant-occupied housing	2	29,844	521,858	585,746
Owner-occupied dwellings	0	0	1,664,795	2,103,449
Automotive equipment rental and leasing	0	31,255	66,034	89,128
General and consumer goods rental except video tapes and discs	0	40,598	45,485	54,607
Video tape and disc rental	0	6,456	10,131	14,844
Commercial and industrial machinery and equipment rental and leasing	0	72,600	111,594	139,711
Lessors of nonfinancial intangible assets	0	5,173	119,307	142,209

## APPENDIX

Legal services	5	519,532	875,461	1,233,426
Accounting, tax preparation, bookkeeping, and payroll services	2	201,139	252,445	331,234
Architectural, engineering, and related services	2	202,323	231,607	409,565
Specialized design services	0	33,890	35,476	41,879
Custom computer programming services	5	596,806	694,996	960,355
Computer systems design services	2	230,425	235,473	298,144
Other computer related services, including facilities management	0	53,583	74,601	131,671
Management consulting services	5	644,192	636,101	882,299
Environmental and other technical consulting services	1	91,705	80,396	111,295
Scientific research and development services	76	9,202,554	12,185,564	21,776,707
Advertising, public relations, and related services	2	148,404	197,790	311,537
Photographic services	0	24,055	14,958	21,428
Veterinary services	0	20,287	27,326	40,998
Marketing research and all other miscellaneous professional, scientific, and technical services	5	448,111	405,563	519,347
Management of companies and enterprises	7	1,049,147	1,227,232	1,640,539
Office administrative services	2	165,720	79,343	137,776
Facilities support services	0	2,698	3,248	7,286
Employment services	9	448,848	732,271	1,047,367
Business support services	1	76,718	69,628	105,461
Travel arrangement and reservation services	0	26,730	36,819	74,454
Investigation and security services	1	55,193	56,579	79,039
Services to buildings	4	150,848	156,187	228,111
Landscape and horticultural services	2	97,425	102,125	151,229
Other support services	1	39,162	50,353	77,822
Waste management and remediation services	1	55,990	113,148	178,477
Elementary and secondary schools	2	104,076	90,081	103,953
Junior colleges, colleges, universities, and professional schools	3	189,904	256,253	331,032
Other educational services	2	59,151	58,251	108,842
Offices of physicians	3	415,304	476,989	676,195
Offices of dentists	1	87,888	105,805	157,754



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Offices of other health practitioners	2	108,206	102,149	134,990
Outpatient care centers	1	90,039	94,124	167,864
Medical and diagnostic laboratories	0	25,107	36,636	57,440
Home health care services	2	132,009	92,331	119,317
Other ambulatory health care services	0	29,226	31,595	52,273
Hospitals	7	574,834	697,493	1,237,953
Nursing and community care facilities	2	114,326	136,700	216,990
Residential mental retardation, mental health, substance abuse and other facilities	1	52,380	57,935	84,888
Individual and family services	5	158,182	140,784	200,194
Child day care services	2	62,859	72,528	97,793
Community food, housing, and other relief services, including rehabilitation services	1	42,119	46,333	98,716
Performing arts companies	0	15,850	24,207	39,198
Commercial Sports Except Racing	0	12,778	15,877	29,121
Racing and Track Operation	0	3,985	5,939	9,231
Independent artists, writers, and performers	2	61,124	70,880	79,804
Promoters of performing arts and sports and agents for public figures	0	17,326	37,415	70,180
Museums, historical sites, zoos, and parks	0	12,089	14,683	23,909
Amusement parks and arcades	0	2,195	7,634	9,450
Gambling industries (except casino hotels)	0	10,112	30,750	43,900
Other amusement and recreation industries	1	31,312	38,143	58,055
Fitness and recreational sports centers	1	20,596	34,792	48,054
Bowling centers	0	2,197	3,376	5,518
Hotels and motels, including casino hotels	0	20,328	34,612	49,099
Other accommodations	0	10,618	14,038	17,381
Full-service restaurants	6	195,074	283,968	460,321
Limited-service restaurants	4	103,089	157,839	315,848
All other food and drinking places	4	144,772	182,116	261,481
Automotive repair and maintenance, except car washes	2	142,531	171,370	237,267
Car washes	1	70,935	102,212	147,182

## APPENDIX

Electronic and precision equipment repair and maintenance	1	105,733	172,283	244,178
Commercial and industrial machinery and equipment repair and maintenance	1	65,646	89,716	120,188
Personal and household goods repair and maintenance	1	49,534	47,571	54,869
Personal care services	2	84,001	62,997	80,631
Death care services	0	8,814	11,861	17,128
Dry-cleaning and laundry services	0	17,171	20,638	28,619
Other personal services	2	72,763	62,176	78,124
Religious organizations	4	181,408	90,230	382,869
Grantmaking, giving, and social advocacy organizations	1	40,371	124,861	173,276
Business and professional associations	0	24,744	38,994	57,474
Labor and civic organizations	1	30,480	79,741	137,302
Private households	1	30,948	30,948	30,948
Postal service	1	70,646	70,746	77,890
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	862	463	3,385
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	15,736	16,638	27,733
Local government passenger transit	0	7,936	(8,892)	1,439
Local government electric utilities	0	5,929	11,936	23,354
Other local government enterprises	2	138,401	210,905	507,479
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	8	1,077,522	1,730,144	2,742,181

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 384: Detailed M2M Program Impacts by Types of Impact, Connecticut.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>86</i>	<i>8,172,521</i>	<i>12,910,038</i>	<i>22,136,624</i>
Oilseed farming	0	(0)	(0)	94
Grain farming	0	47	269	1,001
Vegetable and melon farming	0	383	686	1,550
Fruit farming	0	336	687	1,348
Tree nut farming	0	2	2	2
Greenhouse, nursery, and floriculture production	0	1,264	1,757	3,280
Tobacco farming	0	1,194	1,460	2,625
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	273	383	707
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	11	330	1,363
Dairy cattle and milk production	0	90	335	1,776
Poultry and egg production	0	65	99	973
Animal production, except cattle and poultry and eggs	0	384	3,516	6,787
Forestry, forest products, and timber tract production	0	2,562	2,694	3,102
Commercial logging	0	749	762	1,190
Commercial fishing	0	1,182	724	805
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	4,013	3,364	4,055
Oil and gas extraction	1	25,396	37,502	166,015
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	(64)	2,239	4,904
Sand and gravel mining	0	1,162	2,036	2,471
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	(32)	108	286
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	18	19	67
Metal mining services	0	22	29	168
Other nonmetallic minerals services	0	2	3	16
Electric power generation - Hydroelectric	0	473	2,065	3,689
Electric power generation - Fossil fuel	0	2,862	16,686	38,356
Electric power generation - Nuclear	0	8,787	28,021	49,650
Electric power generation - Solar	0	358	1,148	2,129
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	304	1,261	3,405
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	16,082	83,807	156,430
Natural gas distribution	0	5,935	23,820	37,726
Water, sewage and other systems	0	1,768	4,275	5,717
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	143,086	149,907	346,034
Maintenance and repair construction of residential structures	0	9,704	10,686	25,334
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	16	9	20
Dog and cat food manufacturing	0	33	108	677
Other animal food manufacturing	0	532	1,297	5,993
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	968	1,985	30,079
Breakfast cereal manufacturing	0	13	27	102
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	66	92	465
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	185	242	1,436
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	880	1,263	4,545
Canned fruits and vegetables manufacturing	0	334	569	2,362

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	155	219	2,525
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	564	894	5,459
Creamery butter manufacturing	0	13	28	384
Ice cream and frozen dessert manufacturing	0	230	355	1,546
Frozen cakes and other pastries manufacturing	0	693	919	1,651
Poultry processing	0	56	76	277
Animal, except poultry, slaughtering	0	153	237	1,356
Meat processed from carcasses	0	500	620	4,487
Rendering and meat byproduct processing	0	333	543	1,852
Seafood product preparation and packaging	0	181	214	749
Bread and bakery product, except frozen, manufacturing	0	2,769	3,500	8,393
Cookie and cracker manufacturing	0	36	40	193
Dry pasta, mixes, and dough manufacturing	0	175	384	1,363
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	342	691	2,081
Other snack food manufacturing	0	739	1,547	5,828
Coffee and tea manufacturing	0	203	352	1,403
Flavoring syrup and concentrate manufacturing	0	490	2,994	4,802
Mayonnaise, dressing, and sauce manufacturing	0	21	35	141
Spice and extract manufacturing	0	30	43	164
All other food manufacturing	0	131	160	843
Bottled and canned soft drinks & water	0	1,038	2,094	9,574
Manufactured ice	0	77	53	167
Breweries	0	495	1,233	4,386
Wineries	0	67	110	622
Distilleries	0	607	2,350	3,596
Tobacco product manufacturing	0	498	14,537	23,208
Fiber, yarn, and thread mills	0	8	12	43
Broadwoven fabric mills	0	59	98	295

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	250	283	579
Nonwoven fabric mills	0	171	332	933
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	100	128	309
Fabric coating mills	0	416	542	1,889
Carpet and rug mills	0	8	15	47
Curtain and linen mills	0	115	165	405
Textile bag and canvas mills	0	437	550	1,207
Rope, cordage, twine, tire cord and tire fabric mills	0	50	80	185
Other textile product mills	0	78	92	189
Hosiery and sock mills	0	11	15	29
Other apparel knitting mills	0	15	20	39
Cut and sew apparel contractors	0	50	60	121
Mens and boys cut and sew apparel manufacturing	0	12	18	69
Womens and girls cut and sew apparel manufacturing	0	23	45	224
Other cut and sew apparel manufacturing	0	10	14	32
Apparel accessories and other apparel manufacturing	0	47	74	119
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	58	63	123
Sawmills	0	410	633	2,518
Wood preservation	0	58	190	519
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	62	86	217
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	164	240	927
Cut stock, resawing lumber, and planing	0	20	38	130
Other millwork, including flooring	0	719	1,076	2,867
Wood container and pallet manufacturing	0	298	363	1,009
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	222	267	876
All other miscellaneous wood product manufacturing	0	202	268	859
Pulp mills	0	0	0	0
Paper mills	0	1,682	1,935	10,909
Paperboard mills	0	137	183	1,018
Paperboard container manufacturing	0	3,918	4,456	21,958
Paper bag and coated and treated paper manufacturing	0	1,093	1,219	5,029
Stationery product manufacturing	0	55	62	303
Sanitary paper product manufacturing	0	173	219	915
All other converted paper product manufacturing	0	130	141	462
Printing	0	9,477	11,624	22,135
Support activities for printing	0	362	431	654
Petroleum refineries	0	800	14,282	51,271
Asphalt paving mixture and block manufacturing	0	723	1,730	4,622
Asphalt shingle and coating materials manufacturing	0	51	295	599
Petroleum lubricating oil and grease manufacturing	2	111,109	872,461	2,603,282
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	2,038	3,414	9,943
Industrial gas manufacturing	0	2,309	2,916	5,069
Synthetic dye and pigment manufacturing	0	650	658	1,013
Other basic inorganic chemical manufacturing	0	7,599	8,238	14,695
Other basic organic chemical manufacturing	0	4,216	5,159	25,939
Plastics material and resin manufacturing	0	3,439	3,731	12,038
Synthetic rubber manufacturing	0	340	384	1,386
Artificial and synthetic fibers and filaments manufacturing	0	231	224	335
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	953	821	1,243



## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	3,365	3,393	4,465
Medicinal and botanical manufacturing	0	968	994	1,524
Pharmaceutical preparation manufacturing	0	2,116	3,213	9,200
In-vitro diagnostic substance manufacturing	0	1,008	1,106	2,242
Biological product (except diagnostic) manufacturing	0	2,452	3,038	5,024
Paint and coating manufacturing	0	5,451	5,221	7,997
Adhesive manufacturing	0	13,738	15,144	29,518
Soap and other detergent manufacturing	0	7,113	7,806	8,873
Polish and other sanitation good manufacturing	0	5,171	5,152	5,761
Surface active agent manufacturing	0	1,637	1,760	1,470
Toilet preparation manufacturing	0	4,921	4,521	6,751
Printing ink manufacturing	0	425	435	548
Explosives manufacturing	0	172	185	450
Custom compounding of purchased resins	0	69,243	93,708	255,780
Photographic film and chemical manufacturing	0	1,962	2,154	3,151
Other miscellaneous chemical product manufacturing	0	4,240	4,365	6,968
Plastics packaging materials and unlaminated film and sheet manufacturing	0	512	768	2,350
Unlaminated plastics profile shape manufacturing	0	523	1,005	3,109
Plastics pipe and pipe fitting manufacturing	0	34	74	250
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	334	574	2,118
Polystyrene foam product manufacturing	0	440	687	2,332
Urethane and other foam product (except polystyrene) manufacturing	0	437	649	2,293
Plastics bottle manufacturing	0	724	1,130	5,262
Other plastics product manufacturing	0	5,970	8,308	23,892
Tire manufacturing	0	34	54	411

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	26	40	115
Other rubber product manufacturing	0	1,358	1,905	6,227
Pottery, ceramics, and plumbing fixture manufacturing	0	11	12	41
Brick, tile, and other structural clay product manufacturing	0	154	216	714
Flat glass manufacturing	0	1	1	7
Other pressed and blown glass and glassware manufacturing	0	43	56	201
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	129	180	496
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	814	1,110	3,783
Concrete block and brick manufacturing	0	142	202	529
Concrete pipe manufacturing	0	19	25	65
Other concrete product manufacturing	0	1,072	1,320	3,109
Lime manufacturing	0	228	434	1,276
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	709	1,473	2,554
Cut stone and stone product manufacturing	0	572	643	1,505
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	36	60	177
Miscellaneous nonmetallic mineral products manufacturing	0	24	41	110
Iron and steel mills and ferroalloy manufacturing	0	572	655	3,361
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	792	1,002	5,247
Steel wire drawing	0	687	493	2,450
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	537	621	2,716

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Other aluminum rolling, drawing and extruding	0	167	174	850
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	970	1,104	7,495
Nonferrous metal, except copper and aluminum, shaping	0	420	451	1,816
Secondary processing of other nonferrous metals	0	22	23	216
Ferrous metal foundries	0	852	825	2,393
Nonferrous metal foundries	0	268	293	761
Custom roll forming	0	160	243	976
Crown and closure manufacturing and metal stamping	0	2,886	4,089	10,024
Iron and steel forging	0	554	756	2,187
Nonferrous forging	0	227	283	769
Cutlery, utensil, pot, and pan manufacturing	0	1,772	5,296	9,119
Handtool manufacturing	0	803	1,256	2,158
Prefabricated metal buildings and components manufacturing	0	62	84	224
Fabricated structural metal manufacturing	0	729	1,062	2,738
Plate work manufacturing	0	477	509	1,411
Metal window and door manufacturing	0	378	560	1,144
Sheet metal work manufacturing	0	1,009	1,272	2,711
Ornamental and architectural metal work manufacturing	0	1,075	1,381	2,684
Power boiler and heat exchanger manufacturing	0	61	83	219
Metal tank (heavy gauge) manufacturing	0	28	34	91
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	3,858	4,850	15,779
Hardware manufacturing	0	3,318	5,294	10,072
Spring and wire product manufacturing	0	1,343	1,765	3,695
Machine shops	0	8,698	9,977	16,707
Turned product and screw, nut, and bolt manufacturing	0	3,059	4,183	9,648
Metal heat treating	0	1,265	1,907	4,291

## APPENDIX

Metal coating and nonprecious engraving	0	2,349	3,944	8,099
Electroplating, anodizing, and coloring metal	0	2,742	3,067	6,072
Valve and fittings, other than plumbing, manufacturing	0	1,605	2,528	5,989
Plumbing fixture fitting and trim manufacturing	0	511	1,541	3,641
Ball and roller bearing manufacturing	0	1,512	2,709	6,052
Small arms ammunition manufacturing	0	4	5	8
Ammunition, except for small arms, manufacturing	0	0	1	1
Small arms, ordnance, and accessories manufacturing	0	552	1,271	2,190
Fabricated pipe and pipe fitting manufacturing	0	442	513	1,014
Other fabricated metal manufacturing	0	587	759	1,576
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	53	79	344
Construction machinery manufacturing	0	9	15	46
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	17	20	58
Semiconductor machinery manufacturing	0	76	84	232
Food product machinery manufacturing	0	4	4	14
Sawmill, woodworking, and paper machinery	0	15	17	50
Printing machinery and equipment manufacturing	0	4	5	11
All other industrial machinery manufacturing	0	8,879	12,306	25,511
Optical instrument and lens manufacturing	0	26	34	75
Photographic and photocopying equipment manufacturing	0	0	0	0

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Other commercial service industry machinery manufacturing	0	214	344	764
Air purification and ventilation equipment manufacturing	0	77	102	232
Heating equipment (except warm air furnaces) manufacturing	0	140	186	458
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	42	65	244
Industrial mold manufacturing	0	157	173	319
Special tool, die, jig, and fixture manufacturing	0	415	473	787
Cutting tool and machine tool accessory manufacturing	0	171	183	401
Machine tool manufacturing	0	228	249	566
Rolling mill and other metalworking machinery manufacturing	0	15,446	18,237	37,710
Turbine and turbine generator set units manufacturing	0	42	54	133
Speed changer, industrial high-speed drive, and gear manufacturing	0	130	169	385
Mechanical power transmission equipment manufacturing	0	458	558	1,286
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	48	77	223
Air and gas compressor manufacturing	0	2	2	9
Elevator and moving stairway manufacturing	0	0	0	1
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	8
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	37	70	191
Welding and soldering equipment manufacturing	0	47	57	122
Packaging machinery manufacturing	0	26	35	91

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Industrial process furnace and oven manufacturing	0	120	134	345
Fluid power cylinder and actuator manufacturing	0	28	36	103
Fluid power pump and motor manufacturing	0	26	37	93
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	89	107	259
Electronic computer manufacturing	0	4	14	79
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	19	45	154
Telephone apparatus manufacturing	0	11	25	79
Broadcast and wireless communications equipment manufacturing	0	11	18	43
Other communications equipment manufacturing	0	104	187	490
Audio and video equipment manufacturing	0	4	12	67
Printed circuit assembly (electronic assembly) manufacturing	0	536	948	3,043
Bare printed circuit board manufacturing	0	161	230	655
Semiconductor and related device manufacturing	0	170	345	972
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	149	229	535
Electronic connector manufacturing	0	524	895	2,306
Other electronic component manufacturing	0	147	180	553
Electromedical and electrotherapeutic apparatus manufacturing	0	11	28	60
Search, detection, and navigation instruments manufacturing	0	2	4	8
Automatic environmental control manufacturing	0	201	290	555

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Industrial process variable instruments manufacturing	0	260	417	846
Totalizing fluid meter and counting device manufacturing	0	42	111	275
Electricity and signal testing instruments manufacturing	0	26	44	132
Analytical laboratory instrument manufacturing	0	4,289	8,905	14,271
Irradiation apparatus manufacturing	0	20	44	83
Watch, clock, and other measuring and controlling device manufacturing	0	149	291	579
Blank magnetic and optical recording media manufacturing	0	525	1,845	5,064
Software and other prerecorded and record reproducing	0	(0)	(0)	2
Electric lamp bulb and part manufacturing	0	510	830	1,263
Lighting fixture manufacturing	0	905	1,274	2,365
Small electrical appliance manufacturing	0	64	118	206
Household cooking appliance manufacturing	0	180	405	765
Household refrigerator and home freezer manufacturing	0	182	485	903
Household laundry equipment manufacturing	0	307	630	1,558
Other major household appliance manufacturing	0	76	190	322
Power, distribution, and specialty transformer manufacturing	0	3	4	10
Motor and generator manufacturing	0	254	365	909
Switchgear and switchboard apparatus manufacturing	0	154	248	620
Relay and industrial control manufacturing	0	1,143	1,510	3,609
Storage battery manufacturing	0	68	100	296
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	1,150	1,839	7,106
Other communication and energy wire manufacturing	0	133	223	744
Wiring device manufacturing	0	1,553	2,919	6,329

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Carbon and graphite product manufacturing	0	110	150	410
All other miscellaneous electrical equipment and component manufacturing	0	72	82	189
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	2	6
Motor vehicle body manufacturing	0	1	1	8
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	133	289	883
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	355	569	2,186
Motor vehicle electrical and electronic equipment manufacturing	0	1,188	1,751	5,398
Motor vehicle transmission and power train parts manufacturing	0	386	704	2,853
Motor vehicle seating and interior trim manufacturing	0	10	16	74
Motor vehicle metal stamping	0	161	234	678
Other motor vehicle parts manufacturing	0	3,222	5,140	20,095
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	2,293	4,395	13,306
Aircraft manufacturing	0	74	115	338
Aircraft engine and engine parts manufacturing	0	4,591	7,519	19,451
Other aircraft parts and auxiliary equipment manufacturing	0	2,903	4,105	8,974
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	4	5	19
Ship building and repairing	0	1,061	1,224	2,437
Boat building	0	112	141	505
Motorcycle, bicycle, and parts manufacturing	0	12	23	103



## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	4	7	34
Wood kitchen cabinet and countertop manufacturing	0	816	742	1,710
Upholstered household furniture manufacturing	0	168	172	466
Nonupholstered wood household furniture manufacturing	0	127	122	267
Other household nonupholstered furniture manufacturing	0	9	10	26
Institutional furniture manufacturing	0	16,390	16,910	52,596
Wood office furniture manufacturing	0	5	4	11
Custom architectural woodwork and millwork	0	66	62	146
Office furniture, except wood, manufacturing	0	3	3	8
Showcase, partition, shelving, and locker manufacturing	0	60	53	156
Mattress manufacturing	0	213	164	1,097
Blind and shade manufacturing	0	21	21	76
Surgical and medical instrument manufacturing	0	972	3,447	5,434
Surgical appliance and supplies manufacturing	0	450	1,742	2,831
Dental equipment and supplies manufacturing	0	30	91	163
Ophthalmic goods manufacturing	0	28	119	219
Dental laboratories	0	44	46	134
Jewelry and silverware manufacturing	0	37	113	358
Sporting and athletic goods manufacturing	0	(52)	20	345
Doll, toy, and game manufacturing	0	(178)	(65)	254
Office supplies (except paper) manufacturing	0	(108)	(54)	254
Sign manufacturing	0	(162)	(162)	486
Gasket, packing, and sealing device manufacturing	0	170	372	858
Musical instrument manufacturing	0	(161)	(155)	77
Fasteners, buttons, needles, and pins manufacturing	0	44	195	502

## APPENDIX

Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	(15)	(3)	65
All other miscellaneous manufacturing	0	285	503	1,114
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4,370	15,915	27,573
Wholesale - Professional and commercial equipment and supplies	0	21,404	49,158	71,307
Wholesale - Household appliances and electrical and electronic goods	0	8,625	29,637	44,923
Wholesale - Machinery, equipment, and supplies	0	12,524	29,518	42,956
Wholesale - Other durable goods merchant wholesalers	0	23,980	50,071	80,353
Wholesale - Drugs and druggists' sundries	0	10,962	48,371	74,144
Wholesale - Grocery and related product wholesalers	0	19,846	33,771	56,553
Wholesale - Petroleum and petroleum products	0	3,654	64,298	69,844
Wholesale - Other nondurable goods merchant wholesalers	0	49,962	127,097	179,224
Wholesale - Wholesale electronic markets and agents and brokers	0	16,001	13,215	13,995
Retail - Motor vehicle and parts dealers	0	17,204	24,752	34,714
Retail - Furniture and home furnishings stores	0	10,978	14,057	20,877
Retail - Electronics and appliance stores	0	11,996	11,402	18,228
Retail - Building material and garden equipment and supplies stores	0	25,128	40,113	56,668
Retail - Food and beverage stores	1	35,349	45,125	70,707
Retail - Health and personal care stores	0	19,822	23,086	34,367
Retail - Gasoline stores	0	9,162	12,710	20,389
Retail - Clothing and clothing accessories stores	0	20,276	26,011	43,754
Retail - Sporting goods, hobby, musical instrument and book stores	0	8,759	11,196	16,540

## APPENDIX

Retail - General merchandise stores	1	19,826	29,128	47,184
Retail - Miscellaneous store retailers	0	17,150	19,231	28,281
Retail - Nonstore retailers	1	37,640	76,073	110,704
Air transportation	0	6,796	15,541	20,502
Rail transportation	0	14,207	5,442	47,346
Water transportation	0	8,960	12,501	41,758
Truck transportation	0	30,980	34,322	64,573
Transit and ground passenger transportation	1	32,788	38,707	48,566
Pipeline transportation	0	64,659	32,691	33,089
Scenic and sightseeing transportation and support activities for transportation	0	44,388	47,391	71,171
Couriers and messengers	0	13,349	15,659	29,558
Warehousing and storage	0	17,774	20,121	40,338
Newspaper publishers	0	3,589	5,460	7,135
Periodical publishers	0	6,508	9,393	12,864
Book publishers	0	1,380	3,906	6,879
Directory, mailing list, and other publishers	0	1,049	3,130	4,685
Greeting card publishing	0	67	237	350
Software publishers	0	78,686	164,068	186,320
Motion picture and video industries	0	20,819	58,032	59,031
Sound recording industries	0	894	6,156	6,761
Radio and television broadcasting	0	11,836	6,950	21,931
Cable and other subscription programming	0	26,250	124,306	194,151
Wired telecommunications carriers	0	24,657	46,420	83,455
Wireless telecommunications carriers (except satellite)	0	3,260	11,119	32,588
Satellite, telecommunications resellers, and all other telecommunications	0	1,612	1,829	5,314
Data processing, hosting, and related services	0	12,214	27,256	51,408
News syndicates, libraries, archives and all other information services	0	3,189	6,786	10,624
Internet publishing and broadcasting and web search portals	0	25,714	90,915	162,956

## APPENDIX

Nondepository credit intermediation and related activities	0	41,326	54,730	69,350
Securities and commodity contracts intermediation and brokerage	0	67,352	58,166	81,088
Monetary authorities and depository credit intermediation	1	66,126	167,596	252,354
Other financial investment activities	1	162,918	152,565	193,579
Direct life insurance carriers	0	28,895	54,777	68,769
Insurance carriers, except direct life	0	66,389	204,991	318,983
Insurance agencies, brokerages, and related activities	0	38,547	57,590	105,050
Funds, trusts, and other financial vehicles	0	6,126	6,658	21,489
Other real estate	5	136,605	491,219	1,047,736
Tenant-occupied housing	0	9,572	157,816	174,578
Owner-occupied dwellings	0	0	498,350	629,660
Automotive equipment rental and leasing	0	11,434	19,750	25,516
General and consumer goods rental except video tapes and discs	0	12,638	13,265	14,870
Video tape and disc rental	0	1,838	2,783	3,977
Commercial and industrial machinery and equipment rental and leasing	0	25,585	33,765	41,036
Lessors of nonfinancial intangible assets	0	1,420	32,243	38,184
Legal services	1	142,886	250,652	344,337
Accounting, tax preparation, bookkeeping, and payroll services	1	56,270	70,900	90,740
Architectural, engineering, and related services	1	60,065	69,075	120,312
Specialized design services	0	10,446	10,959	12,668
Custom computer programming services	2	271,277	313,809	423,906
Computer systems design services	1	90,546	92,241	114,786
Other computer related services, including facilities management	0	19,894	26,618	44,807
Management consulting services	1	187,008	184,970	249,307
Environmental and other technical consulting services	0	28,896	25,555	34,834

## APPENDIX

Scientific research and development services	21	3,050,772	4,094,403	6,762,975
Advertising, public relations, and related services	0	35,962	47,655	71,602
Photographic services	0	6,443	4,220	5,709
Veterinary services	0	5,617	7,672	11,204
Marketing research and all other miscellaneous professional, scientific, and technical services	1	117,489	106,052	133,747
Management of companies and enterprises	2	294,789	348,120	450,792
Office administrative services	0	56,838	27,725	43,531
Facilities support services	0	803	965	2,041
Employment services	2	126,125	211,198	290,736
Business support services	0	19,595	18,140	26,601
Travel arrangement and reservation services	0	7,979	11,081	21,511
Investigation and security services	0	16,131	16,578	22,444
Services to buildings	1	46,469	48,255	67,066
Landscape and horticultural services	1	27,215	28,585	40,804
Other support services	0	9,927	12,791	19,613
Waste management and remediation services	0	16,548	33,669	52,352
Elementary and secondary schools	1	37,013	31,893	36,196
Junior colleges, colleges, universities, and professional schools	1	74,495	99,611	122,248
Other educational services	1	17,256	17,038	30,699
Offices of physicians	1	111,631	129,220	181,750
Offices of dentists	0	24,770	30,137	44,310
Offices of other health practitioners	0	29,141	27,731	36,562
Outpatient care centers	0	26,755	28,082	49,332
Medical and diagnostic laboratories	0	6,954	10,418	15,809
Home health care services	1	35,286	24,963	32,483
Other ambulatory health care services	0	8,175	8,892	14,473
Hospitals	2	172,823	208,835	361,703
Nursing and community care facilities	1	32,388	38,786	59,962
Residential mental retardation, mental health, substance abuse and other facilities	0	16,712	18,495	26,548

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Individual and family services	1	49,426	44,765	63,279
Child day care services	1	18,454	21,608	28,429
Community food, housing, and other relief services, including rehabilitation services	0	14,048	15,646	32,216
Performing arts companies	0	5,292	7,817	11,493
Commercial Sports Except Racing	0	3,352	4,153	7,458
Racing and Track Operation	0	1,227	1,737	2,597
Independent artists, writers, and performers	0	20,010	22,630	24,350
Promoters of performing arts and sports and agents for public figures	0	5,640	11,156	19,581
Museums, historical sites, zoos, and parks	0	3,752	4,504	7,109
Amusement parks and arcades	0	687	2,084	2,607
Gambling industries (except casino hotels)	0	3,034	8,697	12,261
Other amusement and recreation industries	0	8,464	9,885	15,002
Fitness and recreational sports centers	0	6,372	10,059	13,703
Bowling centers	0	607	900	1,454
Hotels and motels, including casino hotels	0	7,419	12,090	16,892
Other accommodations	0	4,437	5,770	6,995
Full-service restaurants	2	53,811	78,797	124,999
Limited-service restaurants	1	29,646	45,124	87,105
All other food and drinking places	1	43,959	54,401	75,892
Automotive repair and maintenance, except car washes	1	42,451	49,185	67,683
Car washes	0	20,207	29,015	41,468
Electronic and precision equipment repair and maintenance	0	16,669	27,213	36,605
Commercial and industrial machinery and equipment repair and maintenance	0	12,005	16,121	21,516
Personal and household goods repair and maintenance	0	14,441	12,400	14,302
Personal care services	1	25,702	17,640	22,828
Death care services	0	2,809	3,573	5,134
Dry-cleaning and laundry services	0	4,966	5,876	8,129
Other personal services	1	22,400	16,782	21,689
Religious organizations	1	60,495	23,421	117,165
Grantmaking, giving, and social advocacy organizations	0	15,496	41,116	57,055

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Business and professional associations	0	7,531	10,746	15,257
Labor and civic organizations	0	10,151	23,486	41,287
Private households	0	9,839	9,839	9,839
Postal service	0	20,289	20,319	22,326
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	282	175	1,091
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	2,465	2,539	3,968
Local government passenger transit	0	2,544	(3,601)	312
Local government electric utilities	0	1,769	3,252	6,195
Other local government enterprises	1	41,644	58,716	139,992
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	62,007	143,889	300,867

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 9. District of Columbia (D.C.)

**Table 385: Detailed NASA Impacts by Types of Impact, D.C.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>2,696</i>	<i>308,454,241</i>	<i>363,394,657</i>	<i>648,638,397</i>
Oilseed farming	0	0	0	0
Grain farming	0	0	0	0
Vegetable and melon farming	0	0	0	0
Fruit farming	0	0	0	0
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	0	0	0
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	0	0	0
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	0	0	0	0
Dairy cattle and milk production	0	0	0	0
Poultry and egg production	0	0	0	0
Animal production, except cattle and poultry and eggs	0	0	0	0
Forestry, forest products, and timber tract production	0	6	7	8
Commercial logging	0	870	860	994
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	255	169	244
Support activities for agriculture and forestry	0	273	839	1,689
Oil and gas extraction	0	721	788	69,589
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	0	0	0
Sand and gravel mining	0	1,469	1,288	4,599



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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	10
Support activities for oil and gas operations	0	1	1	104
Metal mining services	0	20	25	2,441
Other nonmetallic minerals services	0	3	4	345
Electric power generation - Hydroelectric	0	7,700	23,600	44,045
Electric power generation - Fossil fuel	0	2,405	11,927	24,968
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	1	82,793	140,964	265,199
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	3	514,759	2,388,160	4,830,891
Natural gas distribution	2	382,345	1,235,600	2,032,163
Water, sewage and other systems	0	27,295	66,401	99,603
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	495	36,236,080	13,584,543	36,371,673
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	5	361,502	517,292	1,119,918
Maintenance and repair construction of residential structures	2	111,821	176,529	373,477
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	183	86	233
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	2,280	4,347	30,393
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	(196)	(187)	1,784
Confectionery manufacturing from purchased chocolate	0	(58)	(41)	652
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	(1,081)	(1,010)	7,950
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0

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Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	6,901	10,155	18,202
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	670	914	6,385
Meat processed from carcasses	0	439	593	3,277
Rendering and meat byproduct processing	0	127	173	719
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	13,230	18,471	53,135
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	(22)	3	878
Other snack food manufacturing	0	60	74	292
Coffee and tea manufacturing	0	(123)	11	6,654
Flavoring syrup and concentrate manufacturing	0	(67)	14	2,170
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	822	1,367	23,484
Bottled and canned soft drinks & water	0	328	400	2,799
Manufactured ice	0	0	0	0
Breweries	0	7,219	12,606	68,763
Wineries	0	19	26	195
Distilleries	0	2,403	6,394	24,404
Tobacco product manufacturing	0	3,515	35,222	68,882
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	717	1,900	2,542
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0

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Textile and fabric finishing mills	0	48	99	164
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	14	67	603
Textile bag and canvas mills	0	0	0	0
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	39	113	852
Hosiery and sock mills	0	49	81	173
Other apparel knitting mills	0	91	157	342
Cut and sew apparel contractors	0	(157)	(22)	747
Mens and boys cut and sew apparel manufacturing	0	104	729	2,209
Womens and girls cut and sew apparel manufacturing	0	39	73	270
Other cut and sew apparel manufacturing	0	37	67	167
Apparel accessories and other apparel manufacturing	0	34	62	149
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	(0)	1	26
Sawmills	0	1,666	1,718	19,036
Wood preservation	0	0	0	0
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	0	0	0
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	0	0	0
Wood container and pallet manufacturing	0	0	0	0
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	0	0
All other miscellaneous wood product manufacturing	0	0	0	0

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Pulp mills	0	0	0	0
Paper mills	0	10,023	735	36,055
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	13	1,253,098	1,938,607	3,032,201
Support activities for printing	0	529	750	1,506
Petroleum refineries	0	5	40	12,903
Asphalt paving mixture and block manufacturing	0	0	0	0
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	95	116	520
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	108	125	801
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	4	7	98

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Pharmaceutical preparation manufacturing	0	2,716	3,711	10,125
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	3	6	51
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	249	376	4,014
Soap and other detergent manufacturing	0	0	0	0
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	0	0	0
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	484	736	6,435
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	2,726	335	5,237
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	0

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	0
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	8,013	24,978	57,061
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	0	0	0
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	2,270	3,148	5,845
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	24,400	120,338	176,381
Iron and steel mills and ferroalloy manufacturing	0	10,947	16,465	101,003
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	0	0	0
Plate work manufacturing	0	0	0	0
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Ornamental and architectural metal work manufacturing	0	3,546	4,761	10,657
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	0	0
Machine shops	0	0	0	0
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	0	0	0
Electroplating, anodizing, and coloring metal	0	0	0	0



## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	4,569	7,634	14,644
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	263	648	1,251
Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	1,760	2,400	5,931
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	1,594	4,118	9,271
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	317	940	2,338
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0

## APPENDIX

Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	197	449	1,104
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	1	19,852	49,396	433,385
Telephone apparatus manufacturing	0	61	119	352
Broadcast and wireless communications equipment manufacturing	0	14	22	59
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	19	36	140
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	952	1,743	4,922
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	2	6	35
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	0

## APPENDIX

Electricity and signal testing instruments manufacturing	0	18	31	255
Analytical laboratory instrument manufacturing	1	32,719	64,864	250,423
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	2	3	9
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	48	75	187
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	909	(1,372)	1,330
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	29,771	21,511	50,677

## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0
Motor vehicle electrical and electronic equipment manufacturing	0	79	165	387
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	16	16	65
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	4,340	12,236	15,569
Upholstered household furniture manufacturing	0	1,095	1,643	2,985
Nonupholstered wood household furniture manufacturing	0	0	0	0
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	127	79	352
Surgical appliance and supplies manufacturing	0	118	77	258
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	137	128	188
Jewelry and silverware manufacturing	0	554	894	2,160
Sporting and athletic goods manufacturing	0	0	0	0
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	1,520	842	1,863
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	(0)	(43,878)	(43,431)	(73,734)
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	47,122	111,584	186,844
Wholesale - Professional and commercial equipment and supplies	3	439,648	743,390	1,152,567
Wholesale - Household appliances and electrical and electronic goods	1	97,979	222,407	352,267
Wholesale - Machinery, equipment, and supplies	0	37,251	78,952	108,398
Wholesale - Other durable goods merchant wholesalers	3	334,037	540,936	864,056
Wholesale - Drugs and druggists' sundries	1	294,105	791,438	1,154,347
Wholesale - Grocery and related product wholesalers	2	124,179	172,814	330,566
Wholesale - Petroleum and petroleum products	0	5,259	132,567	144,583
Wholesale - Other nondurable goods merchant wholesalers	4	304,231	754,236	1,268,123
Wholesale - Wholesale electronic markets and agents and brokers	11	1,578,187	590,436	677,470
Retail - Motor vehicle and parts dealers	0	10,230	17,974	28,632
Retail - Furniture and home furnishings stores	3	211,131	263,370	369,384
Retail - Electronics and appliance stores	3	266,923	266,550	364,585
Retail - Building material and garden equipment and supplies stores	7	593,033	999,257	1,264,621
Retail - Food and beverage stores	15	524,599	764,437	1,190,622
Retail - Health and personal care stores	7	370,151	450,379	635,817
Retail - Gasoline stores	1	43,321	83,200	142,823
Retail - Clothing and clothing accessories stores	7	277,070	439,724	767,422
Retail - Sporting goods, hobby, musical instrument and book stores	3	186,318	228,185	303,653
Retail - General merchandise stores	9	563,008	610,142	866,661
Retail - Miscellaneous store retailers	7	343,884	389,898	509,337

## APPENDIX

Retail - Nonstore retailers	4	204,210	606,686	912,271
Air transportation	0	45,381	59,400	82,580
Rail transportation	1	211,305	90,560	465,182
Water transportation	0	397	2,062	21,480
Truck transportation	6	563,376	736,983	1,281,859
Transit and ground passenger transportation	6	114,398	131,557	221,006
Pipeline transportation	0	25,952	83,998	94,312
Scenic and sightseeing transportation and support activities for transportation	4	224,888	247,897	566,787
Couriers and messengers	3	121,083	152,225	271,480
Warehousing and storage	1	8,584	9,902	40,444
Newspaper publishers	2	270,904	471,086	522,550
Periodical publishers	3	387,303	621,446	800,565
Book publishers	0	82,077	291,683	377,192
Directory, mailing list, and other publishers	3	224,117	790,615	1,057,348
Greeting card publishing	0	0	0	0
Software publishers	7	1,669,067	4,426,246	4,815,745
Motion picture and video industries	2	163,058	319,954	536,839
Sound recording industries	0	17,427	124,645	150,590
Radio and television broadcasting	5	916,431	899,388	1,993,793
Cable and other subscription programming	1	113,081	1,603,166	2,093,332
Wired telecommunications carriers	3	484,656	1,765,953	2,413,633
Wireless telecommunications carriers (except satellite)	1	34,848	566,343	1,145,383
Satellite, telecommunications resellers, and all other telecommunications	5	1,419,267	2,412,121	3,198,998
Data processing, hosting, and related services	4	594,532	925,109	1,904,196
News syndicates, libraries, archives and all other information services	4	457,213	796,174	1,079,235
Internet publishing and broadcasting and web search portals	5	1,193,799	3,340,242	6,366,802
Nondepository credit intermediation and related activities	10	1,970,991	2,737,602	3,530,595
Securities and commodity contracts intermediation and brokerage	4	1,424,616	1,347,379	1,784,894



## APPENDIX

Monetary authorities and depository credit intermediation	12	1,705,621	4,525,985	6,271,204
Other financial investment activities	19	2,314,028	2,525,688	3,802,224
Direct life insurance carriers	0	118,629	321,948	353,782
Insurance carriers, except direct life	3	384,915	2,110,028	2,972,713
Insurance agencies, brokerages, and related activities	14	2,552,418	5,131,476	6,821,786
Funds, trusts, and other financial vehicles	4	918,985	257,283	1,430,495
Other real estate	182	11,079,915	28,399,611	49,636,629
Tenant-occupied housing	9	264,835	2,940,743	3,284,706
Owner-occupied dwellings	0	0	8,845,039	11,175,604
Automotive equipment rental and leasing	1	47,984	232,624	352,325
General and consumer goods rental except video tapes and discs	1	61,996	93,948	147,113
Video tape and disc rental	0	25,604	42,579	63,667
Commercial and industrial machinery and equipment rental and leasing	4	349,901	1,122,553	1,611,896
Lessors of nonfinancial intangible assets	0	11,350	117,778	169,327
Legal services	14	3,599,736	6,492,987	7,310,360
Accounting, tax preparation, bookkeeping, and payroll services	14	2,758,696	2,276,750	2,821,007
Architectural, engineering, and related services	25	3,868,610	3,573,684	5,629,081
Specialized design services	2	642,906	660,165	683,608
Custom computer programming services	4	702,316	737,014	959,503
Computer systems design services	8	1,091,964	1,110,381	1,407,630
Other computer related services, including facilities management	5	582,903	225,196	760,397
Management consulting services	161	31,477,210	30,328,181	37,140,495
Environmental and other technical consulting services	4	789,527	548,089	662,031
Scientific research and development services	199	26,079,090	29,491,980	54,655,182
Advertising, public relations, and related services	10	2,536,623	2,129,421	2,822,674
Photographic services	1	179,489	142,425	153,872
Veterinary services	1	71,062	57,395	86,741

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	67	18,353,873	14,653,230	15,796,974
Management of companies and enterprises	14	3,154,131	3,698,057	4,568,948
Office administrative services	9	852,099	266,531	589,002
Facilities support services	2	98,322	132,899	277,399
Employment services	38	2,899,778	4,469,754	5,866,454
Business support services	16	1,130,433	946,745	1,392,956
Travel arrangement and reservation services	2	170,878	233,103	455,773
Investigation and security services	11	687,095	706,301	904,622
Services to buildings	66	2,191,411	2,307,681	3,506,579
Landscape and horticultural services	6	154,266	171,223	302,407
Other support services	3	161,819	211,597	380,299
Waste management and remediation services	1	76,811	150,181	280,059
Elementary and secondary schools	14	1,039,588	888,256	1,011,908
Junior colleges, colleges, universities, and professional schools	42	2,640,329	3,556,961	4,735,845
Other educational services	22	1,134,438	991,418	1,519,653
Offices of physicians	14	2,231,667	2,707,598	3,526,345
Offices of dentists	5	444,156	580,347	790,749
Offices of other health practitioners	6	408,611	391,150	521,111
Outpatient care centers	8	599,289	635,489	1,117,096
Medical and diagnostic laboratories	1	61,100	100,961	160,384
Home health care services	21	743,641	544,287	806,555
Other ambulatory health care services	1	103,785	115,645	172,502
Hospitals	47	5,156,569	5,957,737	9,852,085
Nursing and community care facilities	7	357,094	400,978	628,300
Residential mental retardation, mental health, substance abuse and other facilities	10	455,379	484,326	701,946
Individual and family services	23	1,264,240	1,079,695	1,374,792
Child day care services	13	461,515	520,751	667,085
Community food, housing, and other relief services, including rehabilitation services	5	364,664	390,911	646,128
Performing arts companies	2	67,361	93,583	164,934

## APPENDIX

Commercial Sports Except Racing	2	290,525	310,027	383,191
Racing and Track Operation	0	25,743	37,050	54,440
Independent artists, writers, and performers	10	144,932	177,708	236,911
Promoters of performing arts and sports and agents for public figures	2	311,409	480,552	642,484
Museums, historical sites, zoos, and parks	1	61,645	67,725	98,070
Amusement parks and arcades	0	2,059	2,380	3,629
Gambling industries (except casino hotels)	4	258,602	511,508	738,357
Other amusement and recreation industries	2	95,745	130,243	180,000
Fitness and recreational sports centers	4	117,934	185,936	247,809
Bowling centers	0	20,055	34,001	46,156
Hotels and motels, including casino hotels	4	259,459	481,367	659,798
Other accommodations	1	67,369	93,491	118,095
Full-service restaurants	38	1,424,427	2,165,664	3,215,982
Limited-service restaurants	30	1,069,084	1,669,353	2,879,698
All other food and drinking places	23	872,488	1,301,737	1,774,094
Automotive repair and maintenance, except car washes	2	107,817	92,647	151,735
Car washes	1	35,025	54,497	88,005
Electronic and precision equipment repair and maintenance	44	4,843,092	6,723,666	9,412,137
Commercial and industrial machinery and equipment repair and maintenance	1	63,490	51,989	86,182
Personal and household goods repair and maintenance	1	60,128	6,290	25,104
Personal care services	12	552,654	239,055	324,623
Death care services	0	16,564	19,245	29,705
Dry-cleaning and laundry services	1	43,313	49,824	72,950
Other personal services	20	850,049	(543,474)	192,330
Religious organizations	22	2,131,695	(46,822)	1,451,813
Grantmaking, giving, and social advocacy organizations	4	444,149	643,605	985,889
Business and professional associations	4	652,819	712,397	991,306
Labor and civic organizations	8	678,436	903,450	1,305,566
Private households	13	377,320	377,320	377,320
Postal service	4	486,953	487,141	522,972
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	259	36,607,477	46,428,115	128,355,253
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	6	794,360	234,484	661,982
Local government electric utilities	0	0	0	0
Other local government enterprises	0	0	0	0
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	303	54,266,101	62,787,668	126,230,211

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 386: Detailed M2M Program Impacts by Types of Impact, D.C.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	85	11,664,684	14,633,852	22,373,449
Oilseed farming	0	0	0	0
Grain farming	0	0	0	0
Vegetable and melon farming	0	0	0	0
Fruit farming	0	0	0	0
Tree nut farming	0	0	0	0

## APPENDIX

Greenhouse, nursery, and floriculture production	0	0	0	0
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	0	0	0
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	0	0	0
Dairy cattle and milk production	0	0	0	0
Poultry and egg production	0	0	0	0
Animal production, except cattle and poultry and eggs	0	0	0	0
Forestry, forest products, and timber tract production	0	0	0	0
Commercial logging	0	2	2	2
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	8	5	7
Support activities for agriculture and forestry	0	30	92	186
Oil and gas extraction	0	10	14	1,186
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	0	0	0
Sand and gravel mining	0	61	26	76
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	7
Metal mining services	0	1	1	93

## APPENDIX

Other nonmetallic minerals services	0	0	0	8
Electric power generation - Hydroelectric	0	317	877	1,511
Electric power generation - Fossil fuel	0	70	331	666
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	2,087	3,390	6,171
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	13,290	62,748	123,269
Natural gas distribution	0	10,102	33,716	48,937
Water, sewage and other systems	0	1,044	2,226	2,994
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	8,948	12,862	27,046

## APPENDIX

Maintenance and repair construction of residential structures	0	4,119	6,541	13,392
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	6	3	8
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	189	379	2,513
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	(14)	(13)	116
Confectionery manufacturing from purchased chocolate	0	(2)	(2)	24
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	(27)	(25)	196
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	246	358	628
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	15	21	141
Meat processed from carcasses	0	18	24	131

## APPENDIX

Rendering and meat byproduct processing	0	6	8	33
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	465	650	1,832
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	(1)	0	39
Other snack food manufacturing	0	2	3	11
Coffee and tea manufacturing	0	(3)	0	152
Flavoring syrup and concentrate manufacturing	0	(6)	1	200
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	35	58	934
Bottled and canned soft drinks & water	0	11	14	92
Manufactured ice	0	0	0	0
Breweries	0	189	341	1,807
Wineries	0	2	2	16
Distilleries	0	81	223	769
Tobacco product manufacturing	0	119	1,580	2,695
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	23	67	88
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	9	19	29
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	1	3	26
Textile bag and canvas mills	0	0	0	0
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	2	5	35
Hosiery and sock mills	0	2	3	6
Other apparel knitting mills	0	5	8	15
Cut and sew apparel contractors	0	(9)	(1)	39



## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	5	38	100
Womens and girls cut and sew apparel manufacturing	0	3	5	17
Other cut and sew apparel manufacturing	0	2	4	9
Apparel accessories and other apparel manufacturing	0	2	4	8
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	(0)	0	1
Sawmills	0	5	6	62
Wood preservation	0	0	0	0
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	0	0	0
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	0	0	0
Wood container and pallet manufacturing	0	0	0	0
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	0	0
All other miscellaneous wood product manufacturing	0	0	0	0
Pulp mills	0	0	0	0
Paper mills	0	292	19	1,004
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0

## APPENDIX

All other converted paper product manufacturing	0	0	0	0
Printing	0	37,913	58,728	86,601
Support activities for printing	0	27	37	73
Petroleum refineries	0	0	1	396
Asphalt paving mixture and block manufacturing	0	0	0	0
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	5	7	28
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1	1	6
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	1	6
Pharmaceutical preparation manufacturing	0	176	254	624
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	1	7
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	6	10	94
Soap and other detergent manufacturing	0	0	0	0

## APPENDIX

Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	0	0	0
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	19	32	277
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	91	11	165
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	0
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	0
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0

## APPENDIX

Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	35	105	243
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	0	0	0
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	50	69	128
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	37	171	246
Iron and steel mills and ferroalloy manufacturing	0	265	345	2,210
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0

## APPENDIX

Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	0	0	0
Plate work manufacturing	0	0	0	0
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Ornamental and architectural metal work manufacturing	0	22	30	64
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	0	0
Machine shops	0	0	0	0
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	0	0	0
Electroplating, anodizing, and coloring metal	0	0	0	0
Valve and fittings, other than plumbing, manufacturing	0	59	99	189
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	10	24	43

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	33	45	107
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	28	76	149
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	2	6	12
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	8	19	46
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	4

## APPENDIX

Telephone apparatus manufacturing	0	2	3	10
Broadcast and wireless communications equipment manufacturing	0	1	2	6
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	1	3	9
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	8	14	38
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	2
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	15	26	201
Analytical laboratory instrument manufacturing	0	24,390	49,959	172,871
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	1	2
Blank magnetic and optical recording media manufacturing	0	0	0	0



## APPENDIX

Software and other prerecorded and record reproducing	0	3	4	9
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	11	(16)	15
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	5,621	4,159	10,732
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	4	8	18
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	1	1	3
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	50	129	168
Upholstered household furniture manufacturing	0	62	93	166
Nonupholstered wood household furniture manufacturing	0	0	0	0
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	6	3	14
Surgical appliance and supplies manufacturing	0	6	4	13
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	7	6	9
Jewelry and silverware manufacturing	0	23	36	84
Sporting and athletic goods manufacturing	0	0	0	0
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	54	30	63
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	(0)	(1,975)	(1,786)	(3,142)
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,119	5,028	8,405
Wholesale - Professional and commercial equipment and supplies	0	13,564	22,970	34,823
Wholesale - Household appliances and electrical and electronic goods	0	2,346	5,348	8,347
Wholesale - Machinery, equipment, and supplies	0	780	1,661	2,269
Wholesale - Other durable goods merchant wholesalers	0	3,747	6,071	9,631

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	12,033	31,956	45,466
Wholesale - Grocery and related product wholesalers	0	3,360	4,630	8,857
Wholesale - Petroleum and petroleum products	0	136	3,940	4,222
Wholesale - Other nondurable goods merchant wholesalers	0	8,570	21,910	36,106
Wholesale - Wholesale electronic markets and agents and brokers	0	19,002	6,696	7,682
Retail - Motor vehicle and parts dealers	0	359	635	1,003
Retail - Furniture and home furnishings stores	0	7,052	8,792	12,126
Retail - Electronics and appliance stores	0	8,840	8,861	11,885
Retail - Building material and garden equipment and supplies stores	0	4,454	7,487	9,370
Retail - Food and beverage stores	1	19,733	28,448	43,257
Retail - Health and personal care stores	0	12,564	15,381	21,638
Retail - Gasoline stores	0	2,654	4,723	7,624
Retail - Clothing and clothing accessories stores	0	10,027	15,785	26,729
Retail - Sporting goods, hobby, musical instrument and book stores	0	6,092	7,482	9,771
Retail - General merchandise stores	0	18,142	19,809	27,930
Retail - Miscellaneous store retailers	0	11,813	13,266	16,728
Retail - Nonstore retailers	0	7,643	22,990	32,899
Air transportation	0	1,577	2,117	2,898
Rail transportation	0	9,453	3,584	19,631
Water transportation	0	28	141	1,428
Truck transportation	2	193,765	244,462	410,062
Transit and ground passenger transportation	0	4,925	5,704	8,997
Pipeline transportation	0	455	1,610	1,847
Scenic and sightseeing transportation and support activities for transportation	0	22,668	25,332	57,994
Couriers and messengers	0	6,061	7,877	13,726
Warehousing and storage	0	415	477	1,933

## APPENDIX

Newspaper publishers	0	9,555	16,068	17,561
Periodical publishers	0	15,155	23,804	28,290
Book publishers	0	9,893	32,452	42,505
Directory, mailing list, and other publishers	0	1,196	4,277	5,681
Greeting card publishing	0	0	0	0
Software publishers	0	73,812	172,782	183,878
Motion picture and video industries	0	7,394	14,654	20,438
Sound recording industries	0	522	3,513	3,943
Radio and television broadcasting	0	51,674	55,695	82,268
Cable and other subscription programming	0	5,968	67,406	72,884
Wired telecommunications carriers	0	14,871	50,187	66,773
Wireless telecommunications carriers (except satellite)	0	1,623	21,553	42,328
Satellite, telecommunications resellers, and all other telecommunications	0	12,313	16,954	20,403
Data processing, hosting, and related services	0	17,656	25,815	50,712
News syndicates, libraries, archives and all other information services	0	6,465	11,246	14,338
Internet publishing and broadcasting and web search portals	0	63,115	168,093	276,123
Nondepository credit intermediation and related activities	0	55,980	78,637	95,595
Securities and commodity contracts intermediation and brokerage	0	48,305	44,905	55,663
Monetary authorities and depository credit intermediation	0	60,105	164,188	221,190
Other financial investment activities	1	109,855	116,570	139,959
Direct life insurance carriers	0	3,451	9,668	10,359
Insurance carriers, except direct life	0	11,761	66,124	89,806
Insurance agencies, brokerages, and related activities	0	19,451	39,548	50,312
Funds, trusts, and other financial vehicles	0	37,668	10,351	48,669
Other real estate	4	310,982	791,599	1,197,442
Tenant-occupied housing	0	10,962	114,772	126,345

## APPENDIX

Owner-occupied dwellings	0	0	341,730	431,771
Automotive equipment rental and leasing	0	1,334	5,410	7,893
General and consumer goods rental except video tapes and discs	0	2,362	3,361	4,930
Video tape and disc rental	0	935	1,500	2,188
Commercial and industrial machinery and equipment rental and leasing	0	3,993	11,103	15,528
Lessors of nonfinancial intangible assets	0	680	6,904	9,858
Legal services	1	253,556	477,141	523,323
Accounting, tax preparation, bookkeeping, and payroll services	0	93,959	77,827	94,063
Architectural, engineering, and related services	1	121,411	112,645	174,755
Specialized design services	0	14,343	14,745	15,002
Custom computer programming services	0	23,167	24,149	30,718
Computer systems design services	0	39,462	39,994	49,843
Other computer related services, including facilities management	0	18,621	6,906	22,270
Management consulting services	3	578,672	558,545	665,227
Environmental and other technical consulting services	0	56,155	39,325	46,751
Scientific research and development services	30	4,626,014	5,302,476	9,081,912
Advertising, public relations, and related services	0	111,852	93,377	117,899
Photographic services	0	6,712	5,620	5,732
Veterinary services	0	2,778	2,276	3,347
Marketing research and all other miscellaneous professional, scientific, and technical services	3	808,998	643,176	683,216
Management of companies and enterprises	1	240,454	284,707	340,650
Office administrative services	0	54,488	17,383	34,630
Facilities support services	0	4,691	6,301	12,345
Employment services	2	189,735	300,431	379,196
Business support services	0	18,280	15,597	22,241
Travel arrangement and reservation services	0	9,329	12,835	24,047
Investigation and security services	0	25,885	26,675	33,112
Services to buildings	1	38,816	40,991	59,261

## APPENDIX

Landscape and horticultural services	0	1,689	1,878	3,200
Other support services	0	2,964	3,883	6,912
Waste management and remediation services	0	2,579	5,078	9,334
Elementary and secondary schools	1	47,701	40,574	45,460
Junior colleges, colleges, universities, and professional schools	2	133,282	177,931	225,065
Other educational services	1	32,470	28,414	42,075
Offices of physicians	0	77,423	94,674	122,335
Offices of dentists	0	16,156	21,335	28,666
Offices of other health practitioners	0	14,202	13,705	18,216
Outpatient care centers	0	22,984	24,471	42,372
Medical and diagnostic laboratories	0	2,184	3,705	5,697
Home health care services	1	25,655	18,993	28,340
Other ambulatory health care services	0	3,745	4,198	6,161
Hospitals	2	200,106	230,242	371,550
Nursing and community care facilities	0	13,053	14,680	22,403
Residential mental retardation, mental health, substance abuse and other facilities	0	18,753	19,956	28,335
Individual and family services	1	50,984	44,309	56,086
Child day care services	0	17,486	20,022	25,027
Community food, housing, and other relief services, including rehabilitation services	0	15,698	17,038	27,215
Performing arts companies	0	2,925	3,930	6,282
Commercial Sports Except Racing	0	10,195	10,846	13,109
Racing and Track Operation	0	1,023	1,399	1,978
Independent artists, writers, and performers	0	5,922	7,083	9,023
Promoters of performing arts and sports and agents for public figures	0	13,183	18,631	23,291
Museums, historical sites, zoos, and parks	0	2,469	2,682	3,763
Amusement parks and arcades	0	83	84	130
Gambling industries (except casino hotels)	0	10,015	18,674	26,619
Other amusement and recreation industries	0	3,338	4,355	5,999

## APPENDIX

Fitness and recreational sports centers	0	4,681	6,899	9,066
Bowling centers	0	715	1,170	1,570
Hotels and motels, including casino hotels	0	10,971	19,492	26,312
Other accommodations	0	3,531	4,821	5,962
Full-service restaurants	1	48,756	74,569	108,370
Limited-service restaurants	1	38,699	60,075	99,979
All other food and drinking places	1	39,290	57,665	76,291
Automotive repair and maintenance, except car washes	0	4,463	3,684	5,996
Car washes	0	1,246	1,932	3,098
Electronic and precision equipment repair and maintenance	0	3,982	5,533	7,371
Commercial and industrial machinery and equipment repair and maintenance	0	1,966	1,582	2,610
Personal and household goods repair and maintenance	0	2,230	209	833
Personal care services	0	21,825	8,640	11,862
Death care services	0	681	748	1,149
Dry-cleaning and laundry services	0	1,749	1,980	2,891
Other personal services	1	36,754	(20,529)	7,482
Religious organizations	1	91,751	(1,569)	57,343
Grantmaking, giving, and social advocacy organizations	0	21,993	27,341	41,878
Business and professional associations	0	21,670	21,436	28,784
Labor and civic organizations	0	29,162	34,343	50,671
Private households	0	15,481	15,481	15,481
Postal service	0	19,031	19,039	20,397
Federal electric utilities	0	0	0	0
Other federal government enterprises	1	146,256	225,469	372,901
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	28,544	10,501	16,423
Local government electric utilities	0	0	0	0
Other local government enterprises	0	0	0	0



## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	9	1,491,353	1,812,022	2,921,294

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 10. Delaware

**Table 387: Detailed NASA Impacts by Types of Impact, Delaware.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>107</i>	<i>8,755,769</i>	<i>13,002,296</i>	<i>22,446,050</i>
Oilseed farming	0	10,939	5,424	7,448
Grain farming	0	8,566	8,409	14,116
Vegetable and melon farming	0	5,797	6,717	9,352
Fruit farming	0	557	654	761
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	443	503	719
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	1,634	1,514	2,372
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	814	1,149	1,761
Dairy cattle and milk production	0	179	215	660
Poultry and egg production	0	3,167	3,330	32,906

## APPENDIX

Animal production, except cattle and poultry and eggs	0	6,170	4,023	6,124
Forestry, forest products, and timber tract production	0	191	224	274
Commercial logging	0	426	428	458
Commercial fishing	0	2,326	1,274	1,506
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	8,399	3,078	4,668
Oil and gas extraction	0	1,433	1,517	4,835
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	0	0	0
Sand and gravel mining	0	12	114	256
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	5	7	17
Metal mining services	0	19	24	83
Other nonmetallic minerals services	0	3	4	13
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	3,364	10,923	31,765
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	22	44	61
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0

## APPENDIX

Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	456	107	534
Electric power transmission and distribution	0	27,980	84,967	220,977
Natural gas distribution	0	6,699	15,591	30,101
Water, sewage and other systems	0	4,744	9,057	16,091
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	30,484	42,700	94,259
Maintenance and repair construction of residential structures	0	11,648	17,793	39,806
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	42	32	67
Dog and cat food manufacturing	0	83	184	1,257
Other animal food manufacturing	0	402	583	6,052
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0

## APPENDIX

Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	21	24	100
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	31	35	161
Frozen fruits, juices and vegetables manufacturing	0	144	205	900
Frozen specialties manufacturing	0	85	104	416
Canned fruits and vegetables manufacturing	0	10	12	61
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	441	573	3,772
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	27	33	140
Frozen cakes and other pastries manufacturing	0	185	222	468
Poultry processing	0	10,563	12,279	61,731
Animal, except poultry, slaughtering	0	20	26	195
Meat processed from carcasses	0	384	403	3,301
Rendering and meat byproduct processing	0	5	7	30
Seafood product preparation and packaging	0	48	49	158
Bread and bakery product, except frozen, manufacturing	0	505	563	1,557
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	56	64	299

## APPENDIX

Other snack food manufacturing	0	37	46	239
Coffee and tea manufacturing	0	0	0	0
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	80	113	462
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	485	574	2,138
Bottled and canned soft drinks & water	0	40	49	217
Manufactured ice	0	0	0	0
Breweries	0	911	1,181	3,046
Wineries	0	27	28	71
Distilleries	0	269	308	573
Tobacco product manufacturing	0	1,305	15,950	36,086
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	88	96	464
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	15	16	55
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	1	2	14
Curtain and linen mills	0	5	6	27
Textile bag and canvas mills	0	13	13	40
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	32	34	92
Hosiery and sock mills	0	3	3	10
Other apparel knitting mills	0	2	3	10
Cut and sew apparel contractors	0	4	5	19
Mens and boys cut and sew apparel manufacturing	0	2	2	10
Womens and girls cut and sew apparel manufacturing	0	1	2	12
Other cut and sew apparel manufacturing	0	7	4	25
Apparel accessories and other apparel manufacturing	0	11	4	42
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0

## APPENDIX

Other leather and allied product manufacturing	0	1	1	4
Sawmills	0	0	0	0
Wood preservation	0	24	(26)	87
Veneer and plywood manufacturing	0	24	23	53
Engineered wood member and truss manufacturing	0	64	43	152
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	459	305	905
Cut stock, resawing lumber, and planing	0	69	28	135
Other millwork, including flooring	0	192	148	346
Wood container and pallet manufacturing	0	209	163	435
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	139	119	322
All other miscellaneous wood product manufacturing	0	200	152	371
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	432	701	2,320
Paper bag and coated and treated paper manufacturing	0	982	1,954	5,214
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	1,484	5,362	12,546
All other converted paper product manufacturing	0	55	86	350
Printing	0	2,931	2,753	7,633
Support activities for printing	0	25	22	45
Petroleum refineries	0	4,902	23,442	163,623
Asphalt paving mixture and block manufacturing	0	150	208	1,085
Asphalt shingle and coating materials manufacturing	0	172	371	1,305
Petroleum lubricating oil and grease manufacturing	0	83	206	723

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	188	713	1,438
Synthetic dye and pigment manufacturing	0	260	836	1,745
Other basic inorganic chemical manufacturing	0	226	713	1,635
Other basic organic chemical manufacturing	0	852	2,495	10,252
Plastics material and resin manufacturing	0	401	930	4,163
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	237	480	1,866
Nitrogenous fertilizer manufacturing	0	94	313	641
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	32	57	126
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	15	31	45
Pharmaceutical preparation manufacturing	0	76	174	464
In-vitro diagnostic substance manufacturing	0	216	445	905
Biological product (except diagnostic) manufacturing	0	24	25	55
Paint and coating manufacturing	0	62	149	386
Adhesive manufacturing	0	4	7	17
Soap and other detergent manufacturing	0	130	286	493
Polish and other sanitation good manufacturing	0	626	1,675	3,273
Surface active agent manufacturing	0	242	916	1,314
Toilet preparation manufacturing	0	84	291	505
Printing ink manufacturing	0	37	42	120
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	348	661	1,626
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	327	423	858

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	941	1,915	5,428
Unlaminated plastics profile shape manufacturing	0	140	409	786
Plastics pipe and pipe fitting manufacturing	0	2	6	12
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	67	156	369
Polystyrene foam product manufacturing	0	36	74	170
Urethane and other foam product (except polystyrene) manufacturing	0	70	124	325
Plastics bottle manufacturing	0	19	39	102
Other plastics product manufacturing	0	247	428	1,334
Tire manufacturing	0	14	21	78
Rubber and plastics hoses and belting manufacturing	0	66	128	275
Other rubber product manufacturing	0	65	114	357
Pottery, ceramics, and plumbing fixture manufacturing	0	26	28	50
Brick, tile, and other structural clay product manufacturing	0	170	212	456
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	26	28	62
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	5	6	17
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	1,327	1,647	6,389
Concrete block and brick manufacturing	0	201	263	876
Concrete pipe manufacturing	0	32	40	128
Other concrete product manufacturing	0	144	169	492
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	20	29	162
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	249	261	523



## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	12	16	55
Iron and steel mills and ferroalloy manufacturing	0	283	553	2,534
Iron, steel pipe and tube manufacturing from purchased steel	0	34	57	213
Rolled steel shape manufacturing	0	13	35	146
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	38	95	575
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	24	39	292
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	1	2	5
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	11	15	41
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	2	3	6
Prefabricated metal buildings and components manufacturing	0	1	1	3
Fabricated structural metal manufacturing	0	153	212	798
Plate work manufacturing	0	52	54	168
Metal window and door manufacturing	0	14	19	51

## APPENDIX

Sheet metal work manufacturing	0	795	970	2,394
Ornamental and architectural metal work manufacturing	0	27	34	85
Power boiler and heat exchanger manufacturing	0	2	2	5
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	3	4	12
Machine shops	0	533	597	1,130
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	20	29	73
Metal coating and nonprecious engraving	0	23	35	95
Electroplating, anodizing, and coloring metal	0	21	23	56
Valve and fittings, other than plumbing, manufacturing	0	37	53	106
Plumbing fixture fitting and trim manufacturing	0	91	228	519
Ball and roller bearing manufacturing	0	26	42	80
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	86	96	185
Other fabricated metal manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	6	8	18
All other industrial machinery manufacturing	0	6	10	23
Optical instrument and lens manufacturing	0	1	2	4
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	1	13
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	25	88	172
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	9	11	27
Machine tool manufacturing	0	1	2	13
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	35	84	181
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	2	4

## APPENDIX

Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	2	2	7
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	1	1	4
Packaging machinery manufacturing	0	0	1	2
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	8	15	33
Electronic computer manufacturing	0	(1)	(0)	8
Computer storage device manufacturing	0	(0)	1	16
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	3	6	11
Broadcast and wireless communications equipment manufacturing	0	1	2	5
Other communications equipment manufacturing	0	(0)	(0)	1
Audio and video equipment manufacturing	0	(2)	(2)	5
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0

## APPENDIX

Semiconductor and related device manufacturing	0	(1)	(1)	2
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	(11)	(8)	28
Other electronic component manufacturing	0	87	104	327
Electromedical and electrotherapeutic apparatus manufacturing	0	35	73	152
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	17	26	68
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	1	132,202	228,773	453,907
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	40	67	149
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	(4)	(3)	2
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	23	34	102
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	6	14	52
Household refrigerator and home freezer manufacturing	0	6	15	50
Household laundry equipment manufacturing	0	9	19	98

## APPENDIX

Other major household appliance manufacturing	0	3	6	20
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	1	1	3
Relay and industrial control manufacturing	0	5	6	22
Storage battery manufacturing	0	623	1,031	2,706
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	70	142	322
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	12	14	35
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	106	104	454
Motor vehicle gasoline engine and engine parts manufacturing	0	9	6	55
Motor vehicle electrical and electronic equipment manufacturing	0	46	37	270
Motor vehicle transmission and power train parts manufacturing	0	5	3	28
Motor vehicle seating and interior trim manufacturing	0	14	8	100
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0

## APPENDIX

Aircraft manufacturing	0	4	9	29
Aircraft engine and engine parts manufacturing	0	3	7	18
Other aircraft parts and auxiliary equipment manufacturing	0	3	5	12
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	3
Ship building and repairing	0	16	20	69
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	2	5	27
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	4	12	121
Wood kitchen cabinet and countertop manufacturing	0	188	153	458
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	5	5	14
Other household nonupholstered furniture manufacturing	0	23	19	94
Institutional furniture manufacturing	0	10	10	32
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	18	11	61
Showcase, partition, shelving, and locker manufacturing	0	30	23	91
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	3	3	13
Surgical and medical instrument manufacturing	0	36	272	422
Surgical appliance and supplies manufacturing	0	48	388	639

## APPENDIX

Dental equipment and supplies manufacturing	0	31	127	209
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	9	9	33
Jewelry and silverware manufacturing	0	31	43	135
Sporting and athletic goods manufacturing	0	(130)	(121)	26
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	(52)	(48)	9
Sign manufacturing	0	(2,838)	(2,838)	345
Gasket, packing, and sealing device manufacturing	0	(157)	(90)	67
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	(34,866)	(32,224)	6,549
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4,011	10,454	26,381
Wholesale - Professional and commercial equipment and supplies	0	14,817	27,802	49,032
Wholesale - Household appliances and electrical and electronic goods	0	10,026	23,662	48,651
Wholesale - Machinery, equipment, and supplies	0	12,335	23,121	40,388
Wholesale - Other durable goods merchant wholesalers	0	19,278	32,264	62,680
Wholesale - Drugs and druggists' sundries	0	10,662	31,298	70,431
Wholesale - Grocery and related product wholesalers	0	10,288	14,347	27,945
Wholesale - Petroleum and petroleum products	0	3,234	31,488	35,017
Wholesale - Other nondurable goods merchant wholesalers	0	22,431	47,551	80,129
Wholesale - Wholesale electronic markets and agents and brokers	0	17,098	7,859	9,181
Retail - Motor vehicle and parts dealers	0	26,398	33,037	50,323



## APPENDIX

Retail - Furniture and home furnishings stores	0	14,536	15,546	27,035
Retail - Electronics and appliance stores	0	16,557	13,657	24,074
Retail - Building material and garden equipment and supplies stores	0	15,936	23,249	36,369
Retail - Food and beverage stores	1	42,746	51,504	89,855
Retail - Health and personal care stores	1	27,396	30,260	48,155
Retail - Gasoline stores	0	9,271	13,326	31,825
Retail - Clothing and clothing accessories stores	1	20,792	25,405	60,442
Retail - Sporting goods, hobby, musical instrument and book stores	0	8,970	9,730	17,962
Retail - General merchandise stores	1	34,952	39,866	73,908
Retail - Miscellaneous store retailers	1	16,332	15,271	29,402
Retail - Nonstore retailers	1	23,514	52,444	102,172
Air transportation	0	7,592	5,580	12,078
Rail transportation	0	4,758	6,745	18,177
Water transportation	0	(2,477)	321	7,627
Truck transportation	0	23,964	27,460	58,436
Transit and ground passenger transportation	0	11,307	12,618	19,528
Pipeline transportation	0	353	1,447	1,653
Scenic and sightseeing transportation and support activities for transportation	1	45,771	50,732	98,502
Couriers and messengers	0	12,339	16,480	29,601
Warehousing and storage	1	31,024	33,959	66,904
Newspaper publishers	0	5,626	9,948	12,760
Periodical publishers	0	2,032	3,352	6,006
Book publishers	0	473	1,724	3,637
Directory, mailing list, and other publishers	0	601	2,101	3,690
Greeting card publishing	0	153	625	903
Software publishers	0	8,193	22,533	28,356
Motion picture and video industries	0	2,383	5,487	16,407
Sound recording industries	0	228	1,282	2,370
Radio and television broadcasting	0	7,219	5,206	26,637

## APPENDIX

Cable and other subscription programming	0	264	965	5,212
Wired telecommunications carriers	0	17,225	39,984	82,727
Wireless telecommunications carriers (except satellite)	0	575	2,762	16,570
Satellite, telecommunications resellers, and all other telecommunications	0	1,768	2,250	9,524
Data processing, hosting, and related services	0	11,661	39,630	70,514
News syndicates, libraries, archives and all other information services	0	2,801	6,078	9,298
Internet publishing and broadcasting and web search portals	0	5,065	16,546	34,370
Nondepository credit intermediation and related activities	0	46,911	109,439	139,811
Securities and commodity contracts intermediation and brokerage	0	90,284	94,811	141,546
Monetary authorities and depository credit intermediation	1	65,862	476,709	534,694
Other financial investment activities	1	58,314	74,483	158,986
Direct life insurance carriers	0	5,498	64,594	64,839
Insurance carriers, except direct life	0	11,279	320,718	327,176
Insurance agencies, brokerages, and related activities	0	5,118	40,931	48,196
Funds, trusts, and other financial vehicles	0	4,032	5,749	85,250
Other real estate	7	154,427	512,206	1,347,795
Tenant-occupied housing	0	8,164	151,829	166,807
Owner-occupied dwellings	0	0	541,884	684,664
Automotive equipment rental and leasing	0	922	20,012	21,361
General and consumer goods rental except video tapes and discs	0	7,030	10,088	14,355
Video tape and disc rental	0	1,734	2,577	4,423
Commercial and industrial machinery and equipment rental and leasing	0	3,355	30,937	33,912
Lessors of nonfinancial intangible assets	0	888	46,415	48,953

## APPENDIX

Legal services	1	211,910	407,431	496,936
Accounting, tax preparation, bookkeeping, and payroll services	1	52,184	58,252	82,057
Architectural, engineering, and related services	1	76,280	82,349	146,455
Specialized design services	0	5,754	6,201	7,397
Custom computer programming services	0	26,694	32,871	46,120
Computer systems design services	0	27,396	29,322	38,895
Other computer related services, including facilities management	0	6,589	10,364	16,725
Management consulting services	2	177,474	174,989	253,485
Environmental and other technical consulting services	0	18,342	14,827	21,363
Scientific research and development services	28	3,437,833	4,162,314	7,682,973
Advertising, public relations, and related services	0	28,923	33,796	68,357
Photographic services	0	7,049	3,516	5,541
Veterinary services	0	5,823	6,841	11,050
Marketing research and all other miscellaneous professional, scientific, and technical services	1	115,504	105,096	139,140
Management of companies and enterprises	2	291,806	376,521	509,904
Office administrative services	1	55,698	19,827	43,509
Facilities support services	0	735	947	2,466
Employment services	3	158,487	253,896	374,710
Business support services	1	29,105	25,130	40,441
Travel arrangement and reservation services	0	12,567	17,443	32,391
Investigation and security services	0	19,504	19,908	27,945
Services to buildings	2	44,100	45,702	74,997
Landscape and horticultural services	1	28,805	30,262	48,247
Other support services	0	7,404	9,564	18,998
Waste management and remediation services	0	15,492	28,800	48,803
Elementary and secondary schools	0	16,304	14,400	17,485
Junior colleges, colleges, universities, and professional schools	0	19,730	27,437	37,954
Other educational services	1	17,038	15,698	31,379
Offices of physicians	1	139,478	162,575	240,641
Offices of dentists	0	36,237	45,210	63,133

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Offices of other health practitioners	1	41,466	37,793	52,197
Outpatient care centers	0	24,242	25,192	47,357
Medical and diagnostic laboratories	0	11,223	16,615	28,031
Home health care services	1	43,461	29,162	40,368
Other ambulatory health care services	0	6,578	7,138	12,996
Hospitals	3	309,559	347,648	614,661
Nursing and community care facilities	1	49,500	51,086	85,176
Residential mental retardation, mental health, substance abuse and other facilities	0	20,186	20,511	28,869
Individual and family services	1	45,062	39,919	59,373
Child day care services	1	20,608	23,895	32,115
Community food, housing, and other relief services, including rehabilitation services	0	9,738	10,627	26,032
Performing arts companies	0	2,086	3,048	8,000
Commercial Sports Except Racing	0	1,330	1,558	8,761
Racing and Track Operation	0	819	1,479	2,608
Independent artists, writers, and performers	0	1,048	1,459	4,457
Promoters of performing arts and sports and agents for public figures	0	1,020	1,879	8,971
Museums, historical sites, zoos, and parks	0	3,013	3,333	6,008
Amusement parks and arcades	0	800	968	1,661
Gambling industries (except casino hotels)	0	9,014	18,165	31,267
Other amusement and recreation industries	0	6,260	6,603	12,599
Fitness and recreational sports centers	0	5,366	6,269	12,480
Bowling centers	0	798	1,007	2,115
Hotels and motels, including casino hotels	0	1,474	2,769	4,450
Other accommodations	0	475	636	841
Full-service restaurants	3	73,201	100,821	180,969
Limited-service restaurants	2	44,078	61,698	143,067
All other food and drinking places	1	47,193	60,356	89,574
Automotive repair and maintenance, except car washes	1	43,653	48,471	70,922
Car washes	0	23,098	30,459	47,406

## APPENDIX

Electronic and precision equipment repair and maintenance	1	43,753	58,296	100,122
Commercial and industrial machinery and equipment repair and maintenance	0	10,692	12,677	19,059
Personal and household goods repair and maintenance	0	15,571	14,232	17,083
Personal care services	1	25,269	17,482	23,896
Death care services	0	2,988	3,732	5,762
Dry-cleaning and laundry services	0	6,088	6,400	9,090
Other personal services	1	18,676	16,973	22,848
Religious organizations	1	65,575	40,605	101,326
Grantmaking, giving, and social advocacy organizations	0	8,386	27,991	45,296
Business and professional associations	0	8,334	13,181	22,151
Labor and civic organizations	0	8,229	21,314	39,976
Private households	0	5,308	5,308	5,308
Postal service	0	23,213	23,234	25,619
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	400	160	889
State government passenger transit	0	12,515	5,064	26,606
State government electric utilities	0	0	0	0
Other state government enterprises	0	14,171	15,272	28,174
Local government passenger transit	0	0	0	0
Local government electric utilities	0	0	0	0
Other local government enterprises	0	2,302	4,040	8,549
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	8	1,229,470	1,634,777	2,773,041

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 388: Detailed M2M Program Impacts by Types of Impact, Delaware.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	3	237,738	346,930	572,409
Oilseed farming	0	297	232	384
Grain farming	0	206	225	349
Vegetable and melon farming	0	157	191	251
Fruit farming	0	20	23	26
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	7	8	11
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	35	34	52
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	21	29	43
Dairy cattle and milk production	0	6	7	18
Poultry and egg production	0	70	75	727
Animal production, except cattle and poultry and eggs	0	121	88	137
Forestry, forest products, and timber tract production	0	4	5	6
Commercial logging	0	1	1	1
Commercial fishing	0	81	34	40
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	233	84	128
Oil and gas extraction	0	24	34	105
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	0	0	0
Sand and gravel mining	0	1	4	7
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	0
Metal mining services	0	0	0	1
Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	98	303	845
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	1	1	1
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	25	5	20
Electric power transmission and distribution	0	714	2,206	5,564
Natural gas distribution	0	208	500	847
Water, sewage and other systems	0	157	261	417
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	791	1,113	2,386
Maintenance and repair construction of residential structures	0	307	471	1,020
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1	1	2
Dog and cat food manufacturing	0	2	4	28
Other animal food manufacturing	0	11	17	169
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1	1	3
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	1	1	4
Frozen fruits, juices and vegetables manufacturing	0	5	7	28
Frozen specialties manufacturing	0	3	3	12
Canned fruits and vegetables manufacturing	0	0	0	2



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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	12	16	102
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	1	1	4
Frozen cakes and other pastries manufacturing	0	5	6	13
Poultry processing	0	234	288	1,368
Animal, except poultry, slaughtering	0	0	1	4
Meat processed from carcasses	0	10	11	88
Rendering and meat byproduct processing	0	0	0	1
Seafood product preparation and packaging	0	1	1	3
Bread and bakery product, except frozen, manufacturing	0	14	15	42
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	2	2	9
Other snack food manufacturing	0	1	1	7
Coffee and tea manufacturing	0	0	0	0
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	3	4	14
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	16	20	69
Bottled and canned soft drinks & water	0	1	1	5
Manufactured ice	0	0	0	0
Breweries	0	24	32	80
Wineries	0	2	2	4
Distilleries	0	8	9	16
Tobacco product manufacturing	0	32	511	1,007
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	3	4	16
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	1	3
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	1
Textile bag and canvas mills	0	0	0	1
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	1	1	3
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	1
Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	1
Other cut and sew apparel manufacturing	0	0	0	1
Apparel accessories and other apparel manufacturing	0	0	0	2
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	0	0	0
Wood preservation	0	1	(1)	2
Veneer and plywood manufacturing	0	0	0	1
Engineered wood member and truss manufacturing	0	1	1	3
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	11	8	23
Cut stock, resawing lumber, and planing	0	2	1	4
Other millwork, including flooring	0	5	4	9
Wood container and pallet manufacturing	0	5	4	11
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	4	3	9
All other miscellaneous wood product manufacturing	0	5	4	9
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	10	15	50
Paper bag and coated and treated paper manufacturing	0	25	44	123
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	34	110	270
All other converted paper product manufacturing	0	1	2	9
Printing	0	84	79	210
Support activities for printing	0	1	1	1
Petroleum refineries	0	138	596	4,237
Asphalt paving mixture and block manufacturing	0	4	5	25
Asphalt shingle and coating materials manufacturing	0	4	8	30
Petroleum lubricating oil and grease manufacturing	0	2	5	18
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	5	21	40
Synthetic dye and pigment manufacturing	0	6	19	42
Other basic inorganic chemical manufacturing	0	6	19	43
Other basic organic chemical manufacturing	0	21	61	260
Plastics material and resin manufacturing	0	8	19	90
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	9	17	67
Nitrogenous fertilizer manufacturing	0	3	11	21
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1	2	4

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	1	1	2
Pharmaceutical preparation manufacturing	0	3	8	19
In-vitro diagnostic substance manufacturing	0	15	30	61
Biological product (except diagnostic) manufacturing	0	2	2	3
Paint and coating manufacturing	0	1	3	8
Adhesive manufacturing	0	0	0	1
Soap and other detergent manufacturing	0	3	9	13
Polish and other sanitation good manufacturing	0	21	65	104
Surface active agent manufacturing	0	5	22	28
Toilet preparation manufacturing	0	3	11	18
Printing ink manufacturing	0	1	2	4
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	2	4	9
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	6	9	18
Plastics packaging materials and unlaminated film and sheet manufacturing	0	19	38	106
Unlaminated plastics profile shape manufacturing	0	3	10	18
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1	3	7
Polystyrene foam product manufacturing	0	1	2	5
Urethane and other foam product (except polystyrene) manufacturing	0	2	4	9
Plastics bottle manufacturing	0	1	1	4
Other plastics product manufacturing	0	7	12	35
Tire manufacturing	0	0	0	1

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	2	3	7
Other rubber product manufacturing	0	2	4	11
Pottery, ceramics, and plumbing fixture manufacturing	0	1	1	1
Brick, tile, and other structural clay product manufacturing	0	4	5	11
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	1	1	2
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	34	41	159
Concrete block and brick manufacturing	0	5	7	22
Concrete pipe manufacturing	0	1	1	3
Other concrete product manufacturing	0	4	4	13
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	1	1	5
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	6	6	12
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	0	1	2
Iron and steel mills and ferroalloy manufacturing	0	6	10	49
Iron, steel pipe and tube manufacturing from purchased steel	0	1	1	3
Rolled steel shape manufacturing	0	0	0	2
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	1	1	7
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0

## APPENDIX

Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	3
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	1
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	4	6	22
Plate work manufacturing	0	1	1	4
Metal window and door manufacturing	0	0	1	1
Sheet metal work manufacturing	0	9	11	26
Ornamental and architectural metal work manufacturing	0	1	1	2
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	0	0
Machine shops	0	9	10	18
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	1

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Metal coating and nonprecious engraving	0	0	0	1
Electroplating, anodizing, and coloring metal	0	0	0	1
Valve and fittings, other than plumbing, manufacturing	0	1	2	3
Plumbing fixture fitting and trim manufacturing	0	3	8	16
Ball and roller bearing manufacturing	0	1	1	2
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	2	2	5
Other fabricated metal manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	1
All other industrial machinery manufacturing	0	0	0	1
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1	2	4
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	1	3	7
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0



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Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	1
Electronic computer manufacturing	0	(0)	(0)	0
Computer storage device manufacturing	0	(0)	0	1
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	(0)	(0)	0
Audio and video equipment manufacturing	0	(0)	(0)	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	(0)	(0)	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	(0)	(0)	1
Other electronic component manufacturing	0	1	1	4
Electromedical and electrotherapeutic apparatus manufacturing	0	2	3	6
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0

## APPENDIX

Industrial process variable instruments manufacturing	0	0	0	1
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	1	2	4
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	2	4	8
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	(0)	(0)	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	1	1	4
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	1
Household refrigerator and home freezer manufacturing	0	0	0	1
Household laundry equipment manufacturing	0	0	1	3
Other major household appliance manufacturing	0	0	0	1
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	23	37	98
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	1	2	5

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Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	1	1
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	2	2	10
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	2
Motor vehicle electrical and electronic equipment manufacturing	0	1	1	6
Motor vehicle transmission and power train parts manufacturing	0	0	0	1
Motor vehicle seating and interior trim manufacturing	0	0	0	2
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	0	1	3
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	1	1	3
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	0	1

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Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	3
Wood kitchen cabinet and countertop manufacturing	0	5	4	12
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	0	0	0
Other household nonupholstered furniture manufacturing	0	1	1	3
Institutional furniture manufacturing	0	0	0	1
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	1	0	2
Showcase, partition, shelving, and locker manufacturing	0	1	1	2
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	1	8	11
Surgical appliance and supplies manufacturing	0	2	15	23
Dental equipment and supplies manufacturing	0	1	4	7
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	0	0	1
Jewelry and silverware manufacturing	0	1	1	4
Sporting and athletic goods manufacturing	0	(4)	(3)	1
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	(2)	(2)	0
Sign manufacturing	0	(62)	(63)	7
Gasket, packing, and sealing device manufacturing	0	(3)	(2)	1
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0

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Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	(2)	(2)	1
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	108	282	713
Wholesale - Professional and commercial equipment and supplies	0	400	752	1,297
Wholesale - Household appliances and electrical and electronic goods	0	154	364	741
Wholesale - Machinery, equipment, and supplies	0	278	524	911
Wholesale - Other durable goods merchant wholesalers	0	438	734	1,415
Wholesale - Drugs and druggists' sundries	0	278	802	1,763
Wholesale - Grocery and related product wholesalers	0	258	357	695
Wholesale - Petroleum and petroleum products	0	77	842	921
Wholesale - Other nondurable goods merchant wholesalers	0	552	1,209	1,997
Wholesale - Wholesale electronic markets and agents and brokers	0	427	186	218
Retail - Motor vehicle and parts dealers	0	645	812	1,227
Retail - Furniture and home furnishings stores	0	367	393	672
Retail - Electronics and appliance stores	0	414	343	592
Retail - Building material and garden equipment and supplies stores	0	407	593	917
Retail - Food and beverage stores	0	1,141	1,360	2,316
Retail - Health and personal care stores	0	665	739	1,172
Retail - Gasoline stores	0	256	343	774
Retail - Clothing and clothing accessories stores	0	540	655	1,513
Retail - Sporting goods, hobby, musical instrument and book stores	0	222	241	437

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Retail - General merchandise stores	0	825	948	1,745
Retail - Miscellaneous store retailers	0	424	392	729
Retail - Nonstore retailers	0	633	1,427	2,649
Air transportation	0	206	155	331
Rail transportation	0	132	166	476
Water transportation	0	(91)	12	268
Truck transportation	0	671	753	1,561
Transit and ground passenger transportation	0	414	466	676
Pipeline transportation	0	7	29	34
Scenic and sightseeing transportation and support activities for transportation	0	1,395	1,567	3,045
Couriers and messengers	0	349	481	845
Warehousing and storage	0	756	826	1,613
Newspaper publishers	0	138	237	300
Periodical publishers	0	67	108	178
Book publishers	0	13	44	94
Directory, mailing list, and other publishers	0	14	49	85
Greeting card publishing	0	3	12	17
Software publishers	0	213	584	717
Motion picture and video industries	0	83	193	478
Sound recording industries	0	8	42	72
Radio and television broadcasting	0	275	217	749
Cable and other subscription programming	0	10	30	134
Wired telecommunications carriers	0	465	1,000	2,009
Wireless telecommunications carriers (except satellite)	0	21	82	478
Satellite, telecommunications resellers, and all other telecommunications	0	61	66	249
Data processing, hosting, and related services	0	339	1,082	1,835
News syndicates, libraries, archives and all other information services	0	98	212	305
Internet publishing and broadcasting and web search portals	0	235	730	1,306

## APPENDIX

Nondepository credit intermediation and related activities	0	1,339	3,167	3,808
Securities and commodity contracts intermediation and brokerage	0	2,454	2,532	3,539
Monetary authorities and depository credit intermediation	0	1,656	12,394	13,493
Other financial investment activities	0	2,049	2,544	4,329
Direct life insurance carriers	0	119	1,447	1,418
Insurance carriers, except direct life	0	279	8,180	8,024
Insurance agencies, brokerages, and related activities	0	126	1,011	1,156
Funds, trusts, and other financial vehicles	0	122	172	2,149
Other real estate	0	5,222	17,222	39,306
Tenant-occupied housing	0	241	4,227	4,577
Owner-occupied dwellings	0	0	14,962	18,904
Automotive equipment rental and leasing	0	31	556	568
General and consumer goods rental except video tapes and discs	0	203	273	362
Video tape and disc rental	0	45	65	109
Commercial and industrial machinery and equipment rental and leasing	0	102	808	859
Lessors of nonfinancial intangible assets	0	24	1,230	1,289
Legal services	0	6,054	12,122	14,413
Accounting, tax preparation, bookkeeping, and payroll services	0	1,423	1,595	2,191
Architectural, engineering, and related services	0	2,302	2,496	4,373
Specialized design services	0	163	176	206
Custom computer programming services	0	378	462	635
Computer systems design services	0	743	792	1,033
Other computer related services, including facilities management	0	214	323	498
Management consulting services	0	5,485	5,417	7,623
Environmental and other technical consulting services	0	598	487	691

## APPENDIX

Scientific research and development services	1	123,466	151,512	258,482
Advertising, public relations, and related services	0	755	878	1,693
Photographic services	0	185	97	145
Veterinary services	0	151	180	283
Marketing research and all other miscellaneous professional, scientific, and technical services	0	3,685	3,343	4,356
Management of companies and enterprises	0	7,789	10,146	13,310
Office administrative services	0	2,019	733	1,453
Facilities support services	0	22	28	70
Employment services	0	4,712	7,749	11,006
Business support services	0	731	644	1,003
Travel arrangement and reservation services	0	374	524	934
Investigation and security services	0	562	576	783
Services to buildings	0	1,339	1,392	2,174
Landscape and horticultural services	0	786	828	1,272
Other support services	0	190	246	485
Waste management and remediation services	0	427	799	1,334
Elementary and secondary schools	0	537	472	564
Junior colleges, colleges, universities, and professional schools	0	715	985	1,294
Other educational services	0	461	426	821
Offices of physicians	0	3,457	4,061	5,964
Offices of dentists	0	941	1,187	1,634
Offices of other health practitioners	0	1,029	946	1,303
Outpatient care centers	0	664	693	1,283
Medical and diagnostic laboratories	0	287	436	711
Home health care services	0	1,071	727	1,013
Other ambulatory health care services	0	170	185	332
Hospitals	0	8,585	9,602	16,567
Nursing and community care facilities	0	1,290	1,334	2,166
Residential mental retardation, mental health, substance abuse and other facilities	0	594	603	832



## APPENDIX

Individual and family services	0	1,299	1,171	1,732
Child day care services	0	559	657	862
Community food, housing, and other relief services, including rehabilitation services	0	300	331	784
Performing arts companies	0	65	92	220
Commercial Sports Except Racing	0	35	41	224
Racing and Track Operation	0	23	40	68
Independent artists, writers, and performers	0	35	47	138
Promoters of performing arts and sports and agents for public figures	0	32	53	238
Museums, historical sites, zoos, and parks	0	86	94	165
Amusement parks and arcades	0	23	24	42
Gambling industries (except casino hotels)	0	249	473	804
Other amusement and recreation industries	0	158	159	303
Fitness and recreational sports centers	0	154	169	331
Bowling centers	0	20	25	51
Hotels and motels, including casino hotels	0	51	92	146
Other accommodations	0	18	24	31
Full-service restaurants	0	1,913	2,651	4,656
Limited-service restaurants	0	1,177	1,638	3,664
All other food and drinking places	0	1,382	1,739	2,507
Automotive repair and maintenance, except car washes	0	1,208	1,292	1,879
Car washes	0	610	802	1,238
Electronic and precision equipment repair and maintenance	0	227	303	498
Commercial and industrial machinery and equipment repair and maintenance	0	271	315	472
Personal and household goods repair and maintenance	0	439	358	430
Personal care services	0	713	451	624
Death care services	0	88	104	159
Dry-cleaning and laundry services	0	166	172	243
Other personal services	0	541	431	597
Religious organizations	0	2,017	972	2,861
Grantmaking, giving, and social advocacy organizations	0	297	850	1,376

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Business and professional associations	0	240	344	556
Labor and civic organizations	0	253	579	1,109
Private households	0	156	156	156
Postal service	0	619	619	681
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	12	6	27
State government passenger transit	0	3,712	1,537	6,578
State government electric utilities	0	0	0	0
Other state government enterprises	0	212	222	384
Local government passenger transit	0	0	0	0
Local government electric utilities	0	0	0	0
Other local government enterprises	0	66	107	224
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 11. Florida

**Table 389: Detailed NASA Impacts by Types of Impact, Florida.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>33,093</i>	<i>2,063,895,600</i>	<i>3,042,088,158</i>	<i>5,913,168,032</i>
Oilseed farming	0	21,012	46,846	65,329
Grain farming	2	108,930	249,166	675,473
Vegetable and melon farming	26	841,880	1,379,366	3,130,833
Fruit farming	37	924,584	1,683,197	3,153,557
Tree nut farming	1	15,093	15,986	24,380
Greenhouse, nursery, and floriculture production	25	805,043	1,122,010	2,370,038
Tobacco farming	0	21,342	22,189	40,730
Cotton farming	0	10,583	15,242	31,394
Sugarcane and sugar beet farming	5	197,431	314,870	712,871
All other crop farming	52	506,004	671,052	1,410,841
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	18	293,135	722,143	2,554,050
Dairy cattle and milk production	5	168,209	286,007	1,974,951
Poultry and egg production	2	73,833	112,259	1,306,864
Animal production, except cattle and poultry and eggs	22	896,434	2,157,088	3,268,300
Forestry, forest products, and timber tract production	2	122,525	133,252	180,983
Commercial logging	15	786,143	824,653	1,334,708
Commercial fishing	9	301,337	532,442	586,717
Commercial hunting and trapping	1	64,006	145,494	157,076
Support activities for agriculture and forestry	76	2,781,934	2,724,337	3,296,271
Oil and gas extraction	50	368,663	206,314	12,525,214
Coal mining	3	156	95,897	660,643
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	2,945	51,420	88,039
Gold ore mining	0	2,718	16,021	54,005
Silver ore mining	0	16,444	48,746	113,387
Uranium-radium-vanadium ore mining	0	(62,257)	(21,701,602)	392,710
Other metal ore mining	0	17,399	61,973	91,106
Stone mining and quarrying	5	297,532	1,367,134	2,002,537
Sand and gravel mining	4	200,907	476,890	776,514

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Other clay, ceramic, refractory minerals mining	0	35,799	80,648	113,257
Potash, soda, and borate mineral mining	0	4,545	9,407	15,549
Phosphate rock mining	1	68,775	114,519	211,193
Other chemical and fertilizer mineral mining	0	1,042	3,380	5,745
Other nonmetallic minerals	1	92,566	196,099	278,646
Drilling oil and gas wells	0	71	65	1,430
Support activities for oil and gas operations	0	1,520	1,324	15,186
Metal mining services	1	12,211	10,488	334,153
Other nonmetallic minerals services	0	636	556	15,331
Electric power generation - Hydroelectric	0	9,059	35,339	41,431
Electric power generation - Fossil fuel	22	2,952,340	15,805,111	34,556,569
Electric power generation - Nuclear	4	820,048	2,441,541	4,494,591
Electric power generation - Solar	4	270,372	592,361	1,074,695
Electric power generation - Wind	1	41,374	228,703	549,878
Electric power generation - Geothermal	0	44,400	136,254	230,542
Electric power generation - Biomass	2	92,217	261,719	691,392
Electric power generation - All other	2	81,964	104,681	313,719
Electric power transmission and distribution	42	5,802,198	29,754,176	62,725,892
Natural gas distribution	4	410,940	1,618,675	3,318,503
Water, sewage and other systems	13	846,849	2,010,981	3,534,273
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	2,004	116,401,653	88,841,753	179,898,665
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	130	7,106,145	10,703,189	25,609,082
Maintenance and repair construction of residential structures	48	2,494,617	4,214,572	9,937,021
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	10,078	8,220	18,385
Dog and cat food manufacturing	1	33,815	131,265	850,307
Other animal food manufacturing	4	277,933	542,801	4,007,133
Flour milling	1	82,093	158,852	993,312
Rice milling	0	4,944	8,324	69,403
Malt manufacturing	0	2,992	6,683	109,950
Wet corn milling	0	277	1,155	68,908
Soybean and other oilseed processing	0	5,194	30,066	927,484
Fats and oils refining and blending	0	8,632	16,786	219,191
Breakfast cereal manufacturing	0	10,986	27,474	157,327
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	1	107,951	243,613	1,196,197
Nonchocolate confectionery manufacturing	1	46,568	68,653	473,187
Chocolate and confectionery manufacturing from cacao beans	0	13,605	29,667	218,713
Confectionery manufacturing from purchased chocolate	1	39,244	54,202	354,939
Frozen fruits, juices and vegetables manufacturing	6	382,147	678,147	2,589,514
Frozen specialties manufacturing	3	132,420	196,992	989,915
Canned fruits and vegetables manufacturing	6	441,460	789,423	3,089,273
Canned specialties	0	6,816	16,438	111,756
Dehydrated food products manufacturing	0	2,449	4,732	57,462
Cheese manufacturing	0	9,187	13,071	158,801

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	11,459	27,698	425,136
Fluid milk manufacturing	4	220,882	344,661	2,683,721
Creamery butter manufacturing	0	2,289	9,173	71,118
Ice cream and frozen dessert manufacturing	2	53,779	83,764	638,360
Frozen cakes and other pastries manufacturing	22	589,847	869,379	1,740,088
Poultry processing	5	205,732	265,655	1,353,340
Animal, except poultry, slaughtering	3	178,637	243,438	1,939,538
Meat processed from carcasses	6	329,831	385,635	3,008,299
Rendering and meat byproduct processing	1	95,333	108,823	510,675
Seafood product preparation and packaging	6	327,771	394,324	2,378,393
Bread and bakery product, except frozen, manufacturing	46	1,517,133	2,090,392	5,959,431
Cookie and cracker manufacturing	4	258,386	355,871	1,416,710
Dry pasta, mixes, and dough manufacturing	1	29,395	68,288	369,992
Tortilla manufacturing	1	67,988	81,894	318,385
Roasted nuts and peanut butter manufacturing	2	123,887	165,305	765,583
Other snack food manufacturing	4	219,824	375,188	1,798,214
Coffee and tea manufacturing	1	52,984	99,375	809,196
Flavoring syrup and concentrate manufacturing	1	129,440	932,625	2,653,627
Mayonnaise, dressing, and sauce manufacturing	1	87,492	163,325	711,542
Spice and extract manufacturing	2	113,819	170,968	944,594
All other food manufacturing	8	336,905	453,621	2,614,903
Bottled and canned soft drinks & water	12	820,285	1,608,420	8,672,675
Manufactured ice	1	41,307	19,337	98,488
Breweries	7	468,966	1,037,186	3,195,495
Wineries	0	18,808	29,503	126,032
Distilleries	2	182,567	711,298	1,861,210
Tobacco product manufacturing	4	558,922	8,834,216	14,867,314
Fiber, yarn, and thread mills	0	7,098	11,927	92,223
Broadwoven fabric mills	0	4,127	6,358	36,953
Narrow fabric mills and schiffli machine embroidery	1	21,837	24,265	85,292
Nonwoven fabric mills	0	34,998	54,756	197,082
Knit fabric mills	0	2,694	3,409	10,607

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Textile and fabric finishing mills	1	55,273	68,392	272,990
Fabric coating mills	0	4,129	5,287	37,198
Carpet and rug mills	1	24,253	38,942	214,277
Curtain and linen mills	2	58,568	80,253	325,380
Textile bag and canvas mills	4	161,178	192,700	577,339
Rope, cordage, twine, tire cord and tire fabric mills	0	16,353	23,538	71,556
Other textile product mills	3	144,322	171,059	450,806
Hosiery and sock mills	1	10,826	17,795	46,781
Other apparel knitting mills	1	14,326	22,485	63,540
Cut and sew apparel contractors	3	90,385	99,009	198,574
Mens and boys cut and sew apparel manufacturing	2	56,595	74,205	280,199
Womens and girls cut and sew apparel manufacturing	2	37,747	56,856	296,979
Other cut and sew apparel manufacturing	1	22,880	33,166	125,230
Apparel accessories and other apparel manufacturing	1	22,934	31,747	113,906
Leather and hide tanning and finishing	0	4,495	7,525	39,464
Footwear manufacturing	0	8,439	10,035	57,180
Other leather and allied product manufacturing	1	19,448	20,623	69,953
Sawmills	13	704,302	938,498	3,487,223
Wood preservation	2	93,132	230,070	966,016
Veneer and plywood manufacturing	3	217,385	292,548	919,226
Engineered wood member and truss manufacturing	10	503,126	641,812	2,058,206
Reconstituted wood product manufacturing	1	222,281	463,745	976,353
Wood windows and door manufacturing	6	378,376	473,348	1,408,815
Cut stock, resawing lumber, and planing	1	28,735	40,444	146,788
Other millwork, including flooring	7	359,341	457,552	1,317,355
Wood container and pallet manufacturing	5	214,945	240,349	687,364
Manufactured home (mobile home) manufacturing	0	1,892	2,695	8,285
Prefabricated wood building manufacturing	2	70,253	79,102	261,693
All other miscellaneous wood product manufacturing	4	218,253	249,607	734,076

## APPENDIX

Pulp mills	1	67,378	118,873	444,308
Paper mills	5	546,788	1,472,847	4,494,113
Paperboard mills	2	206,589	571,927	1,852,316
Paperboard container manufacturing	11	894,698	1,454,916	5,704,924
Paper bag and coated and treated paper manufacturing	3	178,239	352,839	1,251,681
Stationery product manufacturing	1	70,858	108,267	368,510
Sanitary paper product manufacturing	7	522,548	1,845,473	5,534,483
All other converted paper product manufacturing	1	63,368	100,595	287,681
Printing	66	3,275,876	4,918,328	10,700,487
Support activities for printing	5	230,304	345,405	592,459
Petroleum refineries	1	59,542	758,494	5,778,180
Asphalt paving mixture and block manufacturing	2	192,578	424,705	1,617,403
Asphalt shingle and coating materials manufacturing	1	126,277	648,197	1,245,614
Petroleum lubricating oil and grease manufacturing	20	1,804,566	10,223,843	25,152,048
All other petroleum and coal products manufacturing	0	10,009	41,663	122,769
Petrochemical manufacturing	0	16,429	142,221	815,559
Industrial gas manufacturing	2	274,709	705,080	2,027,127
Synthetic dye and pigment manufacturing	0	7,451	16,283	55,734
Other basic inorganic chemical manufacturing	1	116,932	255,927	829,702
Other basic organic chemical manufacturing	2	181,840	382,597	3,089,838
Plastics material and resin manufacturing	2	298,177	500,603	3,099,911
Synthetic rubber manufacturing	1	56,971	93,344	501,404
Artificial and synthetic fibers and filaments manufacturing	0	8,823	13,709	78,795
Nitrogenous fertilizer manufacturing	1	80,369	191,951	1,001,653
Phosphatic fertilizer manufacturing	3	352,052	925,013	2,984,838
Fertilizer mixing	2	169,935	316,468	938,136
Pesticide and other agricultural chemical manufacturing	1	54,576	180,749	1,520,004
Medicinal and botanical manufacturing	1	75,550	133,679	544,144



## APPENDIX

Pharmaceutical preparation manufacturing	8	738,573	2,946,555	9,582,128
In-vitro diagnostic substance manufacturing	0	4,355	6,889	21,396
Biological product (except diagnostic) manufacturing	0	17,327	42,912	90,737
Paint and coating manufacturing	3	275,453	538,882	2,333,437
Adhesive manufacturing	1	137,003	227,008	918,408
Soap and other detergent manufacturing	4	226,927	735,536	3,824,403
Polish and other sanitation good manufacturing	3	172,254	330,446	1,626,067
Surface active agent manufacturing	0	44,578	142,630	422,936
Toilet preparation manufacturing	5	400,433	1,269,236	3,931,837
Printing ink manufacturing	1	53,053	56,928	265,631
Explosives manufacturing	0	62,095	71,387	189,893
Custom compounding of purchased resins	1	30,434	56,360	372,876
Photographic film and chemical manufacturing	1	64,085	142,457	687,287
Other miscellaneous chemical product manufacturing	3	210,498	324,373	1,441,139
Plastics packaging materials and unlaminated film and sheet manufacturing	3	197,448	325,838	1,220,747
Unlaminated plastics profile shape manufacturing	3	239,693	534,068	1,395,398
Plastics pipe and pipe fitting manufacturing	3	217,131	502,618	1,618,346
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	33,394	59,981	203,189
Polystyrene foam product manufacturing	5	266,728	451,513	1,587,953
Urethane and other foam product (except polystyrene) manufacturing	2	112,897	180,587	702,138
Plastics bottle manufacturing	3	227,559	383,265	1,356,050
Other plastics product manufacturing	20	1,130,663	1,653,163	5,484,541
Tire manufacturing	2	112,886	158,090	676,441
Rubber and plastics hoses and belting manufacturing	1	84,903	133,389	369,057
Other rubber product manufacturing	6	428,148	637,457	1,999,241

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	1	30,552	41,882	127,991
Brick, tile, and other structural clay product manufacturing	2	79,868	161,648	399,133
Flat glass manufacturing	2	122,027	304,910	814,634
Other pressed and blown glass and glassware manufacturing	1	29,960	48,694	124,237
Glass container manufacturing	1	75,777	155,260	383,586
Glass product manufacturing made of purchased glass	5	220,791	430,448	1,172,707
Cement manufacturing	2	217,234	646,377	1,708,519
Ready-mix concrete manufacturing	16	1,176,534	2,311,335	6,744,492
Concrete block and brick manufacturing	7	445,570	972,750	2,346,871
Concrete pipe manufacturing	5	356,660	673,612	1,635,084
Other concrete product manufacturing	22	1,371,386	2,260,328	5,317,635
Lime manufacturing	0	6,858	20,813	52,270
Gypsum product manufacturing	5	445,204	1,467,396	3,478,350
Abrasive product manufacturing	0	7,926	29,292	58,273
Cut stone and stone product manufacturing	3	139,592	173,738	402,635
Ground or treated mineral and earth manufacturing	0	42,981	160,135	288,122
Mineral wool manufacturing	1	83,134	244,249	492,294
Miscellaneous nonmetallic mineral products manufacturing	4	268,432	805,886	1,790,500
Iron and steel mills and ferroalloy manufacturing	2	157,609	853,891	2,490,198
Iron, steel pipe and tube manufacturing from purchased steel	1	47,886	192,354	439,345
Rolled steel shape manufacturing	0	14,837	138,106	336,893
Steel wire drawing	1	36,343	190,485	400,581
Alumina refining and primary aluminum production	0	(640)	24,357	115,857
Secondary smelting and alloying of aluminum	0	14,597	85,412	459,702
Aluminum sheet, plate, and foil manufacturing	0	(22,106)	103,329	355,090
Other aluminum rolling, drawing and extruding	1	75,940	232,206	648,832
Nonferrous metal (exc aluminum) smelting and refining	0	(882)	57,318	77,477

## APPENDIX

Copper rolling, drawing, extruding and alloying	1	(15,883)	51,591	498,104
Nonferrous metal, except copper and aluminum, shaping	0	13,144	43,794	110,121
Secondary processing of other nonferrous metals	0	11,237	237,657	432,863
Ferrous metal foundries	2	106,875	717,185	1,024,272
Nonferrous metal foundries	1	26,150	169,609	295,559
Custom roll forming	0	8,285	13,209	81,847
Crown and closure manufacturing and metal stamping	4	222,783	325,399	924,514
Iron and steel forging	1	29,913	40,866	158,994
Nonferrous forging	0	18,185	23,028	75,663
Cutlery, utensil, pot, and pan manufacturing	0	15,403	45,040	146,302
Handtool manufacturing	1	91,884	150,641	273,873
Prefabricated metal buildings and components manufacturing	12	753,947	1,092,421	3,395,557
Fabricated structural metal manufacturing	14	917,003	1,382,366	4,322,869
Plate work manufacturing	3	203,741	212,679	605,779
Metal window and door manufacturing	15	914,463	1,425,466	3,717,859
Sheet metal work manufacturing	8	468,578	611,467	1,666,863
Ornamental and architectural metal work manufacturing	11	611,822	824,153	2,256,391
Power boiler and heat exchanger manufacturing	0	3,880	5,467	16,354
Metal tank (heavy gauge) manufacturing	3	191,120	236,243	666,683
Metal cans manufacturing	2	148,408	339,289	1,310,242
Metal barrels, drums and pails manufacturing	1	51,604	65,720	304,708
Hardware manufacturing	2	96,092	161,153	496,778
Spring and wire product manufacturing	2	109,447	151,143	452,942
Machine shops	16	962,931	1,121,882	2,299,426
Turned product and screw, nut, and bolt manufacturing	2	100,447	141,868	414,782
Metal heat treating	1	59,203	92,890	216,975
Metal coating and nonprecious engraving	4	258,770	460,296	1,070,295
Electroplating, anodizing, and coloring metal	4	199,170	224,668	521,559

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	5	411,497	677,692	1,756,324
Plumbing fixture fitting and trim manufacturing	1	54,053	167,547	530,477
Ball and roller bearing manufacturing	0	16,218	30,224	70,242
Small arms ammunition manufacturing	1	92,010	225,222	453,983
Ammunition, except for small arms, manufacturing	0	2,267	2,899	8,164
Small arms, ordnance, and accessories manufacturing	1	79,310	201,235	493,600
Fabricated pipe and pipe fitting manufacturing	1	78,403	92,358	253,055
Other fabricated metal manufacturing	8	465,748	623,770	1,702,629
Farm machinery and equipment manufacturing	0	5,646	7,319	40,876
Lawn and garden equipment manufacturing	0	15,381	24,209	226,649
Construction machinery manufacturing	0	4,129	6,370	27,161
Mining machinery and equipment manufacturing	0	4,071	4,482	13,916
Oil and gas field machinery and equipment manufacturing	0	360	428	2,797
Semiconductor machinery manufacturing	0	1,094	1,190	4,739
Food product machinery manufacturing	0	2,115	2,343	7,092
Sawmill, woodworking, and paper machinery	0	3,839	4,151	14,585
Printing machinery and equipment manufacturing	0	6,115	6,591	22,287
All other industrial machinery manufacturing	1	51,518	60,262	192,878
Optical instrument and lens manufacturing	0	15,884	20,420	61,473
Photographic and photocopying equipment manufacturing	0	1,665	2,079	9,554
Other commercial service industry machinery manufacturing	6	526,775	776,998	2,136,263
Air purification and ventilation equipment manufacturing	1	51,537	64,339	207,727

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	1	45,818	56,825	204,287
Air conditioning, refrigeration, and warm air heating equipment manufacturing	4	242,369	356,652	1,520,431
Industrial mold manufacturing	0	26,090	27,837	63,062
Special tool, die, jig, and fixture manufacturing	0	5,147	5,778	14,358
Cutting tool and machine tool accessory manufacturing	0	11,479	12,045	32,469
Machine tool manufacturing	0	8,079	8,649	30,245
Rolling mill and other metalworking machinery manufacturing	0	1,854	2,052	6,493
Turbine and turbine generator set units manufacturing	0	10,380	12,498	60,389
Speed changer, industrial high-speed drive, and gear manufacturing	1	61,563	75,747	275,725
Mechanical power transmission equipment manufacturing	0	35,257	41,260	101,300
Other engine equipment manufacturing	2	122,431	212,856	1,344,597
Pump and pumping equipment manufacturing	1	59,768	84,002	291,050
Air and gas compressor manufacturing	1	59,628	84,164	313,434
Elevator and moving stairway manufacturing	0	5,155	6,628	31,193
Conveyor and conveying equipment manufacturing	0	3,972	4,156	14,011
Overhead cranes, hoists, and monorail systems manufacturing	1	57,696	85,073	336,676
Industrial truck, trailer, and stacker manufacturing	0	18,004	23,082	85,238
Power-driven handtool manufacturing	0	1,212	2,307	11,981
Welding and soldering equipment manufacturing	0	14,881	18,017	98,890
Packaging machinery manufacturing	0	19,631	23,642	64,301
Industrial process furnace and oven manufacturing	0	341	381	1,520
Fluid power cylinder and actuator manufacturing	0	9,258	11,010	36,185

## APPENDIX

Fluid power pump and motor manufacturing	0	29,974	38,096	144,905
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	22,014	25,212	89,042
Electronic computer manufacturing	2	227,353	569,416	2,185,912
Computer storage device manufacturing	0	119	1,253	23,656
Computer terminals and other computer peripheral equipment manufacturing	14	1,906,480	3,786,699	9,185,428
Telephone apparatus manufacturing	0	39,678	81,871	269,319
Broadcast and wireless communications equipment manufacturing	0	25,573	39,440	90,428
Other communications equipment manufacturing	1	98,719	168,988	392,139
Audio and video equipment manufacturing	0	16,680	34,515	168,200
Printed circuit assembly (electronic assembly) manufacturing	3	129,589	215,750	815,793
Bare printed circuit board manufacturing	2	280,088	375,616	689,568
Semiconductor and related device manufacturing	10	1,194,566	2,249,501	6,363,664
Capacitor, resistor, coil, transformer, and other inductor manufacturing	1	65,367	98,829	280,555
Electronic connector manufacturing	4	333,739	531,530	1,351,868
Other electronic component manufacturing	3	202,213	239,663	778,382
Electromedical and electrotherapeutic apparatus manufacturing	0	18,854	44,127	110,948
Search, detection, and navigation instruments manufacturing	1	179,059	307,039	626,831
Automatic environmental control manufacturing	2	87,275	127,782	354,312
Industrial process variable instruments manufacturing	0	25,924	40,775	100,104
Totalizing fluid meter and counting device manufacturing	0	14,734	35,721	100,702

## APPENDIX

Electricity and signal testing instruments manufacturing	0	8,554	13,336	40,296
Analytical laboratory instrument manufacturing	4	310,939	606,891	1,495,749
Irradiation apparatus manufacturing	0	1,167	2,637	6,461
Watch, clock, and other measuring and controlling device manufacturing	0	15,745	29,745	71,532
Blank magnetic and optical recording media manufacturing	0	124	1,303	17,415
Software and other prerecorded and record reproducing	2	136,107	217,355	454,434
Electric lamp bulb and part manufacturing	0	18,609	31,000	101,661
Lighting fixture manufacturing	5	292,539	436,433	1,448,028
Small electrical appliance manufacturing	0	8,807	18,121	79,962
Household cooking appliance manufacturing	0	3,372	10,382	60,965
Household refrigerator and home freezer manufacturing	0	2,797	11,716	74,768
Household laundry equipment manufacturing	0	6,087	15,489	112,378
Other major household appliance manufacturing	0	844	4,169	35,813
Power, distribution, and specialty transformer manufacturing	0	40,426	58,610	165,438
Motor and generator manufacturing	1	44,240	67,538	247,983
Switchgear and switchboard apparatus manufacturing	3	270,721	434,112	1,169,101
Relay and industrial control manufacturing	1	99,226	130,615	374,653
Storage battery manufacturing	2	189,091	289,236	761,963
Primary battery manufacturing	1	106,231	222,029	562,894
Fiber optic cable manufacturing	2	64,222	104,498	792,122
Other communication and energy wire manufacturing	1	85,637	147,744	615,230
Wiring device manufacturing	2	124,502	233,479	761,007
Carbon and graphite product manufacturing	0	46,749	65,026	139,124
All other miscellaneous electrical equipment and component manufacturing	0	26,680	30,527	111,864

## APPENDIX

Automobile manufacturing	0	2,830	5,500	73,129
Light truck and utility vehicle manufacturing	0	5,507	9,214	112,379
Heavy duty truck manufacturing	0	11,374	19,717	151,904
Motor vehicle body manufacturing	0	13,570	15,580	61,030
Truck trailer manufacturing	0	831	911	4,708
Motor home manufacturing	1	65,076	88,973	408,109
Travel trailer and camper manufacturing	4	290,208	308,205	1,400,572
Motor vehicle gasoline engine and engine parts manufacturing	1	74,061	88,585	515,649
Motor vehicle electrical and electronic equipment manufacturing	2	137,745	172,396	873,218
Motor vehicle transmission and power train parts manufacturing	1	55,752	69,656	479,945
Motor vehicle seating and interior trim manufacturing	0	15,583	17,216	98,262
Motor vehicle metal stamping	1	35,500	40,599	201,687
Other motor vehicle parts manufacturing	5	356,528	422,864	2,596,729
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	2	199,786	242,951	1,226,590
Aircraft manufacturing	0	42,714	67,033	239,261
Aircraft engine and engine parts manufacturing	2	305,301	588,595	1,469,461
Other aircraft parts and auxiliary equipment manufacturing	1	84,521	118,962	318,662
Guided missile and space vehicle manufacturing	1	111,166	135,853	351,016
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	20,987	25,780	55,161
Railroad rolling stock manufacturing	0	1,478	1,989	10,563
Ship building and repairing	1	69,925	82,126	234,834
Boat building	14	855,226	1,091,050	3,871,574
Motorcycle, bicycle, and parts manufacturing	1	23,580	56,512	270,305
Military armored vehicle, tank, and tank component manufacturing	1	58,907	100,474	342,871
All other transportation equipment manufacturing	2	143,596	238,506	974,223



## APPENDIX

Wood kitchen cabinet and countertop manufacturing	13	643,180	766,981	1,778,323
Upholstered household furniture manufacturing	2	104,614	129,204	453,802
Nonupholstered wood household furniture manufacturing	2	123,096	132,840	336,432
Other household nonupholstered furniture manufacturing	2	94,831	126,489	505,257
Institutional furniture manufacturing	0	7,892	8,459	23,916
Wood office furniture manufacturing	0	12,749	15,444	41,566
Custom architectural woodwork and millwork	0	21,234	20,568	58,803
Office furniture, except wood, manufacturing	0	29,082	38,650	104,106
Showcase, partition, shelving, and locker manufacturing	1	52,312	63,851	194,027
Mattress manufacturing	2	104,598	163,340	723,813
Blind and shade manufacturing	1	49,158	52,083	207,571
Surgical and medical instrument manufacturing	3	248,779	416,005	1,120,192
Surgical appliance and supplies manufacturing	4	384,823	636,108	1,760,814
Dental equipment and supplies manufacturing	0	23,383	34,179	91,109
Ophthalmic goods manufacturing	4	476,730	797,499	1,455,739
Dental laboratories	4	258,557	243,862	412,954
Jewelry and silverware manufacturing	5	221,306	324,117	839,861
Sporting and athletic goods manufacturing	3	165,483	203,445	681,821
Doll, toy, and game manufacturing	1	69,840	88,033	315,198
Office supplies (except paper) manufacturing	1	105,738	128,540	339,804
Sign manufacturing	4	265,622	218,399	514,928
Gasket, packing, and sealing device manufacturing	0	24,624	28,280	85,225
Musical instrument manufacturing	0	9,218	9,390	21,788
Fasteners, buttons, needles, and pins manufacturing	1	56,989	65,552	135,793
Broom, brush, and mop manufacturing	1	58,834	73,604	219,542
Burial casket manufacturing	0	8,007	8,788	17,638

## APPENDIX

All other miscellaneous manufacturing	7	419,910	482,194	1,193,830
Wholesale - Motor vehicle and motor vehicle parts and supplies	22	1,560,211	4,031,277	8,525,613
Wholesale - Professional and commercial equipment and supplies	70	7,721,322	14,170,602	23,827,143
Wholesale - Household appliances and electrical and electronic goods	43	4,277,482	10,766,876	21,239,205
Wholesale - Machinery, equipment, and supplies	55	4,536,280	8,654,945	14,773,864
Wholesale - Other durable goods merchant wholesalers	128	9,769,487	16,654,442	31,248,944
Wholesale - Drugs and druggists' sundries	29	4,120,482	12,795,975	25,085,866
Wholesale - Grocery and related product wholesalers	75	5,769,165	8,203,830	15,157,920
Wholesale - Petroleum and petroleum products	14	1,224,419	22,033,441	24,474,061
Wholesale - Other nondurable goods merchant wholesalers	119	10,231,361	23,087,209	39,368,196
Wholesale - Wholesale electronic markets and agents and brokers	75	6,878,732	3,736,566	4,356,524
Retail - Motor vehicle and parts dealers	106	6,508,487	9,939,207	14,116,997
Retail - Furniture and home furnishings stores	75	3,436,764	4,550,361	7,168,504
Retail - Electronics and appliance stores	74	4,025,275	4,395,888	7,087,855
Retail - Building material and garden equipment and supplies stores	152	6,126,722	11,424,353	16,742,140
Retail - Food and beverage stores	350	9,669,521	14,096,582	24,085,557
Retail - Health and personal care stores	162	6,839,379	8,382,909	12,929,018
Retail - Gasoline stores	109	2,765,701	5,390,887	10,738,217
Retail - Clothing and clothing accessories stores	180	4,820,981	7,759,656	15,801,838
Retail - Sporting goods, hobby, musical instrument and book stores	96	2,669,571	3,658,891	5,744,497
Retail - General merchandise stores	347	10,247,731	14,931,011	24,363,444
Retail - Miscellaneous store retailers	186	4,817,382	5,868,954	9,304,919

## APPENDIX

Retail - Nonstore retailers	204	7,212,997	21,969,813	36,475,347
Air transportation	62	6,793,261	15,952,611	23,868,193
Rail transportation	20	2,746,575	4,022,172	8,868,892
Water transportation	9	861,544	2,296,156	7,131,576
Truck transportation	1,215	56,468,306	69,715,978	177,778,718
Transit and ground passenger transportation	229	2,761,048	3,414,488	6,917,896
Pipeline transportation	2	372,944	1,136,981	1,423,442
Scenic and sightseeing transportation and support activities for transportation	229	15,965,687	17,637,236	36,464,498
Couriers and messengers	165	6,070,547	8,216,262	16,123,206
Warehousing and storage	112	5,254,915	6,019,871	12,570,251
Newspaper publishers	21	1,285,488	1,938,118	2,544,753
Periodical publishers	15	1,298,518	1,823,565	3,039,232
Book publishers	6	571,489	1,577,399	2,819,288
Directory, mailing list, and other publishers	5	307,211	812,713	1,317,640
Greeting card publishing	0	12,022	37,661	54,848
Software publishers	50	7,151,722	15,929,422	19,423,457
Motion picture and video industries	45	2,564,686	4,878,027	10,772,079
Sound recording industries	6	315,787	2,120,592	2,834,647
Radio and television broadcasting	45	14,812,514	13,282,993	23,369,000
Cable and other subscription programming	7	2,377,403	10,870,026	19,428,667
Wired telecommunications carriers	86	8,030,789	21,358,133	42,770,575
Wireless telecommunications carriers (except satellite)	21	1,883,565	12,143,760	33,341,597
Satellite, telecommunications resellers, and all other telecommunications	161	13,068,492	19,871,339	53,920,467
Data processing, hosting, and related services	67	6,540,658	16,288,767	31,745,227
News syndicates, libraries, archives and all other information services	9	604,015	1,052,955	1,642,864
Internet publishing and broadcasting and web search portals	24	3,007,699	9,408,782	23,420,361
Nondepository credit intermediation and related activities	165	12,461,315	15,313,092	28,957,557
Securities and commodity contracts intermediation and brokerage	118	19,104,332	19,263,608	34,344,929

## APPENDIX

Monetary authorities and depository credit intermediation	245	22,846,367	37,276,794	76,027,696
Other financial investment activities	378	8,789,497	10,511,354	42,331,212
Direct life insurance carriers	27	3,552,177	6,443,583	9,643,127
Insurance carriers, except direct life	158	16,057,065	47,198,643	108,106,912
Insurance agencies, brokerages, and related activities	322	20,741,086	30,825,161	73,810,709
Funds, trusts, and other financial vehicles	81	1,954,737	3,673,492	25,056,960
Other real estate	1,498	26,314,962	94,070,726	266,059,954
Tenant-occupied housing	98	1,817,284	35,198,631	39,159,866
Owner-occupied dwellings	0	0	129,774,508	163,968,564
Automotive equipment rental and leasing	43	1,977,209	7,790,172	11,457,942
General and consumer goods rental except video tapes and discs	56	2,493,673	3,716,917	6,293,335
Video tape and disc rental	12	495,367	849,790	1,377,863
Commercial and industrial machinery and equipment rental and leasing	54	3,986,104	11,817,920	18,073,020
Lessors of nonfinancial intangible assets	6	718,610	10,850,752	13,029,130
Legal services	387	38,380,440	61,758,137	87,698,886
Accounting, tax preparation, bookkeeping, and payroll services	249	17,611,487	26,132,912	35,784,310
Architectural, engineering, and related services	348	27,761,070	34,638,712	62,547,842
Specialized design services	56	2,807,947	3,003,267	3,920,868
Custom computer programming services	83	7,442,373	8,511,462	12,734,071
Computer systems design services	72	7,216,566	7,596,052	10,245,811
Other computer related services, including facilities management	48	4,576,362	6,958,746	12,795,556
Management consulting services	585	45,194,975	45,004,335	72,180,344
Environmental and other technical consulting services	82	5,628,554	5,060,121	7,747,528
Scientific research and development services	3,342	284,765,124	395,239,883	817,097,021
Advertising, public relations, and related services	147	10,271,894	15,668,671	26,850,218
Photographic services	40	1,507,964	659,570	1,413,539
Veterinary services	28	1,265,827	1,981,560	3,012,123

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	2,588	143,014,986	129,198,358	196,184,493
Management of companies and enterprises	579	58,742,493	68,340,856	105,079,951
Office administrative services	195	11,193,073	4,781,869	12,089,467
Facilities support services	523	34,132,373	46,458,568	90,853,694
Employment services	963	40,966,623	66,137,925	101,047,572
Business support services	227	9,670,667	8,341,151	14,901,758
Travel arrangement and reservation services	43	2,607,063	3,625,481	8,233,934
Investigation and security services	189	6,871,119	7,019,871	10,416,735
Services to buildings	727	17,625,739	18,252,020	31,461,273
Landscape and horticultural services	202	6,485,815	6,836,489	11,634,224
Other support services	65	2,682,815	3,440,332	6,989,268
Waste management and remediation services	53	3,448,961	6,645,660	11,563,557
Elementary and secondary schools	102	4,255,793	3,976,425	4,887,395
Junior colleges, colleges, universities, and professional schools	88	4,312,537	6,429,662	8,881,616
Other educational services	138	4,233,177	4,082,170	7,375,694
Offices of physicians	363	36,149,408	43,414,729	64,744,263
Offices of dentists	106	6,758,145	8,759,462	13,263,806
Offices of other health practitioners	163	8,095,341	7,485,157	11,071,204
Outpatient care centers	117	6,943,164	7,315,627	14,295,532
Medical and diagnostic laboratories	41	2,791,374	4,451,229	7,347,476
Home health care services	257	10,542,855	8,176,008	11,440,592
Other ambulatory health care services	40	2,087,981	2,311,517	4,002,528
Hospitals	634	46,895,531	55,485,704	107,746,513
Nursing and community care facilities	245	9,287,959	10,561,732	18,626,419
Residential mental retardation, mental health, substance abuse and other facilities	65	2,568,894	2,721,924	4,158,037
Individual and family services	154	5,216,226	4,697,721	6,685,167
Child day care services	163	3,984,177	4,669,100	6,515,784
Community food, housing, and other relief services, including rehabilitation services	35	1,220,642	1,343,760	3,045,945
Performing arts companies	33	967,247	1,813,529	3,348,665

## APPENDIX

Commercial Sports Except Racing	35	3,536,779	4,010,058	5,485,217
Racing and Track Operation	6	215,572	548,412	799,965
Independent artists, writers, and performers	176	1,022,422	2,373,861	3,447,290
Promoters of performing arts and sports and agents for public figures	42	1,041,403	3,135,331	7,015,670
Museums, historical sites, zoos, and parks	7	267,685	345,001	610,074
Amusement parks and arcades	16	695,785	1,155,765	1,487,384
Gambling industries (except casino hotels)	56	2,332,636	4,706,013	7,735,354
Other amusement and recreation industries	77	2,248,656	2,439,907	4,198,910
Fitness and recreational sports centers	74	1,249,444	1,713,908	2,987,799
Bowling centers	8	195,848	300,064	509,974
Hotels and motels, including casino hotels	350	13,722,046	27,573,124	41,756,148
Other accommodations	49	2,355,092	3,207,802	4,227,618
Full-service restaurants	794	21,377,463	31,723,823	53,507,138
Limited-service restaurants	562	11,546,844	18,830,940	41,068,537
All other food and drinking places	366	10,054,061	15,097,688	22,611,897
Automotive repair and maintenance, except car washes	267	13,276,760	17,092,525	25,364,915
Car washes	112	5,695,163	8,658,937	12,986,248
Electronic and precision equipment repair and maintenance	199	12,819,805	19,205,301	31,313,869
Commercial and industrial machinery and equipment repair and maintenance	98	7,193,096	8,898,572	13,722,934
Personal and household goods repair and maintenance	163	6,431,370	3,515,263	5,880,084
Personal care services	223	5,746,393	4,663,680	6,269,489
Death care services	13	563,419	733,658	1,150,580
Dry-cleaning and laundry services	39	1,370,675	1,548,478	2,267,776
Other personal services	208	5,431,133	4,228,692	6,067,460
Religious organizations	54	2,857,078	1,473,457	5,113,597
Grantmaking, giving, and social advocacy organizations	15	786,733	2,410,144	3,694,826
Business and professional associations	28	1,970,485	3,061,797	5,298,982
Labor and civic organizations	47	1,697,873	4,215,611	6,599,944
Private households	103	2,029,556	2,029,556	2,029,556
Postal service	78	7,272,786	7,276,130	7,999,975
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	12	463,842	497,216	2,621,714
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	12	1,835,422	2,364,214	3,709,112
Local government passenger transit	25	2,360,449	143,603	2,271,686
Local government electric utilities	16	1,644,289	5,431,277	9,992,315
Other local government enterprises	81	6,026,880	14,495,865	27,409,324
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2,062	322,851,061	424,099,516	879,606,595

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 390: Detailed M2M Program Impacts by Types of Impact, Florida.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>10,870</i>	<i>744,350,312</i>	<i>1,088,662,099</i>	<i>2,013,857,849</i>
Oilseed farming	0	6,558	21,517	34,293
Grain farming	1	33,736	85,889	212,326
Vegetable and melon farming	8	306,799	526,841	1,128,641
Fruit farming	14	437,640	805,513	1,424,209
Tree nut farming	0	11,185	11,810	17,784

## APPENDIX

Greenhouse, nursery, and floriculture production	7	249,587	359,642	742,089
Tobacco farming	0	10,810	13,337	25,504
Cotton farming	0	3,483	4,998	10,110
Sugarcane and sugar beet farming	1	54,658	90,602	188,410
All other crop farming	14	149,252	205,846	420,658
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	5	100,477	239,650	763,237
Dairy cattle and milk production	2	71,361	125,243	756,010
Poultry and egg production	1	22,083	34,250	390,883
Animal production, except cattle and poultry and eggs	7	218,778	588,277	916,702
Forestry, forest products, and timber tract production	1	47,196	51,093	66,487
Commercial logging	5	294,018	307,468	466,269
Commercial fishing	3	139,916	186,739	207,920
Commercial hunting and trapping	0	23,455	50,022	47,747
Support activities for agriculture and forestry	26	969,367	942,699	1,135,686
Oil and gas extraction	11	63,255	46,289	2,726,962
Coal mining	1	32	17,384	132,880
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	7,785	39,826	55,567
Gold ore mining	0	628	3,087	11,297
Silver ore mining	0	2,724	7,961	18,929
Uranium-radium-vanadium ore mining	0	(15,092)	585,633	83,069
Other metal ore mining	0	5,821	16,196	25,716
Stone mining and quarrying	2	198,897	438,550	660,677
Sand and gravel mining	1	179,713	207,462	281,605
Other clay, ceramic, refractory minerals mining	0	14,156	24,857	35,303
Potash, soda, and borate mineral mining	0	1,867	3,539	6,118
Phosphate rock mining	0	15,036	25,251	46,417
Other chemical and fertilizer mineral mining	0	444	983	1,526
Other nonmetallic minerals	0	61,901	70,655	93,107
Drilling oil and gas wells	0	17	17	372
Support activities for oil and gas operations	0	263	238	2,697
Metal mining services	0	2,439	2,663	83,421



## APPENDIX

Other nonmetallic minerals services	0	151	168	4,455
Electric power generation - Hydroelectric	0	4,392	15,411	16,717
Electric power generation - Fossil fuel	7	1,015,183	5,162,443	10,845,118
Electric power generation - Nuclear	1	273,905	845,421	1,517,984
Electric power generation - Solar	1	79,444	166,564	292,306
Electric power generation - Wind	0	11,917	62,951	141,731
Electric power generation - Geothermal	0	26,494	72,914	125,179
Electric power generation - Biomass	1	60,140	131,215	342,779
Electric power generation - All other	1	55,970	54,962	142,289
Electric power transmission and distribution	12	1,753,742	9,128,518	18,695,504
Natural gas distribution	1	163,482	666,152	1,200,650
Water, sewage and other systems	3	247,830	516,778	812,978
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	938	59,955,613	37,926,137	80,841,666
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	40	2,282,966	3,453,255	8,026,157

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Maintenance and repair construction of residential structures	16	889,390	1,511,969	3,449,212
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	3,419	2,705	6,022
Dog and cat food manufacturing	0	10,447	42,075	261,430
Other animal food manufacturing	1	101,830	208,299	1,461,349
Flour milling	0	24,874	48,674	308,770
Rice milling	0	2,498	4,030	34,742
Malt manufacturing	0	984	2,461	30,743
Wet corn milling	0	115	519	31,203
Soybean and other oilseed processing	0	2,367	13,938	421,346
Fats and oils refining and blending	0	3,183	6,424	77,257
Breakfast cereal manufacturing	0	3,192	7,814	44,445
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	1	50,376	114,448	557,495
Nonchocolate confectionery manufacturing	0	19,966	29,070	183,517
Chocolate and confectionery manufacturing from cacao beans	0	9,681	21,261	145,131
Confectionery manufacturing from purchased chocolate	0	15,730	21,954	132,849
Frozen fruits, juices and vegetables manufacturing	2	168,378	301,163	1,074,239
Frozen specialties manufacturing	1	56,906	84,022	397,152
Canned fruits and vegetables manufacturing	3	222,133	398,031	1,532,934
Canned specialties	0	2,581	6,137	41,668
Dehydrated food products manufacturing	0	1,289	2,464	27,592
Cheese manufacturing	0	3,797	5,395	66,903
Dry, condensed, and evaporated dairy product manufacturing	0	5,475	13,616	186,053
Fluid milk manufacturing	1	82,293	131,524	980,605
Creamery butter manufacturing	0	1,060	4,050	30,255
Ice cream and frozen dessert manufacturing	1	21,429	34,567	232,804
Frozen cakes and other pastries manufacturing	8	225,526	328,433	642,020
Poultry processing	1	61,691	84,132	405,636
Animal, except poultry, slaughtering	1	52,411	72,665	566,073
Meat processed from carcasses	2	120,324	142,763	1,078,070

## APPENDIX

Rendering and meat byproduct processing	1	38,458	43,385	202,822
Seafood product preparation and packaging	2	104,238	130,324	701,274
Bread and bakery product, except frozen, manufacturing	17	561,725	775,307	2,166,035
Cookie and cracker manufacturing	2	103,089	150,994	545,687
Dry pasta, mixes, and dough manufacturing	0	12,199	27,722	154,236
Tortilla manufacturing	0	23,652	28,312	107,757
Roasted nuts and peanut butter manufacturing	1	54,348	80,888	326,077
Other snack food manufacturing	1	83,431	143,170	660,523
Coffee and tea manufacturing	1	21,308	40,678	313,804
Flavoring syrup and concentrate manufacturing	0	71,246	486,127	1,415,054
Mayonnaise, dressing, and sauce manufacturing	0	37,230	67,844	281,815
Spice and extract manufacturing	1	62,162	95,347	478,302
All other food manufacturing	3	154,859	209,407	1,137,544
Bottled and canned soft drinks & water	4	275,772	562,346	2,898,050
Manufactured ice	0	14,476	7,470	31,587
Breweries	2	166,975	381,509	1,131,634
Wineries	0	14,706	23,038	96,194
Distilleries	1	72,284	294,133	692,246
Tobacco product manufacturing	1	184,578	3,856,038	5,657,896
Fiber, yarn, and thread mills	0	2,282	4,266	29,400
Broadwoven fabric mills	0	1,237	2,105	11,934
Narrow fabric mills and schiffli machine embroidery	0	10,794	12,153	39,392
Nonwoven fabric mills	0	15,722	26,216	85,310
Knit fabric mills	0	1,752	2,266	6,971
Textile and fabric finishing mills	1	32,802	40,555	156,956
Fabric coating mills	0	2,376	2,958	19,005
Carpet and rug mills	0	12,989	22,207	103,666
Curtain and linen mills	1	25,036	35,831	135,682
Textile bag and canvas mills	1	59,616	72,397	208,744
Rope, cordage, twine, tire cord and tire fabric mills	0	4,100	6,204	17,545
Other textile product mills	1	59,778	72,203	179,215
Hosiery and sock mills	0	3,932	6,908	15,862
Other apparel knitting mills	0	7,667	11,556	29,864
Cut and sew apparel contractors	2	54,923	59,614	113,690

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Mens and boys cut and sew apparel manufacturing	1	31,512	41,798	135,668
Womens and girls cut and sew apparel manufacturing	1	27,039	40,373	185,194
Other cut and sew apparel manufacturing	1	13,096	18,707	62,833
Apparel accessories and other apparel manufacturing	1	13,474	18,693	58,450
Leather and hide tanning and finishing	0	1,471	2,546	12,900
Footwear manufacturing	0	3,462	4,213	22,495
Other leather and allied product manufacturing	0	10,249	10,893	33,951
Sawmills	4	258,185	360,190	1,260,692
Wood preservation	1	30,596	82,416	323,899
Veneer and plywood manufacturing	1	68,308	92,703	293,722
Engineered wood member and truss manufacturing	3	160,620	211,569	662,127
Reconstituted wood product manufacturing	0	69,087	150,710	336,272
Wood windows and door manufacturing	2	120,455	156,092	451,571
Cut stock, resawing lumber, and planing	0	11,488	17,361	57,939
Other millwork, including flooring	2	126,315	168,783	453,510
Wood container and pallet manufacturing	1	67,623	77,852	217,325
Manufactured home (mobile home) manufacturing	0	945	1,553	4,378
Prefabricated wood building manufacturing	1	37,303	42,613	128,909
All other miscellaneous wood product manufacturing	1	72,259	85,479	230,170
Pulp mills	0	16,346	27,786	106,644
Paper mills	1	150,585	354,245	1,182,679
Paperboard mills	1	56,550	145,225	496,601
Paperboard container manufacturing	4	342,641	539,508	2,103,410
Paper bag and coated and treated paper manufacturing	1	60,579	109,506	401,162
Stationery product manufacturing	0	27,611	39,210	120,289
Sanitary paper product manufacturing	2	156,484	498,125	1,574,399

## APPENDIX

All other converted paper product manufacturing	0	24,251	36,359	104,667
Printing	22	1,156,936	1,731,025	3,624,696
Support activities for printing	2	96,390	141,529	240,427
Petroleum refineries	0	15,720	176,375	1,369,842
Asphalt paving mixture and block manufacturing	1	70,547	145,408	523,304
Asphalt shingle and coating materials manufacturing	0	45,048	206,547	411,017
Petroleum lubricating oil and grease manufacturing	4	347,070	2,011,468	4,759,411
All other petroleum and coal products manufacturing	0	2,125	8,378	24,824
Petrochemical manufacturing	0	3,107	26,786	154,066
Industrial gas manufacturing	1	85,462	234,087	645,113
Synthetic dye and pigment manufacturing	0	2,726	6,125	22,589
Other basic inorganic chemical manufacturing	0	32,505	76,123	239,072
Other basic organic chemical manufacturing	1	55,125	117,218	980,162
Plastics material and resin manufacturing	1	99,250	170,035	1,099,018
Synthetic rubber manufacturing	0	17,278	28,457	159,383
Artificial and synthetic fibers and filaments manufacturing	0	4,476	6,750	38,927
Nitrogenous fertilizer manufacturing	0	37,031	94,370	445,959
Phosphatic fertilizer manufacturing	1	94,794	252,284	829,536
Fertilizer mixing	1	62,595	122,310	359,611
Pesticide and other agricultural chemical manufacturing	0	16,894	57,127	477,273
Medicinal and botanical manufacturing	1	44,638	86,216	295,822
Pharmaceutical preparation manufacturing	4	436,705	1,844,485	5,402,206
In-vitro diagnostic substance manufacturing	0	4,016	6,399	19,698
Biological product (except diagnostic) manufacturing	0	14,164	36,964	71,774
Paint and coating manufacturing	1	119,397	250,417	1,052,365
Adhesive manufacturing	1	57,813	104,607	391,017
Soap and other detergent manufacturing	1	72,221	293,796	1,251,472

## APPENDIX

Polish and other sanitation good manufacturing	1	69,589	156,803	634,044
Surface active agent manufacturing	0	11,432	42,975	114,571
Toilet preparation manufacturing	2	183,250	664,366	1,865,471
Printing ink manufacturing	0	24,268	26,387	120,738
Explosives manufacturing	0	21,153	24,602	67,694
Custom compounding of purchased resins	0	7,495	15,421	102,844
Photographic film and chemical manufacturing	0	22,236	54,507	238,198
Other miscellaneous chemical product manufacturing	1	72,269	118,341	530,372
Plastics packaging materials and unlaminated film and sheet manufacturing	1	96,071	156,791	575,726
Unlaminated plastics profile shape manufacturing	1	109,367	239,775	618,718
Plastics pipe and pipe fitting manufacturing	1	94,023	226,924	702,016
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	12,524	22,467	75,420
Polystyrene foam product manufacturing	2	95,985	160,265	559,056
Urethane and other foam product (except polystyrene) manufacturing	1	44,928	70,852	273,595
Plastics bottle manufacturing	1	100,533	167,602	581,148
Other plastics product manufacturing	7	424,786	618,975	1,946,482
Tire manufacturing	0	23,951	34,069	155,343
Rubber and plastics hoses and belting manufacturing	0	29,571	45,318	122,730
Other rubber product manufacturing	2	164,594	243,252	785,812
Pottery, ceramics, and plumbing fixture manufacturing	0	13,094	17,075	54,178
Brick, tile, and other structural clay product manufacturing	1	30,142	58,141	149,230
Flat glass manufacturing	1	44,127	102,874	286,914
Other pressed and blown glass and glassware manufacturing	0	13,697	21,986	55,886
Glass container manufacturing	0	27,597	52,902	137,050
Glass product manufacturing made of purchased glass	2	81,309	154,025	419,038

## APPENDIX

Cement manufacturing	1	76,942	215,907	577,004
Ready-mix concrete manufacturing	5	415,228	783,437	2,314,929
Concrete block and brick manufacturing	2	160,173	329,926	808,990
Concrete pipe manufacturing	2	125,942	228,765	561,971
Other concrete product manufacturing	8	517,073	818,458	1,953,902
Lime manufacturing	0	1,726	5,342	13,664
Gypsum product manufacturing	2	148,607	474,031	1,147,576
Abrasive product manufacturing	0	4,693	16,428	33,425
Cut stone and stone product manufacturing	1	44,032	54,583	125,913
Ground or treated mineral and earth manufacturing	0	13,492	48,587	90,066
Mineral wool manufacturing	0	37,909	103,020	209,754
Miscellaneous nonmetallic mineral products manufacturing	2	127,083	353,633	770,912
Iron and steel mills and ferroalloy manufacturing	1	53,863	253,869	774,105
Iron, steel pipe and tube manufacturing from purchased steel	0	22,096	78,863	180,145
Rolled steel shape manufacturing	0	4,984	42,681	115,177
Steel wire drawing	0	20,837	72,402	183,838
Alumina refining and primary aluminum production	0	(405)	14,055	63,836
Secondary smelting and alloying of aluminum	0	7,647	36,416	205,501
Aluminum sheet, plate, and foil manufacturing	0	(7,599)	31,392	120,665
Other aluminum rolling, drawing and extruding	1	37,974	101,693	302,465
Nonferrous metal (exc aluminum) smelting and refining	0	(207)	11,520	16,996
Copper rolling, drawing, extruding and alloying	0	(7,122)	21,690	203,006
Nonferrous metal, except copper and aluminum, shaping	0	8,306	25,327	69,460
Secondary processing of other nonferrous metals	0	5,133	66,466	156,803
Ferrous metal foundries	1	42,433	229,957	367,864
Nonferrous metal foundries	0	13,693	79,490	143,411
Custom roll forming	0	4,653	7,341	41,595
Crown and closure manufacturing and metal stamping	2	105,554	154,848	429,619

## APPENDIX

Iron and steel forging	0	22,380	30,708	114,952
Nonferrous forging	0	14,505	18,568	57,315
Cutlery, utensil, pot, and pan manufacturing	0	7,344	22,933	70,545
Handtool manufacturing	1	50,785	83,673	152,028
Prefabricated metal buildings and components manufacturing	5	322,430	473,226	1,392,217
Fabricated structural metal manufacturing	4	300,202	454,952	1,399,060
Plate work manufacturing	1	69,276	72,445	199,056
Metal window and door manufacturing	5	335,335	526,067	1,338,908
Sheet metal work manufacturing	3	204,845	268,483	706,177
Ornamental and architectural metal work manufacturing	4	224,955	304,625	794,300
Power boiler and heat exchanger manufacturing	0	2,018	2,913	8,965
Metal tank (heavy gauge) manufacturing	1	91,212	113,556	312,323
Metal cans manufacturing	1	49,196	114,634	435,580
Metal barrels, drums and pails manufacturing	0	17,800	22,742	97,965
Hardware manufacturing	1	37,944	63,873	191,426
Spring and wire product manufacturing	1	54,014	73,999	216,832
Machine shops	6	380,579	445,062	891,721
Turned product and screw, nut, and bolt manufacturing	1	52,523	74,070	207,921
Metal heat treating	0	28,812	45,109	105,431
Metal coating and nonprecious engraving	2	104,342	185,825	432,500
Electroplating, anodizing, and coloring metal	2	98,509	111,311	253,417
Valve and fittings, other than plumbing, manufacturing	2	142,016	232,511	599,416
Plumbing fixture fitting and trim manufacturing	0	25,335	80,877	242,299
Ball and roller bearing manufacturing	0	11,441	21,341	47,787
Small arms ammunition manufacturing	0	26,625	63,484	129,687
Ammunition, except for small arms, manufacturing	0	737	944	2,663
Small arms, ordnance, and accessories manufacturing	0	30,926	77,035	176,454



## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	29,004	34,317	93,779
Other fabricated metal manufacturing	3	185,671	248,606	647,155
Farm machinery and equipment manufacturing	0	2,492	3,500	16,970
Lawn and garden equipment manufacturing	0	7,090	10,978	93,873
Construction machinery manufacturing	0	5,572	9,253	36,916
Mining machinery and equipment manufacturing	0	940	1,050	3,146
Oil and gas field machinery and equipment manufacturing	0	89	107	692
Semiconductor machinery manufacturing	0	799	869	3,147
Food product machinery manufacturing	0	1,454	1,650	4,896
Sawmill, woodworking, and paper machinery	0	1,859	2,038	6,469
Printing machinery and equipment manufacturing	0	2,877	3,137	9,540
All other industrial machinery manufacturing	1	43,266	58,377	153,578
Optical instrument and lens manufacturing	0	8,807	11,889	31,889
Photographic and photocopying equipment manufacturing	0	1,293	1,636	7,175
Other commercial service industry machinery manufacturing	2	163,903	270,842	710,578
Air purification and ventilation equipment manufacturing	0	30,405	39,574	122,656
Heating equipment (except warm air furnaces) manufacturing	0	23,210	30,237	94,642
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	76,639	118,540	487,606
Industrial mold manufacturing	0	10,628	11,531	25,042
Special tool, die, jig, and fixture manufacturing	0	2,938	3,345	7,947
Cutting tool and machine tool accessory manufacturing	0	5,403	5,699	15,175
Machine tool manufacturing	0	4,826	5,221	17,225

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	725	810	2,494
Turbine and turbine generator set units manufacturing	0	3,825	4,844	19,402
Speed changer, industrial high-speed drive, and gear manufacturing	1	38,580	49,398	160,239
Mechanical power transmission equipment manufacturing	0	14,135	16,629	40,538
Other engine equipment manufacturing	1	56,366	103,112	566,400
Pump and pumping equipment manufacturing	0	29,208	46,145	140,319
Air and gas compressor manufacturing	0	47,596	80,222	240,009
Elevator and moving stairway manufacturing	0	1,958	2,757	11,527
Conveyor and conveying equipment manufacturing	0	1,201	1,265	4,232
Overhead cranes, hoists, and monorail systems manufacturing	0	31,696	51,534	188,477
Industrial truck, trailer, and stacker manufacturing	0	5,247	6,909	25,391
Power-driven handtool manufacturing	0	1,119	2,166	9,963
Welding and soldering equipment manufacturing	0	11,569	14,555	60,969
Packaging machinery manufacturing	0	11,406	14,189	37,384
Industrial process furnace and oven manufacturing	0	202	225	875
Fluid power cylinder and actuator manufacturing	0	2,813	3,464	11,717
Fluid power pump and motor manufacturing	0	20,132	27,616	91,491
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	10,619	12,556	40,886
Electronic computer manufacturing	0	10,145	25,296	103,121
Computer storage device manufacturing	0	80	836	15,499
Computer terminals and other computer peripheral equipment manufacturing	11	1,540,613	3,050,901	7,447,847

## APPENDIX

Telephone apparatus manufacturing	0	12,761	25,986	85,370
Broadcast and wireless communications equipment manufacturing	0	14,321	21,666	48,291
Other communications equipment manufacturing	0	33,838	57,148	139,853
Audio and video equipment manufacturing	0	12,072	24,457	111,755
Printed circuit assembly (electronic assembly) manufacturing	1	64,517	106,806	393,906
Bare printed circuit board manufacturing	1	130,324	173,730	341,559
Semiconductor and related device manufacturing	4	491,315	907,935	2,471,022
Capacitor, resistor, coil, transformer, and other inductor manufacturing	1	35,490	52,751	144,302
Electronic connector manufacturing	2	158,144	249,852	646,654
Other electronic component manufacturing	1	92,741	109,584	343,514
Electromedical and electrotherapeutic apparatus manufacturing	0	11,048	25,187	61,246
Search, detection, and navigation instruments manufacturing	0	52,773	92,272	182,235
Automatic environmental control manufacturing	1	68,939	99,293	254,165
Industrial process variable instruments manufacturing	0	12,004	18,582	45,206
Totalizing fluid meter and counting device manufacturing	0	4,829	11,797	33,103
Electricity and signal testing instruments manufacturing	0	2,359	3,673	10,546
Analytical laboratory instrument manufacturing	0	29,899	60,180	133,759
Irradiation apparatus manufacturing	0	680	1,510	3,617
Watch, clock, and other measuring and controlling device manufacturing	0	12,429	22,876	51,546
Blank magnetic and optical recording media manufacturing	0	217	2,213	23,204

## APPENDIX

Software and other prerecorded and record reproducing	1	58,058	93,393	174,064
Electric lamp bulb and part manufacturing	0	8,216	13,876	44,852
Lighting fixture manufacturing	2	138,738	203,941	653,530
Small electrical appliance manufacturing	0	4,808	9,646	39,599
Household cooking appliance manufacturing	0	1,187	3,819	22,530
Household refrigerator and home freezer manufacturing	0	1,007	4,447	29,612
Household laundry equipment manufacturing	0	2,242	5,946	42,941
Other major household appliance manufacturing	0	404	2,265	17,934
Power, distribution, and specialty transformer manufacturing	0	21,539	31,483	85,711
Motor and generator manufacturing	0	19,963	29,436	112,147
Switchgear and switchboard apparatus manufacturing	1	109,376	173,695	469,040
Relay and industrial control manufacturing	1	54,696	72,046	197,572
Storage battery manufacturing	1	92,520	133,901	358,436
Primary battery manufacturing	1	48,057	81,018	233,209
Fiber optic cable manufacturing	1	35,350	57,161	382,773
Other communication and energy wire manufacturing	0	35,936	60,003	241,308
Wiring device manufacturing	1	73,581	137,389	413,648
Carbon and graphite product manufacturing	0	14,093	19,511	43,806
All other miscellaneous electrical equipment and component manufacturing	0	11,576	13,421	51,499
Automobile manufacturing	0	1,083	1,826	26,232
Light truck and utility vehicle manufacturing	0	1,126	2,098	23,629
Heavy duty truck manufacturing	0	2,614	4,562	33,123
Motor vehicle body manufacturing	0	4,250	4,912	19,869
Truck trailer manufacturing	0	203	217	1,124
Motor home manufacturing	0	13,283	19,030	81,560
Travel trailer and camper manufacturing	1	86,856	92,501	421,319
Motor vehicle gasoline engine and engine parts manufacturing	0	21,511	25,849	159,190

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	41,892	51,921	241,696
Motor vehicle transmission and power train parts manufacturing	0	24,380	31,127	185,899
Motor vehicle seating and interior trim manufacturing	0	3,098	3,615	19,775
Motor vehicle metal stamping	0	8,739	10,141	49,231
Other motor vehicle parts manufacturing	1	91,059	98,789	682,529
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	1	58,772	77,484	366,721
Aircraft manufacturing	0	3,531	6,277	21,378
Aircraft engine and engine parts manufacturing	0	52,795	97,314	265,149
Other aircraft parts and auxiliary equipment manufacturing	0	23,148	33,197	87,256
Guided missile and space vehicle manufacturing	0	12,545	15,095	36,887
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	4,582	5,665	11,409
Railroad rolling stock manufacturing	0	454	628	3,066
Ship building and repairing	0	30,510	36,597	101,185
Boat building	4	240,980	309,583	1,074,529
Motorcycle, bicycle, and parts manufacturing	0	13,082	29,796	130,060
Military armored vehicle, tank, and tank component manufacturing	0	25,607	44,849	128,027
All other transportation equipment manufacturing	1	53,457	92,457	371,907
Wood kitchen cabinet and countertop manufacturing	5	239,226	261,642	622,039
Upholstered household furniture manufacturing	1	58,950	72,419	251,059
Nonupholstered wood household furniture manufacturing	1	48,102	50,123	122,892
Other household nonupholstered furniture manufacturing	1	41,424	54,548	205,495
Institutional furniture manufacturing	0	2,943	3,135	8,825
Wood office furniture manufacturing	0	4,273	5,405	14,385

## APPENDIX

Custom architectural woodwork and millwork	0	8,076	7,758	21,401
Office furniture, except wood, manufacturing	0	9,844	12,884	36,394
Showcase, partition, shelving, and locker manufacturing	0	19,694	22,176	69,715
Mattress manufacturing	1	37,127	51,385	248,347
Blind and shade manufacturing	0	14,240	14,923	65,054
Surgical and medical instrument manufacturing	1	102,822	166,996	423,248
Surgical appliance and supplies manufacturing	2	192,709	322,734	835,966
Dental equipment and supplies manufacturing	0	11,457	16,379	41,607
Ophthalmic goods manufacturing	2	200,723	343,603	628,535
Dental laboratories	2	122,573	115,648	192,584
Jewelry and silverware manufacturing	2	88,927	128,229	319,384
Sporting and athletic goods manufacturing	1	60,661	72,503	236,102
Doll, toy, and game manufacturing	0	33,420	39,507	126,175
Office supplies (except paper) manufacturing	1	52,225	64,003	154,329
Sign manufacturing	1	74,280	62,558	137,479
Gasket, packing, and sealing device manufacturing	0	8,031	9,047	26,686
Musical instrument manufacturing	0	7,414	7,510	13,468
Fasteners, buttons, needles, and pins manufacturing	0	26,915	30,823	57,520
Broom, brush, and mop manufacturing	0	25,024	35,816	87,023
Burial casket manufacturing	0	1,899	2,090	4,100
All other miscellaneous manufacturing	2	150,182	171,298	409,723
Wholesale - Motor vehicle and motor vehicle parts and supplies	7	502,564	1,297,908	2,744,956
Wholesale - Professional and commercial equipment and supplies	25	2,970,129	5,459,600	8,974,333
Wholesale - Household appliances and electrical and electronic goods	14	1,465,427	3,686,959	7,172,574
Wholesale - Machinery, equipment, and supplies	18	1,504,261	2,881,597	4,895,276
Wholesale - Other durable goods merchant wholesalers	45	3,511,459	5,991,308	11,148,459

## APPENDIX

Wholesale - Drugs and druggists' sundries	10	1,446,216	4,419,512	8,462,435
Wholesale - Grocery and related product wholesalers	25	1,943,075	2,740,069	5,062,368
Wholesale - Petroleum and petroleum products	3	264,677	5,480,430	5,981,825
Wholesale - Other nondurable goods merchant wholesalers	40	3,497,898	8,150,737	13,620,605
Wholesale - Wholesale electronic markets and agents and brokers	25	2,413,738	1,243,552	1,449,913
Retail - Motor vehicle and parts dealers	33	2,083,537	3,200,030	4,507,563
Retail - Furniture and home furnishings stores	25	1,178,593	1,559,866	2,416,490
Retail - Electronics and appliance stores	24	1,365,894	1,497,437	2,367,711
Retail - Building material and garden equipment and supplies stores	53	2,253,179	4,210,673	6,083,697
Retail - Food and beverage stores	116	3,463,158	4,994,849	8,331,912
Retail - Health and personal care stores	53	2,257,571	2,783,966	4,278,749
Retail - Gasoline stores	22	703,162	1,261,495	2,350,248
Retail - Clothing and clothing accessories stores	60	1,703,451	2,720,130	5,376,663
Retail - Sporting goods, hobby, musical instrument and book stores	31	895,380	1,230,738	1,896,488
Retail - General merchandise stores	108	3,229,181	4,740,424	7,679,305
Retail - Miscellaneous store retailers	59	1,696,666	2,047,626	3,133,946
Retail - Nonstore retailers	66	2,556,119	7,881,332	12,453,409
Air transportation	20	2,312,056	5,566,929	8,201,193
Rail transportation	5	716,641	926,404	2,179,405
Water transportation	4	404,162	1,048,894	3,181,760
Truck transportation	76	3,894,208	4,662,903	11,496,749
Transit and ground passenger transportation	93	1,298,725	1,621,887	3,077,321
Pipeline transportation	0	73,496	244,001	312,046
Scenic and sightseeing transportation and support activities for transportation	55	3,775,261	4,223,036	8,733,962
Couriers and messengers	40	1,509,511	2,111,609	4,047,995
Warehousing and storage	34	1,651,414	1,888,190	3,908,309

## APPENDIX

Newspaper publishers	6	409,897	600,018	776,206
Periodical publishers	5	542,538	747,463	1,148,098
Book publishers	2	198,942	523,739	933,268
Directory, mailing list, and other publishers	1	86,486	232,770	376,126
Greeting card publishing	0	2,992	9,911	14,272
Software publishers	18	3,096,492	6,530,188	7,752,874
Motion picture and video industries	14	1,134,455	2,179,698	3,999,621
Sound recording industries	2	143,591	909,901	1,122,729
Radio and television broadcasting	13	7,233,284	7,092,574	8,451,248
Cable and other subscription programming	2	1,180,477	4,303,549	6,383,376
Wired telecommunications carriers	25	2,634,149	6,518,275	12,693,706
Wireless telecommunications carriers (except satellite)	8	866,428	4,567,893	12,164,749
Satellite, telecommunications resellers, and all other telecommunications	44	4,255,181	6,153,746	15,385,928
Data processing, hosting, and related services	21	2,411,361	5,640,458	10,486,653
News syndicates, libraries, archives and all other information services	3	270,687	469,336	688,674
Internet publishing and broadcasting and web search portals	10	1,723,900	5,141,202	11,048,807
Nondepository credit intermediation and related activities	54	4,637,073	5,775,349	10,282,461
Securities and commodity contracts intermediation and brokerage	37	6,875,160	6,813,155	11,370,714
Monetary authorities and depository credit intermediation	75	7,244,407	12,265,554	24,249,172
Other financial investment activities	124	4,126,725	4,797,788	15,408,335
Direct life insurance carriers	8	1,044,542	1,957,033	2,858,573
Insurance carriers, except direct life	47	4,907,690	14,822,837	32,697,350
Insurance agencies, brokerages, and related activities	95	6,394,248	9,556,536	22,193,996
Funds, trusts, and other financial vehicles	27	802,785	1,481,571	8,541,986
Other real estate	479	10,728,318	38,094,778	93,620,556
Tenant-occupied housing	32	731,567	13,359,988	14,648,858



## APPENDIX

Owner-occupied dwellings	0	0	48,672,230	61,496,789
Automotive equipment rental and leasing	12	785,359	2,547,884	3,593,161
General and consumer goods rental except video tapes and discs	14	795,960	1,114,836	1,769,320
Video tape and disc rental	4	175,787	290,900	459,974
Commercial and industrial machinery and equipment rental and leasing	17	1,577,961	4,023,053	5,975,723
Lessors of nonfinancial intangible assets	2	241,545	3,608,847	4,306,061
Legal services	133	13,701,708	22,948,707	31,782,520
Accounting, tax preparation, bookkeeping, and payroll services	79	6,098,168	9,084,249	12,134,658
Architectural, engineering, and related services	111	9,200,473	11,532,284	20,509,648
Specialized design services	18	1,004,967	1,076,981	1,377,610
Custom computer programming services	21	2,045,902	2,324,136	3,396,854
Computer systems design services	23	2,475,128	2,595,740	3,442,291
Other computer related services, including facilities management	16	1,799,041	2,634,882	4,623,418
Management consulting services	218	18,240,389	18,192,993	28,336,659
Environmental and other technical consulting services	31	2,190,614	1,985,335	2,988,765
Scientific research and development services	1,269	127,023,305	178,694,970	341,436,108
Advertising, public relations, and related services	44	3,419,609	5,191,959	8,493,787
Photographic services	12	501,708	231,104	467,892
Veterinary services	9	439,580	697,845	1,032,571
Marketing research and all other miscellaneous professional, scientific, and technical services	875	50,659,316	45,584,497	68,201,848
Management of companies and enterprises	174	19,326,940	22,692,253	33,807,232
Office administrative services	71	4,733,288	2,060,051	4,716,880
Facilities support services	137	10,369,067	13,967,564	25,432,210
Employment services	291	13,450,534	22,279,088	32,781,505
Business support services	66	2,967,163	2,611,054	4,515,823
Travel arrangement and reservation services	15	960,507	1,346,500	2,936,716
Investigation and security services	59	2,354,983	2,411,867	3,469,941
Services to buildings	177	4,852,074	5,038,654	8,265,973

## APPENDIX

Landscape and horticultural services	62	2,174,922	2,297,136	3,767,661
Other support services	19	803,035	1,032,062	2,081,007
Waste management and remediation services	17	1,170,868	2,270,921	3,895,952
Elementary and secondary schools	41	1,890,742	1,758,716	2,125,940
Junior colleges, colleges, universities, and professional schools	35	2,102,275	3,106,136	4,076,472
Other educational services	49	1,616,942	1,563,898	2,724,292
Offices of physicians	120	12,177,547	14,740,080	21,809,416
Offices of dentists	36	2,387,911	3,127,988	4,670,701
Offices of other health practitioners	55	2,733,315	2,547,669	3,759,496
Outpatient care centers	42	2,585,795	2,735,482	5,265,368
Medical and diagnostic laboratories	13	968,972	1,586,454	2,534,564
Home health care services	89	3,533,535	2,771,681	3,905,278
Other ambulatory health care services	13	731,841	815,105	1,388,598
Hospitals	226	17,659,386	20,807,896	39,430,901
Nursing and community care facilities	82	3,304,860	3,763,883	6,464,979
Residential mental retardation, mental health, substance abuse and other facilities	24	1,027,602	1,089,416	1,630,397
Individual and family services	60	2,040,821	1,870,347	2,645,902
Child day care services	55	1,463,717	1,740,753	2,370,388
Community food, housing, and other relief services, including rehabilitation services	14	509,774	568,206	1,244,708
Performing arts companies	11	399,646	724,975	1,215,028
Commercial Sports Except Racing	11	1,202,902	1,359,458	1,821,312
Racing and Track Operation	2	82,885	200,417	281,244
Independent artists, writers, and performers	55	419,970	950,890	1,319,867
Promoters of performing arts and sports and agents for public figures	14	418,800	1,155,216	2,418,602
Museums, historical sites, zoos, and parks	3	104,061	132,591	227,222
Amusement parks and arcades	6	272,267	394,683	513,288
Gambling industries (except casino hotels)	19	877,745	1,669,192	2,709,425
Other amusement and recreation industries	25	758,334	789,035	1,353,644

## APPENDIX

Fitness and recreational sports centers	26	482,412	618,469	1,063,262
Bowling centers	3	67,791	100,150	168,309
Hotels and motels, including casino hotels	145	6,193,824	11,911,042	17,771,278
Other accommodations	23	1,228,900	1,646,651	2,124,407
Full-service restaurants	260	7,335,756	10,950,535	18,077,525
Limited-service restaurants	188	4,154,553	6,735,494	14,171,537
All other food and drinking places	124	3,767,964	5,565,693	8,101,907
Automotive repair and maintenance, except car washes	73	3,832,028	4,743,445	6,999,933
Car washes	38	1,995,651	3,023,558	4,500,974
Electronic and precision equipment repair and maintenance	28	2,100,461	3,152,146	4,880,208
Commercial and industrial machinery and equipment repair and maintenance	48	3,663,221	4,452,736	6,825,158
Personal and household goods repair and maintenance	48	2,103,954	1,027,578	1,720,556
Personal care services	82	2,203,739	1,636,793	2,224,698
Death care services	5	225,222	277,294	432,637
Dry-cleaning and laundry services	13	470,812	523,680	765,282
Other personal services	75	2,088,657	1,425,932	2,104,357
Religious organizations	22	1,193,326	479,037	1,959,969
Grantmaking, giving, and social advocacy organizations	6	377,980	993,410	1,522,822
Business and professional associations	9	730,398	1,027,193	1,714,244
Labor and civic organizations	18	708,214	1,555,088	2,485,729
Private households	36	807,254	807,254	807,254
Postal service	23	2,168,645	2,169,787	2,380,971
Federal electric utilities	0	0	0	0
Other federal government enterprises	2	103,121	133,799	551,961
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	2	336,612	422,218	622,352
Local government passenger transit	8	934,567	71,681	610,471
Local government electric utilities	5	572,244	1,727,687	3,095,286
Other local government enterprises	26	2,115,742	4,707,946	8,832,079

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	638	100,870,422	131,120,684	271,835,193

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 12. Georgia

**Table 391: Detailed NASA Impacts by Types of Impact, Georgia.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	393	26,471,424	42,262,772	78,621,620
Oilseed farming	0	6,918	8,127	11,314
Grain farming	0	9,553	17,540	36,993
Vegetable and melon farming	0	8,258	13,200	30,052
Fruit farming	0	2,739	4,696	8,540
Tree nut farming	0	3,172	3,445	7,782
Greenhouse, nursery, and floriculture production	0	3,107	4,518	10,963
Tobacco farming	0	734	774	1,550
Cotton farming	0	1,832	2,734	6,257
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	6,142	8,224	19,607
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	6,085	12,194	29,396

## APPENDIX

Dairy cattle and milk production	0	1,923	3,211	16,561
Poultry and egg production	0	5,996	9,071	134,259
Animal production, except cattle and poultry and eggs	0	12,280	17,635	26,749
Forestry, forest products, and timber tract production	0	1,812	1,878	2,527
Commercial logging	0	10,539	10,483	16,865
Commercial fishing	0	1,184	858	945
Commercial hunting and trapping	0	591	2,177	2,504
Support activities for agriculture and forestry	1	31,413	28,930	35,128
Oil and gas extraction	0	8,055	8,712	74,588
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	10,881	18,149	30,495
Sand and gravel mining	0	5,819	7,303	10,457
Other clay, ceramic, refractory minerals mining	0	905	1,275	2,110
Potash, soda, and borate mineral mining	0	118	188	334
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	192	237	335
Other nonmetallic minerals	0	838	945	1,390
Drilling oil and gas wells	0	1	1	7
Support activities for oil and gas operations	0	20	20	75
Metal mining services	0	100	121	995
Other nonmetallic minerals services	0	15	19	115
Electric power generation - Hydroelectric	0	184	642	1,018
Electric power generation - Fossil fuel	0	969	4,067	9,790
Electric power generation - Nuclear	0	29,099	70,608	147,714
Electric power generation - Solar	0	4,501	5,526	12,352
Electric power generation - Wind	0	0	0	0

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	544	1,070	2,925
Electric power generation - All other	0	54	16	33
Electric power transmission and distribution	1	73,344	299,414	730,198
Natural gas distribution	0	21,462	61,896	137,617
Water, sewage and other systems	0	6,696	12,515	22,964
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	5	311,067	449,714	1,076,296
Maintenance and repair construction of residential structures	1	29,784	47,815	113,613
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	77	65	140
Dog and cat food manufacturing	0	4,057	11,871	52,946
Other animal food manufacturing	0	3,006	5,250	43,859
Flour milling	0	1,096	1,818	16,591
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	600	2,433	37,995
Fats and oils refining and blending	0	534	892	9,830
Breakfast cereal manufacturing	0	7,882	15,743	59,926
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	525	986	6,003
Nonchocolate confectionery manufacturing	0	2,682	3,553	15,597
Chocolate and confectionery manufacturing from cacao beans	0	60	100	1,008
Confectionery manufacturing from purchased chocolate	0	1,085	1,350	7,365
Frozen fruits, juices and vegetables manufacturing	0	447	678	3,442
Frozen specialties manufacturing	0	3,077	4,055	19,758
Canned fruits and vegetables manufacturing	0	1,246	1,879	10,925
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	183	278	1,319
Cheese manufacturing	0	1,715	2,299	30,587
Dry, condensed, and evaporated dairy product manufacturing	0	239	465	6,228
Fluid milk manufacturing	0	966	1,357	12,401
Creamery butter manufacturing	0	49	154	1,748
Ice cream and frozen dessert manufacturing	0	451	633	4,818
Frozen cakes and other pastries manufacturing	0	5,499	7,970	15,428
Poultry processing	1	36,469	44,123	251,532
Animal, except poultry, slaughtering	0	5,302	6,975	69,416
Meat processed from carcasses	0	14,146	15,260	114,736
Rendering and meat byproduct processing	0	880	890	4,469
Seafood product preparation and packaging	0	3,308	3,774	20,266
Bread and bakery product, except frozen, manufacturing	0	21,258	26,568	65,471
Cookie and cracker manufacturing	0	7,224	8,975	28,532
Dry pasta, mixes, and dough manufacturing	0	1,390	2,598	12,038
Tortilla manufacturing	0	2,282	2,622	9,397

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	2,101	3,954	15,161
Other snack food manufacturing	0	5,038	9,145	41,166
Coffee and tea manufacturing	0	5,722	8,767	30,705
Flavoring syrup and concentrate manufacturing	0	84,798	418,098	549,676
Mayonnaise, dressing, and sauce manufacturing	0	1,019	1,612	8,270
Spice and extract manufacturing	0	1,771	2,374	12,603
All other food manufacturing	0	5,271	6,509	32,660
Bottled and canned soft drinks & water	0	10,105	16,683	88,561
Manufactured ice	0	554	206	1,302
Breweries	0	10,631	20,649	52,738
Wineries	0	225	290	1,117
Distilleries	0	800	3,064	6,905
Tobacco product manufacturing	0	574	10,628	19,037
Fiber, yarn, and thread mills	0	32,490	48,678	164,707
Broadwoven fabric mills	0	9,274	13,748	43,510
Narrow fabric mills and schiffli machine embroidery	0	387	406	652
Nonwoven fabric mills	0	9,422	16,770	45,885
Knit fabric mills	0	89	108	197
Textile and fabric finishing mills	0	1,866	2,306	6,017
Fabric coating mills	0	252	302	1,132
Carpet and rug mills	0	16,664	30,026	100,999
Curtain and linen mills	0	1,355	1,917	6,061
Textile bag and canvas mills	0	1,140	1,406	3,569
Rope, cordage, twine, tire cord and tire fabric mills	0	2,215	3,709	10,345
Other textile product mills	0	2,705	3,241	7,386
Hosiery and sock mills	0	55	91	260
Other apparel knitting mills	0	55	99	282
Cut and sew apparel contractors	0	267	312	1,117
Mens and boys cut and sew apparel manufacturing	0	945	932	3,727
Womens and girls cut and sew apparel manufacturing	0	483	485	2,935
Other cut and sew apparel manufacturing	0	341	361	1,208
Apparel accessories and other apparel manufacturing	0	61	92	385
Leather and hide tanning and finishing	0	20	21	303



## APPENDIX

Footwear manufacturing	0	311	311	1,057
Other leather and allied product manufacturing	0	19	20	130
Sawmills	0	12,807	20,549	56,838
Wood preservation	0	1,322	5,115	11,782
Veneer and plywood manufacturing	0	4,304	7,147	17,302
Engineered wood member and truss manufacturing	0	1,671	2,496	6,803
Reconstituted wood product manufacturing	0	992	3,168	8,644
Wood windows and door manufacturing	0	12,293	18,334	40,189
Cut stock, resawing lumber, and planing	0	755	1,428	3,422
Other millwork, including flooring	0	4,134	6,354	15,730
Wood container and pallet manufacturing	0	4,376	5,422	12,309
Manufactured home (mobile home) manufacturing	0	8,237	15,538	44,633
Prefabricated wood building manufacturing	0	1,245	1,492	4,145
All other miscellaneous wood product manufacturing	0	1,788	2,247	5,002
Pulp mills	0	1,620	3,079	10,556
Paper mills	0	15,234	45,982	130,914
Paperboard mills	0	11,463	35,628	100,964
Paperboard container manufacturing	0	19,483	33,445	123,077
Paper bag and coated and treated paper manufacturing	0	9,251	19,870	63,655
Stationery product manufacturing	0	1,797	2,827	8,943
Sanitary paper product manufacturing	0	3,739	14,975	38,745
All other converted paper product manufacturing	0	896	1,423	3,969
Printing	1	55,192	94,009	176,588
Support activities for printing	0	4,719	8,124	13,392
Petroleum refineries	0	371	9,450	41,726
Asphalt paving mixture and block manufacturing	0	1,021	3,224	11,868
Asphalt shingle and coating materials manufacturing	0	1,248	9,015	15,929
Petroleum lubricating oil and grease manufacturing	0	29,691	253,722	494,009

## APPENDIX

All other petroleum and coal products manufacturing	0	459	4,336	9,538
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	1,141	2,509	10,367
Synthetic dye and pigment manufacturing	0	1,712	3,237	11,885
Other basic inorganic chemical manufacturing	0	4,257	8,045	25,884
Other basic organic chemical manufacturing	0	1,881	3,524	30,510
Plastics material and resin manufacturing	0	3,466	5,352	36,215
Synthetic rubber manufacturing	0	419	620	3,284
Artificial and synthetic fibers and filaments manufacturing	0	6,082	8,940	59,254
Nitrogenous fertilizer manufacturing	0	1,023	2,072	6,355
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	360	536	2,205
Pesticide and other agricultural chemical manufacturing	0	1,988	5,636	38,409
Medicinal and botanical manufacturing	0	712	1,079	3,651
Pharmaceutical preparation manufacturing	0	5,566	17,803	54,909
In-vitro diagnostic substance manufacturing	0	303	432	1,179
Biological product (except diagnostic) manufacturing	0	790	1,661	4,272
Paint and coating manufacturing	0	6,106	10,003	45,825
Adhesive manufacturing	0	3,055	4,528	17,877
Soap and other detergent manufacturing	0	8,944	22,838	75,425
Polish and other sanitation good manufacturing	0	7,663	12,808	48,733
Surface active agent manufacturing	0	1,871	4,984	12,502
Toilet preparation manufacturing	0	3,451	8,221	26,087
Printing ink manufacturing	0	1,431	1,533	6,066
Explosives manufacturing	0	73	85	393
Custom compounding of purchased resins	0	9,245	15,471	60,694
Photographic film and chemical manufacturing	0	7,834	15,025	52,850
Other miscellaneous chemical product manufacturing	0	8,275	11,627	43,953

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	6,246	14,390	43,688
Unlaminated plastics profile shape manufacturing	0	3,529	11,930	29,152
Plastics pipe and pipe fitting manufacturing	0	832	3,064	7,320
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	544	1,488	3,868
Polystyrene foam product manufacturing	0	4,939	11,498	32,742
Urethane and other foam product (except polystyrene) manufacturing	0	1,193	2,765	9,423
Plastics bottle manufacturing	0	3,462	7,946	27,391
Other plastics product manufacturing	0	25,768	51,120	144,442
Tire manufacturing	0	5,717	9,857	39,593
Rubber and plastics hoses and belting manufacturing	0	3,155	7,037	16,719
Other rubber product manufacturing	0	7,668	15,160	45,764
Pottery, ceramics, and plumbing fixture manufacturing	0	1,214	1,684	3,492
Brick, tile, and other structural clay product manufacturing	0	2,145	4,309	9,104
Flat glass manufacturing	0	494	1,161	2,617
Other pressed and blown glass and glassware manufacturing	0	336	532	1,230
Glass container manufacturing	0	2,271	4,446	11,245
Glass product manufacturing made of purchased glass	0	1,477	2,757	6,862
Cement manufacturing	0	813	2,068	8,573
Ready-mix concrete manufacturing	0	6,509	12,114	41,260
Concrete block and brick manufacturing	0	848	1,765	4,729
Concrete pipe manufacturing	0	363	656	1,579
Other concrete product manufacturing	0	3,696	5,862	13,382
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	2,121	6,532	15,353
Abrasive product manufacturing	0	254	933	1,623
Cut stone and stone product manufacturing	0	2,233	2,724	6,035

## APPENDIX

Ground or treated mineral and earth manufacturing	0	1,764	6,162	12,504
Mineral wool manufacturing	0	1,338	3,705	8,155
Miscellaneous nonmetallic mineral products manufacturing	0	877	2,505	5,308
Iron and steel mills and ferroalloy manufacturing	0	2,964	6,385	32,318
Iron, steel pipe and tube manufacturing from purchased steel	0	833	1,474	5,378
Rolled steel shape manufacturing	0	82	275	1,017
Steel wire drawing	0	351	659	2,269
Alumina refining and primary aluminum production	0	(3)	16	216
Secondary smelting and alloying of aluminum	0	609	1,220	8,355
Aluminum sheet, plate, and foil manufacturing	0	1,603	3,769	9,877
Other aluminum rolling, drawing and extruding	0	2,059	3,357	14,015
Nonferrous metal (exc aluminum) smelting and refining	0	45	296	648
Copper rolling, drawing, extruding and alloying	0	10,658	17,312	115,322
Nonferrous metal, except copper and aluminum, shaping	0	178	276	671
Secondary processing of other nonferrous metals	0	1	83	361
Ferrous metal foundries	0	1,548	3,785	8,559
Nonferrous metal foundries	0	163	377	1,131
Custom roll forming	0	608	1,061	5,105
Crown and closure manufacturing and metal stamping	0	5,678	9,086	25,492
Iron and steel forging	0	1,279	1,884	4,931
Nonferrous forging	0	2,148	2,889	8,324
Cutlery, utensil, pot, and pan manufacturing	0	217	741	1,860
Handtool manufacturing	0	1,381	2,546	4,829
Prefabricated metal buildings and components manufacturing	0	1,025	1,602	4,918
Fabricated structural metal manufacturing	0	4,023	6,599	19,048
Plate work manufacturing	0	505	530	1,875
Metal window and door manufacturing	0	5,458	9,391	19,643

## APPENDIX

Sheet metal work manufacturing	0	12,350	17,085	42,591
Ornamental and architectural metal work manufacturing	0	2,745	3,924	9,364
Power boiler and heat exchanger manufacturing	0	572	879	1,954
Metal tank (heavy gauge) manufacturing	0	814	1,058	2,966
Metal cans manufacturing	0	1,114	3,021	10,613
Metal barrels, drums and pails manufacturing	0	1,874	2,489	8,557
Hardware manufacturing	0	1,472	2,745	7,802
Spring and wire product manufacturing	0	617	912	2,496
Machine shops	0	13,673	16,342	31,440
Turned product and screw, nut, and bolt manufacturing	0	1,626	2,495	6,264
Metal heat treating	0	383	666	1,521
Metal coating and nonprecious engraving	0	3,215	6,399	13,338
Electroplating, anodizing, and coloring metal	0	2,071	2,385	5,178
Valve and fittings, other than plumbing, manufacturing	0	1,571	2,854	5,332
Plumbing fixture fitting and trim manufacturing	0	1,471	5,591	15,967
Ball and roller bearing manufacturing	1	45,014	98,088	219,455
Small arms ammunition manufacturing	0	463	1,016	2,109
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	1,160	3,399	6,865
Fabricated pipe and pipe fitting manufacturing	0	608	733	1,905
Other fabricated metal manufacturing	0	1,296	1,830	5,177
Farm machinery and equipment manufacturing	1	117,574	214,206	553,870
Lawn and garden equipment manufacturing	0	635	1,658	7,620
Construction machinery manufacturing	1	56,002	162,714	398,889
Mining machinery and equipment manufacturing	0	1	2	9

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	23	29	101
Food product machinery manufacturing	0	33	48	123
Sawmill, woodworking, and paper machinery	0	286	342	1,062
Printing machinery and equipment manufacturing	0	31	41	175
All other industrial machinery manufacturing	0	59	95	260
Optical instrument and lens manufacturing	0	6	13	27
Photographic and photocopying equipment manufacturing	0	16	34	97
Other commercial service industry machinery manufacturing	0	331	894	2,076
Air purification and ventilation equipment manufacturing	0	155	296	666
Heating equipment (except warm air furnaces) manufacturing	0	499	1,016	2,426
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4,408	12,238	28,963
Industrial mold manufacturing	0	94	123	280
Special tool, die, jig, and fixture manufacturing	0	192	307	564
Cutting tool and machine tool accessory manufacturing	0	121	145	333
Machine tool manufacturing	0	78	99	292
Rolling mill and other metalworking machinery manufacturing	0	13	19	39
Turbine and turbine generator set units manufacturing	0	16	27	69
Speed changer, industrial high-speed drive, and gear manufacturing	0	558	1,093	2,824
Mechanical power transmission equipment manufacturing	0	454	927	2,046
Other engine equipment manufacturing	0	755	2,152	8,505
Pump and pumping equipment manufacturing	0	155	394	953

## APPENDIX

Air and gas compressor manufacturing	0	8	17	51
Elevator and moving stairway manufacturing	0	9	19	49
Conveyor and conveying equipment manufacturing	0	70	75	231
Overhead cranes, hoists, and monorail systems manufacturing	0	16,490	50,722	140,975
Industrial truck, trailer, and stacker manufacturing	0	332	700	1,974
Power-driven handtool manufacturing	0	379	1,533	2,949
Welding and soldering equipment manufacturing	0	40	67	183
Packaging machinery manufacturing	0	59	122	272
Industrial process furnace and oven manufacturing	0	13	20	45
Fluid power cylinder and actuator manufacturing	0	469	843	2,142
Fluid power pump and motor manufacturing	0	22	51	202
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	115	186	492
Electronic computer manufacturing	0	96	269	812
Computer storage device manufacturing	0	212	796	3,609
Computer terminals and other computer peripheral equipment manufacturing	0	45,489	99,324	212,848
Telephone apparatus manufacturing	0	13	33	167
Broadcast and wireless communications equipment manufacturing	0	500	833	1,563
Other communications equipment manufacturing	0	94	182	528
Audio and video equipment manufacturing	0	222	477	1,174
Printed circuit assembly (electronic assembly) manufacturing	0	607	1,117	4,541
Bare printed circuit board manufacturing	0	304	444	1,197

## APPENDIX

Semiconductor and related device manufacturing	0	479	1,028	2,918
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	524	832	1,794
Electronic connector manufacturing	0	92	172	703
Other electronic component manufacturing	0	819	1,009	4,541
Electromedical and electrotherapeutic apparatus manufacturing	0	43	117	307
Search, detection, and navigation instruments manufacturing	0	26,553	51,906	108,719
Automatic environmental control manufacturing	0	2,339	3,392	6,005
Industrial process variable instruments manufacturing	0	831	1,397	3,363
Totalizing fluid meter and counting device manufacturing	0	81	223	591
Electricity and signal testing instruments manufacturing	0	1,978	3,339	10,494
Analytical laboratory instrument manufacturing	2	243,524	516,020	895,466
Irradiation apparatus manufacturing	0	38	93	184
Watch, clock, and other measuring and controlling device manufacturing	0	33	72	187
Blank magnetic and optical recording media manufacturing	0	629	2,373	6,018
Software and other prerecorded and record reproducing	0	36	64	196
Electric lamp bulb and part manufacturing	0	17	24	108
Lighting fixture manufacturing	0	5,499	8,924	16,510
Small electrical appliance manufacturing	0	85	159	349
Household cooking appliance manufacturing	0	908	2,396	6,136
Household refrigerator and home freezer manufacturing	0	1,002	3,239	7,670
Household laundry equipment manufacturing	0	1,960	4,662	16,602



## APPENDIX

Other major household appliance manufacturing	0	389	1,116	2,607
Power, distribution, and specialty transformer manufacturing	0	916	1,460	2,995
Motor and generator manufacturing	0	2,197	3,713	9,377
Switchgear and switchboard apparatus manufacturing	0	780	1,415	3,602
Relay and industrial control manufacturing	0	2,075	2,953	6,992
Storage battery manufacturing	0	5,926	10,346	27,057
Primary battery manufacturing	0	5,649	17,812	38,668
Fiber optic cable manufacturing	0	1,544	2,688	10,341
Other communication and energy wire manufacturing	0	747	1,478	5,112
Wiring device manufacturing	0	1,236	2,726	7,896
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	1	55,687	64,802	184,811
Automobile manufacturing	0	2,085	5,838	40,321
Light truck and utility vehicle manufacturing	0	21	29	301
Heavy duty truck manufacturing	0	3	6	57
Motor vehicle body manufacturing	0	969	1,180	4,444
Truck trailer manufacturing	0	251	293	1,238
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	4,512	4,815	22,191
Motor vehicle gasoline engine and engine parts manufacturing	0	2,734	3,519	16,708
Motor vehicle electrical and electronic equipment manufacturing	0	7,233	8,702	29,297
Motor vehicle transmission and power train parts manufacturing	0	8,239	11,178	52,263
Motor vehicle seating and interior trim manufacturing	0	544	663	4,705
Motor vehicle metal stamping	0	8,997	10,924	47,227
Other motor vehicle parts manufacturing	0	13,412	17,836	91,994
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	7,085	9,614	49,516

## APPENDIX

Aircraft manufacturing	0	742	1,313	3,854
Aircraft engine and engine parts manufacturing	0	863	1,875	5,320
Other aircraft parts and auxiliary equipment manufacturing	1	84,712	128,692	337,009
Guided missile and space vehicle manufacturing	0	22,012	28,216	78,607
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	585	759	1,965
Railroad rolling stock manufacturing	0	92	132	762
Ship building and repairing	0	18	22	55
Boat building	0	2,829	3,726	14,036
Motorcycle, bicycle, and parts manufacturing	0	68	182	766
Military armored vehicle, tank, and tank component manufacturing	0	648	1,277	5,674
All other transportation equipment manufacturing	0	9,209	16,129	53,289
Wood kitchen cabinet and countertop manufacturing	0	4,374	7,826	16,408
Upholstered household furniture manufacturing	0	718	1,179	3,374
Nonupholstered wood household furniture manufacturing	0	630	805	2,317
Other household nonupholstered furniture manufacturing	0	425	828	2,169
Institutional furniture manufacturing	0	44	52	204
Wood office furniture manufacturing	0	144	267	558
Custom architectural woodwork and millwork	0	79	79	260
Office furniture, except wood, manufacturing	0	5,540	13,218	30,559
Showcase, partition, shelving, and locker manufacturing	0	1,321	2,367	5,213
Mattress manufacturing	0	1,425	4,588	11,549
Blind and shade manufacturing	0	414	445	1,156
Surgical and medical instrument manufacturing	0	1,100	2,066	4,692
Surgical appliance and supplies manufacturing	0	2,755	5,157	12,534

## APPENDIX

Dental equipment and supplies manufacturing	0	43	72	228
Ophthalmic goods manufacturing	0	1,322	2,546	5,118
Dental laboratories	0	1,445	1,376	2,556
Jewelry and silverware manufacturing	0	1,206	2,081	5,618
Sporting and athletic goods manufacturing	0	1,031	1,412	5,078
Doll, toy, and game manufacturing	0	2,449	3,723	8,784
Office supplies (except paper) manufacturing	0	670	879	2,760
Sign manufacturing	0	2,841	2,293	6,843
Gasket, packing, and sealing device manufacturing	0	635	790	2,293
Musical instrument manufacturing	0	65	69	334
Fasteners, buttons, needles, and pins manufacturing	0	1,632	1,991	3,638
Broom, brush, and mop manufacturing	0	523	751	2,237
Burial casket manufacturing	0	194	232	629
All other miscellaneous manufacturing	0	1,876	2,269	6,172
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	20,677	60,920	113,904
Wholesale - Professional and commercial equipment and supplies	1	91,580	184,511	292,891
Wholesale - Household appliances and electrical and electronic goods	0	51,094	146,948	255,826
Wholesale - Machinery, equipment, and supplies	1	60,127	127,627	206,106
Wholesale - Other durable goods merchant wholesalers	1	86,849	160,914	291,483
Wholesale - Drugs and druggists' sundries	0	43,053	157,943	276,030
Wholesale - Grocery and related product wholesalers	1	63,001	97,329	181,277
Wholesale - Petroleum and petroleum products	0	9,403	173,083	193,882
Wholesale - Other nondurable goods merchant wholesalers	1	112,274	271,720	471,026
Wholesale - Wholesale electronic markets and agents and brokers	1	92,030	60,138	66,895
Retail - Motor vehicle and parts dealers	1	79,407	123,591	180,207

## APPENDIX

Retail - Furniture and home furnishings stores	1	44,045	54,374	86,310
Retail - Electronics and appliance stores	1	51,987	52,187	82,756
Retail - Building material and garden equipment and supplies stores	2	59,564	111,534	164,406
Retail - Food and beverage stores	4	109,735	158,211	271,341
Retail - Health and personal care stores	2	81,603	99,637	157,438
Retail - Gasoline stores	1	34,255	62,564	121,916
Retail - Clothing and clothing accessories stores	2	50,502	82,776	182,149
Retail - Sporting goods, hobby, musical instrument and book stores	1	28,990	37,162	61,851
Retail - General merchandise stores	4	127,764	180,465	300,088
Retail - Miscellaneous store retailers	2	61,544	70,913	112,786
Retail - Nonstore retailers	2	71,882	207,826	371,460
Air transportation	1	110,377	202,368	299,472
Rail transportation	0	26,759	49,038	102,470
Water transportation	0	1,838	3,409	20,179
Truck transportation	3	165,910	205,552	480,751
Transit and ground passenger transportation	3	26,756	32,770	75,901
Pipeline transportation	0	15,929	31,711	38,028
Scenic and sightseeing transportation and support activities for transportation	2	117,661	135,106	302,196
Couriers and messengers	1	55,364	78,056	142,468
Warehousing and storage	2	103,469	118,318	241,947
Newspaper publishers	0	35,585	53,566	63,188
Periodical publishers	0	20,752	28,634	42,120
Book publishers	0	30,578	81,223	133,203
Directory, mailing list, and other publishers	0	4,293	10,893	16,950
Greeting card publishing	0	0	0	0
Software publishers	2	455,879	1,004,506	1,172,250
Motion picture and video industries	1	57,673	132,386	216,659
Sound recording industries	0	2,966	18,825	27,884
Radio and television broadcasting	1	163,795	115,798	357,718

## APPENDIX

Cable and other subscription programming	0	13,819	127,821	239,043
Wired telecommunications carriers	1	137,102	252,607	391,855
Wireless telecommunications carriers (except satellite)	0	91,370	214,308	395,784
Satellite, telecommunications resellers, and all other telecommunications	0	69,362	65,153	80,821
Data processing, hosting, and related services	1	94,332	236,449	422,374
News syndicates, libraries, archives and all other information services	0	3,175	5,571	9,494
Internet publishing and broadcasting and web search portals	1	67,223	229,016	568,067
Nondepository credit intermediation and related activities	1	131,933	249,008	358,504
Securities and commodity contracts intermediation and brokerage	1	156,794	155,351	301,730
Monetary authorities and depository credit intermediation	2	255,620	1,445,804	1,733,797
Other financial investment activities	3	131,570	149,964	419,392
Direct life insurance carriers	0	59,049	104,328	158,990
Insurance carriers, except direct life	2	138,397	385,614	974,568
Insurance agencies, brokerages, and related activities	4	264,425	367,671	843,538
Funds, trusts, and other financial vehicles	1	29,807	56,322	244,672
Other real estate	20	404,001	1,321,083	3,626,383
Tenant-occupied housing	2	29,374	486,559	546,633
Owner-occupied dwellings	0	0	1,498,659	1,893,538
Automotive equipment rental and leasing	0	28,209	91,484	123,555
General and consumer goods rental except video tapes and discs	0	39,065	47,898	65,816
Video tape and disc rental	0	6,221	10,720	16,767
Commercial and industrial machinery and equipment rental and leasing	0	60,195	121,793	167,381
Lessors of nonfinancial intangible assets	0	3,855	137,964	161,116

## APPENDIX

Legal services	6	528,627	932,651	1,325,083
Accounting, tax preparation, bookkeeping, and payroll services	3	264,982	333,372	455,972
Architectural, engineering, and related services	3	249,566	282,719	508,317
Specialized design services	1	45,432	47,749	59,678
Custom computer programming services	1	132,242	151,344	216,057
Computer systems design services	1	114,793	120,492	159,375
Other computer related services, including facilities management	1	57,168	89,278	165,762
Management consulting services	23	2,248,351	2,200,853	3,278,079
Environmental and other technical consulting services	1	62,922	51,690	77,133
Scientific research and development services	73	6,215,396	8,809,559	17,982,118
Advertising, public relations, and related services	2	211,547	278,637	445,820
Photographic services	1	31,033	7,269	19,414
Veterinary services	0	17,820	23,288	39,149
Marketing research and all other miscellaneous professional, scientific, and technical services	5	312,155	274,913	410,287
Management of companies and enterprises	8	1,034,379	1,204,474	1,699,252
Office administrative services	3	136,093	39,452	137,534
Facilities support services	1	20,600	27,140	68,950
Employment services	13	563,974	859,685	1,345,369
Business support services	3	148,025	122,536	201,758
Travel arrangement and reservation services	1	31,783	42,190	104,223
Investigation and security services	2	73,358	75,129	118,836
Services to buildings	6	127,790	133,248	248,008
Landscape and horticultural services	3	88,432	93,505	172,956
Other support services	1	37,008	47,022	98,306
Waste management and remediation services	1	30,385	71,993	129,971
Elementary and secondary schools	2	67,103	59,155	73,913
Junior colleges, colleges, universities, and professional schools	2	112,952	154,606	203,251
Other educational services	5	112,031	105,811	233,418
Offices of physicians	4	415,765	494,475	743,798
Offices of dentists	1	89,793	114,593	172,886

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Offices of other health practitioners	2	100,182	92,709	133,057
Outpatient care centers	1	74,334	77,809	133,829
Medical and diagnostic laboratories	0	28,357	43,622	72,513
Home health care services	2	108,737	85,912	117,409
Other ambulatory health care services	1	28,621	31,517	55,759
Hospitals	8	620,718	707,133	1,371,780
Nursing and community care facilities	2	78,522	91,031	166,036
Residential mental retardation, mental health, substance abuse and other facilities	0	14,499	15,502	24,517
Individual and family services	2	67,416	60,592	90,813
Child day care services	3	59,157	69,411	100,875
Community food, housing, and other relief services, including rehabilitation services	1	20,949	23,027	51,410
Performing arts companies	0	8,364	12,695	32,772
Commercial Sports Except Racing	1	30,196	32,388	55,937
Racing and Track Operation	0	1,936	3,100	6,231
Independent artists, writers, and performers	2	13,861	18,938	30,318
Promoters of performing arts and sports and agents for public figures	1	20,550	41,367	96,808
Museums, historical sites, zoos, and parks	0	4,598	5,263	9,939
Amusement parks and arcades	0	3,428	10,370	13,668
Gambling industries (except casino hotels)	0	14,705	33,634	60,118
Other amusement and recreation industries	1	23,665	27,738	50,533
Fitness and recreational sports centers	1	12,052	19,460	33,073
Bowling centers	0	2,428	3,448	6,842
Hotels and motels, including casino hotels	1	43,424	75,131	125,090
Other accommodations	0	16,319	22,013	28,963
Full-service restaurants	9	214,725	320,802	579,675
Limited-service restaurants	8	138,874	225,188	535,566
All other food and drinking places	5	140,026	184,270	288,983
Automotive repair and maintenance, except car washes	3	116,387	144,956	227,308
Car washes	1	59,702	93,792	144,620

## APPENDIX

Electronic and precision equipment repair and maintenance	3	199,253	317,293	495,465
Commercial and industrial machinery and equipment repair and maintenance	1	46,697	60,146	93,791
Personal and household goods repair and maintenance	1	30,199	26,446	41,878
Personal care services	4	75,368	64,298	93,179
Death care services	0	7,258	9,078	15,579
Dry-cleaning and laundry services	1	16,763	17,851	27,018
Other personal services	3	65,855	49,663	78,915
Religious organizations	1	65,165	37,303	127,912
Grantmaking, giving, and social advocacy organizations	0	15,089	47,086	79,798
Business and professional associations	1	32,163	49,495	94,862
Labor and civic organizations	1	20,820	52,609	99,499
Private households	2	20,580	20,580	20,580
Postal service	1	87,727	87,784	96,981
Federal electric utilities	0	0	0	0
Other federal government enterprises	2	47,016	35,753	292,709
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	1	52,505	57,412	121,261
Local government passenger transit	0	11,868	403	12,844
Local government electric utilities	0	0	0	0
Other local government enterprises	0	1,777	3,799	6,543
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0



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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	20	2,677,037	3,987,924	7,214,377

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 392: Detailed M2M Program Impacts by Types of Impact, Georgia.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	27	2,124,603	3,343,075	6,043,522
Oilseed farming	0	470	815	1,298
Grain farming	0	667	1,362	2,622
Vegetable and melon farming	0	686	1,149	2,469
Fruit farming	0	297	514	883
Tree nut farming	0	534	579	1,290
Greenhouse, nursery, and floriculture production	0	211	317	751
Tobacco farming	0	90	111	231
Cotton farming	0	119	177	402
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	397	552	1,279
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	473	916	1,973
Dairy cattle and milk production	0	179	309	1,394
Poultry and egg production	0	403	621	9,012
Animal production, except cattle and poultry and eggs	0	679	1,088	1,697
Forestry, forest products, and timber tract production	0	148	153	197
Commercial logging	0	577	571	852
Commercial fishing	0	123	67	74
Commercial hunting and trapping	0	48	168	170
Support activities for agriculture and forestry	0	2,459	2,246	2,718
Oil and gas extraction	0	292	410	3,438
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	643	529	908
Sand and gravel mining	0	765	478	572
Other clay, ceramic, refractory minerals mining	0	61	67	112
Potash, soda, and borate mineral mining	0	8	12	23
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	17	14	18
Other nonmetallic minerals	0	112	68	93
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	1	1	3
Metal mining services	0	4	5	44
Other nonmetallic minerals services	0	1	1	5
Electric power generation - Hydroelectric	0	21	65	96
Electric power generation - Fossil fuel	0	80	321	740
Electric power generation - Nuclear	0	2,373	6,031	12,271
Electric power generation - Solar	0	311	367	794
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	83	126	344
Electric power generation - All other	0	8	2	4
Electric power transmission and distribution	0	5,294	22,098	52,161
Natural gas distribution	0	1,876	5,598	10,941
Water, sewage and other systems	0	653	1,067	1,759
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	5,920	8,599	19,972
Maintenance and repair construction of residential structures	0	2,417	3,903	8,974
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	6	5	10
Dog and cat food manufacturing	0	285	864	3,698
Other animal food manufacturing	0	248	453	3,595
Flour milling	0	73	123	1,139
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	58	239	3,659
Fats and oils refining and blending	0	40	69	700
Breakfast cereal manufacturing	0	520	1,017	3,845
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	56	105	638
Nonchocolate confectionery manufacturing	0	260	340	1,368
Chocolate and confectionery manufacturing from cacao beans	0	10	16	151
Confectionery manufacturing from purchased chocolate	0	99	124	624
Frozen fruits, juices and vegetables manufacturing	0	43	66	312
Frozen specialties manufacturing	0	290	380	1,741
Canned fruits and vegetables manufacturing	0	134	203	1,160

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	21	31	137
Cheese manufacturing	0	153	205	2,785
Dry, condensed, and evaporated dairy product manufacturing	0	25	51	608
Fluid milk manufacturing	0	81	117	1,020
Creamery butter manufacturing	0	5	15	168
Ice cream and frozen dessert manufacturing	0	39	56	378
Frozen cakes and other pastries manufacturing	0	474	679	1,284
Poultry processing	0	2,449	3,128	16,881
Animal, except poultry, slaughtering	0	345	462	4,499
Meat processed from carcasses	0	1,173	1,284	9,347
Rendering and meat byproduct processing	0	77	77	383
Seafood product preparation and packaging	0	233	276	1,320
Bread and bakery product, except frozen, manufacturing	0	1,777	2,225	5,373
Cookie and cracker manufacturing	0	653	862	2,489
Dry pasta, mixes, and dough manufacturing	0	131	239	1,137
Tortilla manufacturing	0	180	206	721
Roasted nuts and peanut butter manufacturing	0	209	438	1,461
Other snack food manufacturing	0	433	790	3,423
Coffee and tea manufacturing	0	504	786	2,608
Flavoring syrup and concentrate manufacturing	0	10,579	49,346	66,415
Mayonnaise, dressing, and sauce manufacturing	0	95	147	717
Spice and extract manufacturing	0	213	291	1,405
All other food manufacturing	0	545	676	3,197
Bottled and canned soft drinks & water	0	767	1,317	6,684
Manufactured ice	0	44	18	94
Breweries	0	839	1,683	4,141
Wineries	0	40	51	193
Distilleries	0	71	283	574
Tobacco product manufacturing	0	43	1,056	1,649
Fiber, yarn, and thread mills	0	2,309	3,850	11,607
Broadwoven fabric mills	0	605	991	3,060

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	41	44	64
Nonwoven fabric mills	0	904	1,713	4,241
Knit fabric mills	0	12	16	28
Textile and fabric finishing mills	0	357	442	1,107
Fabric coating mills	0	29	33	114
Carpet and rug mills	0	1,616	3,130	9,038
Curtain and linen mills	0	131	194	573
Textile bag and canvas mills	0	90	113	277
Rope, cordage, twine, tire cord and tire fabric mills	0	122	215	558
Other textile product mills	0	233	284	610
Hosiery and sock mills	0	5	8	20
Other apparel knitting mills	0	7	12	30
Cut and sew apparel contractors	0	36	42	143
Mens and boys cut and sew apparel manufacturing	0	118	117	406
Womens and girls cut and sew apparel manufacturing	0	78	78	415
Other cut and sew apparel manufacturing	0	45	47	140
Apparel accessories and other apparel manufacturing	0	8	12	44
Leather and hide tanning and finishing	0	2	2	23
Footwear manufacturing	0	29	30	94
Other leather and allied product manufacturing	0	2	2	14
Sawmills	0	592	987	2,601
Wood preservation	0	50	208	463
Veneer and plywood manufacturing	0	171	290	702
Engineered wood member and truss manufacturing	0	74	113	303
Reconstituted wood product manufacturing	0	35	115	310
Wood windows and door manufacturing	0	699	1,079	2,301
Cut stock, resawing lumber, and planing	0	47	94	210
Other millwork, including flooring	0	231	371	860
Wood container and pallet manufacturing	0	309	394	873
Manufactured home (mobile home) manufacturing	0	0	1	2

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Prefabricated wood building manufacturing	0	40	49	130
All other miscellaneous wood product manufacturing	0	138	182	365
Pulp mills	0	82	151	531
Paper mills	0	920	2,426	7,558
Paperboard mills	0	653	1,898	5,643
Paperboard container manufacturing	0	1,481	2,467	9,026
Paper bag and coated and treated paper manufacturing	0	676	1,327	4,389
Stationery product manufacturing	0	177	259	737
Sanitary paper product manufacturing	0	252	909	2,479
All other converted paper product manufacturing	0	74	111	314
Printing	0	4,136	7,027	12,670
Support activities for printing	0	348	587	959
Petroleum refineries	0	27	624	2,807
Asphalt paving mixture and block manufacturing	0	33	101	343
Asphalt shingle and coating materials manufacturing	0	35	236	421
Petroleum lubricating oil and grease manufacturing	0	662	5,811	10,862
All other petroleum and coal products manufacturing	0	18	162	358
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	82	191	759
Synthetic dye and pigment manufacturing	0	117	227	896
Other basic inorganic chemical manufacturing	0	246	497	1,549
Other basic organic chemical manufacturing	0	124	234	2,101
Plastics material and resin manufacturing	0	220	346	2,447
Synthetic rubber manufacturing	0	24	36	198
Artificial and synthetic fibers and filaments manufacturing	0	694	990	6,582
Nitrogenous fertilizer manufacturing	0	86	187	527
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	25	39	159

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Pesticide and other agricultural chemical manufacturing	0	139	404	2,730
Medicinal and botanical manufacturing	0	94	156	444
Pharmaceutical preparation manufacturing	0	748	2,535	7,040
In-vitro diagnostic substance manufacturing	0	62	89	240
Biological product (except diagnostic) manufacturing	0	147	327	771
Paint and coating manufacturing	0	401	702	3,136
Adhesive manufacturing	0	217	348	1,272
Soap and other detergent manufacturing	0	649	2,083	5,630
Polish and other sanitation good manufacturing	0	711	1,400	4,371
Surface active agent manufacturing	0	106	332	750
Toilet preparation manufacturing	0	357	974	2,802
Printing ink manufacturing	0	137	148	575
Explosives manufacturing	0	4	5	23
Custom compounding of purchased resins	0	344	640	2,527
Photographic film and chemical manufacturing	0	571	1,208	3,849
Other miscellaneous chemical product manufacturing	0	510	761	2,900
Plastics packaging materials and unlaminated film and sheet manufacturing	0	640	1,459	4,338
Unlaminated plastics profile shape manufacturing	0	248	828	1,996
Plastics pipe and pipe fitting manufacturing	0	46	172	405
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	56	153	393
Polystyrene foam product manufacturing	0	352	807	2,282
Urethane and other foam product (except polystyrene) manufacturing	0	93	212	719
Plastics bottle manufacturing	0	315	716	2,421
Other plastics product manufacturing	0	1,768	3,494	9,366
Tire manufacturing	0	288	504	2,181

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Rubber and plastics hoses and belting manufacturing	0	143	312	727
Other rubber product manufacturing	0	563	1,103	3,432
Pottery, ceramics, and plumbing fixture manufacturing	0	70	92	202
Brick, tile, and other structural clay product manufacturing	0	101	194	427
Flat glass manufacturing	0	31	69	163
Other pressed and blown glass and glassware manufacturing	0	32	51	117
Glass container manufacturing	0	186	341	905
Glass product manufacturing made of purchased glass	0	113	206	512
Cement manufacturing	0	33	79	333
Ready-mix concrete manufacturing	0	271	487	1,667
Concrete block and brick manufacturing	0	44	87	237
Concrete pipe manufacturing	0	15	26	63
Other concrete product manufacturing	0	180	277	639
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	121	359	859
Abrasive product manufacturing	0	17	59	105
Cut stone and stone product manufacturing	0	147	178	390
Ground or treated mineral and earth manufacturing	0	87	293	613
Mineral wool manufacturing	0	89	230	510
Miscellaneous nonmetallic mineral products manufacturing	0	33	90	186
Iron and steel mills and ferroalloy manufacturing	0	228	426	2,248
Iron, steel pipe and tube manufacturing from purchased steel	0	74	116	422
Rolled steel shape manufacturing	0	5	16	67
Steel wire drawing	0	29	43	163
Alumina refining and primary aluminum production	0	(0)	1	18
Secondary smelting and alloying of aluminum	0	48	79	563
Aluminum sheet, plate, and foil manufacturing	0	57	120	343



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Other aluminum rolling, drawing and extruding	0	141	205	901
Nonferrous metal (exc aluminum) smelting and refining	0	2	11	27
Copper rolling, drawing, extruding and alloying	0	425	654	4,224
Nonferrous metal, except copper and aluminum, shaping	0	32	45	119
Secondary processing of other nonferrous metals	0	0	3	18
Ferrous metal foundries	0	110	215	546
Nonferrous metal foundries	0	15	30	94
Custom roll forming	0	103	178	781
Crown and closure manufacturing and metal stamping	0	215	347	951
Iron and steel forging	0	110	162	409
Nonferrous forging	0	234	318	862
Cutlery, utensil, pot, and pan manufacturing	0	20	74	175
Handtool manufacturing	0	144	266	505
Prefabricated metal buildings and components manufacturing	0	56	89	262
Fabricated structural metal manufacturing	0	403	665	1,885
Plate work manufacturing	0	114	120	410
Metal window and door manufacturing	0	260	448	919
Sheet metal work manufacturing	0	381	529	1,275
Ornamental and architectural metal work manufacturing	0	144	207	473
Power boiler and heat exchanger manufacturing	0	49	77	177
Metal tank (heavy gauge) manufacturing	0	60	78	214
Metal cans manufacturing	0	82	226	782
Metal barrels, drums and pails manufacturing	0	151	201	645
Hardware manufacturing	0	85	159	439
Spring and wire product manufacturing	0	50	74	198
Machine shops	0	1,002	1,202	2,260
Turned product and screw, nut, and bolt manufacturing	0	212	325	781
Metal heat treating	0	37	64	146

## APPENDIX

Metal coating and nonprecious engraving	0	282	562	1,173
Electroplating, anodizing, and coloring metal	0	215	249	529
Valve and fittings, other than plumbing, manufacturing	0	151	273	507
Plumbing fixture fitting and trim manufacturing	0	68	263	717
Ball and roller bearing manufacturing	0	279	606	1,310
Small arms ammunition manufacturing	0	22	47	99
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	106	305	575
Fabricated pipe and pipe fitting manufacturing	0	17	21	55
Other fabricated metal manufacturing	0	94	133	357
Farm machinery and equipment manufacturing	0	82	165	357
Lawn and garden equipment manufacturing	0	61	157	659
Construction machinery manufacturing	0	52	164	373
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	4	5	15
Food product machinery manufacturing	0	4	6	16
Sawmill, woodworking, and paper machinery	0	31	37	105
Printing machinery and equipment manufacturing	0	3	4	15
All other industrial machinery manufacturing	0	6	9	25
Optical instrument and lens manufacturing	0	1	1	2
Photographic and photocopying equipment manufacturing	0	2	4	12

## APPENDIX

Other commercial service industry machinery manufacturing	0	22	64	141
Air purification and ventilation equipment manufacturing	0	15	29	64
Heating equipment (except warm air furnaces) manufacturing	0	40	85	177
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	226	640	1,481
Industrial mold manufacturing	0	8	10	22
Special tool, die, jig, and fixture manufacturing	0	18	30	52
Cutting tool and machine tool accessory manufacturing	0	7	8	19
Machine tool manufacturing	0	6	8	21
Rolling mill and other metalworking machinery manufacturing	0	1	2	3
Turbine and turbine generator set units manufacturing	0	1	2	5
Speed changer, industrial high-speed drive, and gear manufacturing	0	61	124	284
Mechanical power transmission equipment manufacturing	0	81	166	364
Other engine equipment manufacturing	0	66	184	680
Pump and pumping equipment manufacturing	0	11	31	68
Air and gas compressor manufacturing	0	1	1	4
Elevator and moving stairway manufacturing	0	1	2	4
Conveyor and conveying equipment manufacturing	0	3	4	11
Overhead cranes, hoists, and monorail systems manufacturing	0	7,579	25,704	66,045
Industrial truck, trailer, and stacker manufacturing	0	20	43	121
Power-driven handtool manufacturing	0	74	302	518
Welding and soldering equipment manufacturing	0	3	5	12
Packaging machinery manufacturing	0	7	14	30

## APPENDIX

Industrial process furnace and oven manufacturing	0	1	2	4
Fluid power cylinder and actuator manufacturing	0	73	137	356
Fluid power pump and motor manufacturing	0	7	18	62
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	9	14	35
Electronic computer manufacturing	0	9	23	72
Computer storage device manufacturing	0	22	80	359
Computer terminals and other computer peripheral equipment manufacturing	0	70	156	367
Telephone apparatus manufacturing	0	1	2	12
Broadcast and wireless communications equipment manufacturing	0	160	262	477
Other communications equipment manufacturing	0	6	11	33
Audio and video equipment manufacturing	0	34	72	166
Printed circuit assembly (electronic assembly) manufacturing	0	27	50	199
Bare printed circuit board manufacturing	0	17	25	71
Semiconductor and related device manufacturing	0	27	57	157
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	31	48	100
Electronic connector manufacturing	0	6	11	47
Other electronic component manufacturing	0	28	35	152
Electromedical and electrotherapeutic apparatus manufacturing	0	6	15	38
Search, detection, and navigation instruments manufacturing	0	1	3	6
Automatic environmental control manufacturing	0	284	404	662

## APPENDIX

Industrial process variable instruments manufacturing	0	52	86	206
Totalizing fluid meter and counting device manufacturing	0	5	13	35
Electricity and signal testing instruments manufacturing	0	63	107	317
Analytical laboratory instrument manufacturing	0	7,004	15,334	23,851
Irradiation apparatus manufacturing	0	4	10	19
Watch, clock, and other measuring and controlling device manufacturing	0	7	14	35
Blank magnetic and optical recording media manufacturing	0	242	890	1,763
Software and other prerecorded and record reproducing	0	3	6	16
Electric lamp bulb and part manufacturing	0	1	2	9
Lighting fixture manufacturing	0	423	663	1,205
Small electrical appliance manufacturing	0	9	17	35
Household cooking appliance manufacturing	0	72	198	510
Household refrigerator and home freezer manufacturing	0	76	257	637
Household laundry equipment manufacturing	0	164	407	1,442
Other major household appliance manufacturing	0	28	87	199
Power, distribution, and specialty transformer manufacturing	0	92	147	291
Motor and generator manufacturing	0	276	450	1,176
Switchgear and switchboard apparatus manufacturing	0	51	92	236
Relay and industrial control manufacturing	0	284	405	914
Storage battery manufacturing	0	453	749	1,988
Primary battery manufacturing	0	536	1,365	3,365
Fiber optic cable manufacturing	0	120	207	712
Other communication and energy wire manufacturing	0	34	65	221
Wiring device manufacturing	0	60	132	357

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Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	2	3	8
Automobile manufacturing	0	180	438	3,270
Light truck and utility vehicle manufacturing	0	1	1	14
Heavy duty truck manufacturing	0	0	0	2
Motor vehicle body manufacturing	0	59	72	280
Truck trailer manufacturing	0	2	2	10
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	300	321	1,481
Motor vehicle gasoline engine and engine parts manufacturing	0	179	231	1,160
Motor vehicle electrical and electronic equipment manufacturing	0	379	452	1,398
Motor vehicle transmission and power train parts manufacturing	0	556	773	3,149
Motor vehicle seating and interior trim manufacturing	0	18	23	155
Motor vehicle metal stamping	0	414	511	2,157
Other motor vehicle parts manufacturing	0	621	754	4,384
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	419	617	2,985
Aircraft manufacturing	0	27	53	151
Aircraft engine and engine parts manufacturing	0	105	220	677
Other aircraft parts and auxiliary equipment manufacturing	0	14	21	56
Guided missile and space vehicle manufacturing	0	13,991	17,648	46,402
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	319	417	1,017
Railroad rolling stock manufacturing	0	6	9	49
Ship building and repairing	0	2	2	6
Boat building	0	181	240	884
Motorcycle, bicycle, and parts manufacturing	0	9	22	84

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	61	124	460
All other transportation equipment manufacturing	0	757	1,379	4,481
Wood kitchen cabinet and countertop manufacturing	0	268	440	946
Upholstered household furniture manufacturing	0	84	138	388
Nonupholstered wood household furniture manufacturing	0	50	62	172
Other household nonupholstered furniture manufacturing	0	40	77	190
Institutional furniture manufacturing	0	3	4	15
Wood office furniture manufacturing	0	3	5	10
Custom architectural woodwork and millwork	0	5	5	16
Office furniture, except wood, manufacturing	0	29	66	163
Showcase, partition, shelving, and locker manufacturing	0	80	133	302
Mattress manufacturing	0	114	326	896
Blind and shade manufacturing	0	27	29	82
Surgical and medical instrument manufacturing	0	101	185	395
Surgical appliance and supplies manufacturing	0	310	588	1,338
Dental equipment and supplies manufacturing	0	5	8	24
Ophthalmic goods manufacturing	0	126	249	501
Dental laboratories	0	156	148	271
Jewelry and silverware manufacturing	0	110	186	483
Sporting and athletic goods manufacturing	0	85	113	396
Doll, toy, and game manufacturing	0	264	376	793
Office supplies (except paper) manufacturing	0	72	96	275
Sign manufacturing	0	171	141	394
Gasket, packing, and sealing device manufacturing	0	54	66	188
Musical instrument manufacturing	0	12	12	47
Fasteners, buttons, needles, and pins manufacturing	0	175	213	351

## APPENDIX

Broom, brush, and mop manufacturing	0	51	84	205
Burial casket manufacturing	0	10	13	33
All other miscellaneous manufacturing	0	153	183	482
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,465	4,316	8,067
Wholesale - Professional and commercial equipment and supplies	0	6,715	13,549	21,042
Wholesale - Household appliances and electrical and electronic goods	0	2,789	8,048	13,841
Wholesale - Machinery, equipment, and supplies	0	3,720	7,927	12,743
Wholesale - Other durable goods merchant wholesalers	0	5,629	10,440	18,770
Wholesale - Drugs and druggists' sundries	0	3,404	12,289	20,978
Wholesale - Grocery and related product wholesalers	0	4,706	7,209	13,426
Wholesale - Petroleum and petroleum products	0	591	12,342	13,602
Wholesale - Other nondurable goods merchant wholesalers	0	8,160	20,386	34,633
Wholesale - Wholesale electronic markets and agents and brokers	0	6,270	3,879	4,318
Retail - Motor vehicle and parts dealers	0	5,627	8,809	12,737
Retail - Furniture and home furnishings stores	0	3,357	4,142	6,465
Retail - Electronics and appliance stores	0	3,924	3,955	6,150
Retail - Building material and garden equipment and supplies stores	0	3,174	5,937	8,651
Retail - Food and beverage stores	0	9,027	12,876	21,561
Retail - Health and personal care stores	0	6,114	7,511	11,827
Retail - Gasoline stores	0	2,874	4,878	8,966
Retail - Clothing and clothing accessories stores	0	4,050	6,585	14,065
Retail - Sporting goods, hobby, musical instrument and book stores	0	2,163	2,781	4,542



## APPENDIX

Retail - General merchandise stores	0	9,182	13,068	21,575
Retail - Miscellaneous store retailers	0	4,818	5,499	8,443
Retail - Nonstore retailers	0	5,860	17,143	29,180
Air transportation	0	8,234	15,479	22,557
Rail transportation	0	1,845	2,994	6,655
Water transportation	0	191	346	2,000
Truck transportation	0	11,915	14,417	32,759
Transit and ground passenger transportation	0	2,394	2,954	6,425
Pipeline transportation	0	791	1,707	2,091
Scenic and sightseeing transportation and support activities for transportation	0	9,397	10,930	24,460
Couriers and messengers	0	4,099	5,963	10,640
Warehousing and storage	0	7,602	8,678	17,586
Newspaper publishers	0	2,456	3,587	4,169
Periodical publishers	0	1,815	2,457	3,332
Book publishers	0	501	1,288	2,090
Directory, mailing list, and other publishers	0	183	474	736
Greeting card publishing	0	0	0	0
Software publishers	0	61,733	118,842	135,384
Motion picture and video industries	0	5,843	13,545	18,430
Sound recording industries	0	284	1,701	2,328
Radio and television broadcasting	0	17,430	13,487	28,125
Cable and other subscription programming	0	1,508	11,125	17,265
Wired telecommunications carriers	0	10,579	18,062	27,232
Wireless telecommunications carriers (except satellite)	0	9,262	17,735	31,807
Satellite, telecommunications resellers, and all other telecommunications	0	6,674	5,296	5,817
Data processing, hosting, and related services	0	7,053	16,611	28,322
News syndicates, libraries, archives and all other information services	0	278	485	778
Internet publishing and broadcasting and web search portals	0	7,540	24,508	52,575

## APPENDIX

Nondepository credit intermediation and related activities	0	10,726	20,520	27,821
Securities and commodity contracts intermediation and brokerage	0	12,183	11,864	21,568
Monetary authorities and depository credit intermediation	0	16,984	99,347	115,649
Other financial investment activities	0	13,813	15,307	34,139
Direct life insurance carriers	0	3,927	7,167	10,659
Insurance carriers, except direct life	0	9,909	28,380	69,050
Insurance agencies, brokerages, and related activities	0	16,739	23,430	52,060
Funds, trusts, and other financial vehicles	0	2,760	5,120	18,806
Other real estate	1	37,204	120,872	287,922
Tenant-occupied housing	0	2,691	42,024	46,531
Owner-occupied dwellings	0	0	127,564	161,176
Automotive equipment rental and leasing	0	2,554	6,818	8,827
General and consumer goods rental except video tapes and discs	0	3,157	3,629	4,661
Video tape and disc rental	0	501	834	1,271
Commercial and industrial machinery and equipment rental and leasing	0	4,318	7,522	10,027
Lessors of nonfinancial intangible assets	0	272	9,609	11,151
Legal services	0	41,470	76,164	105,518
Accounting, tax preparation, bookkeeping, and payroll services	0	18,223	23,003	30,707
Architectural, engineering, and related services	0	19,190	21,840	38,675
Specialized design services	0	2,908	3,060	3,753
Custom computer programming services	0	5,457	6,205	8,664
Computer systems design services	0	7,863	8,223	10,696
Other computer related services, including facilities management	0	4,431	6,661	11,812
Management consulting services	1	53,001	51,968	75,344
Environmental and other technical consulting services	0	5,288	4,382	6,438

## APPENDIX

Scientific research and development services	6	613,043	880,711	1,661,505
Advertising, public relations, and related services	0	15,403	20,183	30,815
Photographic services	0	2,085	513	1,296
Veterinary services	0	1,404	1,861	3,046
Marketing research and all other miscellaneous professional, scientific, and technical services	0	25,611	22,502	33,059
Management of companies and enterprises	1	77,948	91,619	125,223
Office administrative services	0	12,567	3,711	11,712
Facilities support services	0	1,183	1,565	3,755
Employment services	1	43,188	67,556	101,788
Business support services	0	8,887	7,502	11,963
Travel arrangement and reservation services	0	2,426	3,246	7,700
Investigation and security services	0	5,556	5,704	8,749
Services to buildings	0	10,517	10,997	19,485
Landscape and horticultural services	0	5,665	6,002	10,701
Other support services	0	2,474	3,150	6,534
Waste management and remediation services	0	2,263	5,397	9,606
Elementary and secondary schools	0	6,732	5,908	7,261
Junior colleges, colleges, universities, and professional schools	0	12,491	16,944	21,162
Other educational services	0	3,874	3,658	7,817
Offices of physicians	0	31,802	38,120	56,891
Offices of dentists	0	7,208	9,296	13,830
Offices of other health practitioners	0	7,684	7,168	10,264
Outpatient care centers	0	6,286	6,607	11,193
Medical and diagnostic laboratories	0	2,235	3,531	5,680
Home health care services	0	8,280	6,617	9,105
Other ambulatory health care services	0	2,277	2,523	4,391
Hospitals	1	53,036	60,170	113,907
Nursing and community care facilities	0	6,363	7,388	13,125
Residential mental retardation, mental health, substance abuse and other facilities	0	1,318	1,410	2,184

## APPENDIX

Individual and family services	0	5,981	5,471	8,150
Child day care services	0	4,923	5,862	8,313
Community food, housing, and other relief services, including rehabilitation services	0	1,984	2,208	4,764
Performing arts companies	0	752	1,104	2,591
Commercial Sports Except Racing	0	2,231	2,385	4,035
Racing and Track Operation	0	169	257	497
Independent artists, writers, and performers	0	1,262	1,681	2,573
Promoters of performing arts and sports and agents for public figures	0	1,827	3,371	7,384
Museums, historical sites, zoos, and parks	0	406	459	840
Amusement parks and arcades	0	304	803	1,070
Gambling industries (except casino hotels)	0	1,259	2,713	4,789
Other amusement and recreation industries	0	1,775	1,995	3,624
Fitness and recreational sports centers	0	1,044	1,576	2,641
Bowling centers	0	190	261	512
Hotels and motels, including casino hotels	0	4,153	6,879	11,284
Other accommodations	0	1,840	2,442	3,146
Full-service restaurants	1	16,161	24,288	42,958
Limited-service restaurants	1	11,194	18,046	41,407
All other food and drinking places	0	11,074	14,339	21,859
Automotive repair and maintenance, except car washes	0	9,435	11,318	17,642
Car washes	0	4,709	7,373	11,285
Electronic and precision equipment repair and maintenance	0	2,441	3,891	5,835
Commercial and industrial machinery and equipment repair and maintenance	0	3,223	4,078	6,329
Personal and household goods repair and maintenance	0	2,377	1,864	2,952
Personal care services	0	6,564	5,125	7,509
Death care services	0	660	780	1,332
Dry-cleaning and laundry services	0	1,330	1,395	2,106
Other personal services	0	5,743	3,798	6,207
Religious organizations	0	6,175	2,752	11,123
Grantmaking, giving, and social advocacy organizations	0	1,644	4,402	7,459

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Business and professional associations	0	2,615	3,644	6,734
Labor and civic organizations	0	1,970	4,402	8,501
Private households	0	1,854	1,854	1,854
Postal service	0	5,931	5,936	6,545
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	388	376	2,109
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	2,251	2,398	4,754
Local government passenger transit	0	896	38	671
Local government electric utilities	0	0	0	0
Other local government enterprises	0	145	286	488
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	304,819	352,903	737,908

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 13. Hawaii

**Table 393: Detailed NASA Impacts by Types of Impact, Hawaii.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>412</i>	<i>26,858,491</i>	<i>38,036,083</i>	<i>74,827,427</i>
Oilseed farming	0	(2)	(285)	2,124
Grain farming	2	19,141	17,102	188,355
Vegetable and melon farming	1	19,072	21,352	36,949
Fruit farming	1	21,758	25,294	43,072
Tree nut farming	1	31,131	18,345	19,269
Greenhouse, nursery, and floriculture production	1	21,260	22,573	26,069
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	43	46	89
All other crop farming	0	806	684	978
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	1,049	4,037	58,084
Dairy cattle and milk production	0	656	854	6,753
Poultry and egg production	0	1,693	1,700	12,033
Animal production, except cattle and poultry and eggs	3	22,532	53,927	164,715
Forestry, forest products, and timber tract production	0	1,960	2,075	2,710
Commercial logging	0	2,045	2,261	3,149
Commercial fishing	0	5,592	3,966	8,470
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	2	49,582	38,156	50,349
Oil and gas extraction	0	1,306	1,395	30,144
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	4,941	9,564	15,511
Sand and gravel mining	0	183	237	542

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	1,972	2,364	3,724
Drilling oil and gas wells	0	0	0	7
Support activities for oil and gas operations	0	19	6	63
Metal mining services	0	81	98	2,318
Other nonmetallic minerals services	0	2	3	65
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	36,401	114,164	307,525
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	1,203	2,564	4,171
Electric power generation - Wind	0	1,181	8,751	48,547
Electric power generation - Geothermal	0	746	1,614	3,816
Electric power generation - Biomass	0	696	2,228	7,979
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	50,557	153,253	429,661
Natural gas distribution	0	19,513	47,547	107,461
Water, sewage and other systems	0	5,920	11,878	26,638
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	132,734	191,547	375,814
Maintenance and repair construction of residential structures	1	45,978	74,242	145,815
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	125	91	175
Dog and cat food manufacturing	0	80	230	4,309
Other animal food manufacturing	0	4,711	8,318	79,251
Flour milling	0	0	0	0
Rice milling	0	278	385	4,621
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	302	1,143	38,770
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	145	262	2,382
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	281	359	3,559
Chocolate and confectionery manufacturing from cacao beans	0	184	309	3,009
Confectionery manufacturing from purchased chocolate	0	5,590	6,652	38,061
Frozen fruits, juices and vegetables manufacturing	0	202	289	2,902
Frozen specialties manufacturing	0	112	142	1,574
Canned fruits and vegetables manufacturing	0	2,925	4,187	33,017
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	88	125	1,307
Cheese manufacturing	0	0	0	0



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Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	9,271	12,016	97,406
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	1,274	1,648	10,136
Frozen cakes and other pastries manufacturing	0	7,486	12,038	20,281
Poultry processing	0	101	118	910
Animal, except poultry, slaughtering	0	5,456	6,709	68,275
Meat processed from carcasses	0	15,899	16,931	151,603
Rendering and meat byproduct processing	0	1,410	1,328	8,896
Seafood product preparation and packaging	0	2,144	2,357	12,602
Bread and bakery product, except frozen, manufacturing	1	36,636	46,997	125,208
Cookie and cracker manufacturing	0	14,183	16,889	74,989
Dry pasta, mixes, and dough manufacturing	0	519	892	6,530
Tortilla manufacturing	0	418	471	2,508
Roasted nuts and peanut butter manufacturing	0	3,517	5,925	29,734
Other snack food manufacturing	0	3,546	4,996	30,584
Coffee and tea manufacturing	0	2,264	3,265	27,499
Flavoring syrup and concentrate manufacturing	0	873	3,689	23,100
Mayonnaise, dressing, and sauce manufacturing	0	472	694	4,943
Spice and extract manufacturing	0	184	235	2,298
All other food manufacturing	0	9,756	11,649	76,870
Bottled and canned soft drinks & water	0	18,105	27,157	158,140
Manufactured ice	0	1,399	744	2,664
Breweries	0	4,187	7,381	25,663
Wineries	0	35	50	259
Distilleries	0	1,407	5,129	14,619
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	68	64	275
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	691	618	2,481
Textile bag and canvas mills	0	416	405	1,241
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	445	446	1,601
Hosiery and sock mills	0	52	97	193
Other apparel knitting mills	0	72	140	284
Cut and sew apparel contractors	0	506	619	2,090
Mens and boys cut and sew apparel manufacturing	0	361	412	1,798
Womens and girls cut and sew apparel manufacturing	0	220	275	2,935
Other cut and sew apparel manufacturing	0	34	70	160
Apparel accessories and other apparel manufacturing	0	32	65	145
Leather and hide tanning and finishing	0	11	13	129
Footwear manufacturing	0	38	40	201
Other leather and allied product manufacturing	0	3	3	22
Sawmills	0	287	364	6,684
Wood preservation	0	299	642	5,515
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	670	799	5,374
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	3,129	3,774	25,455
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	74	91	1,598
Wood container and pallet manufacturing	0	86	96	2,275
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	0	0
All other miscellaneous wood product manufacturing	0	74	87	3,577

## APPENDIX

Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	4,068	5,863	31,359
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	1	25,894	43,407	98,392
Support activities for printing	0	0	0	0
Petroleum refineries	0	18,725	133,462	709,700
Asphalt paving mixture and block manufacturing	0	517	843	4,520
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	2,171	5,466	19,268
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	1,090	2,345	9,243
Other basic organic chemical manufacturing	0	1,798	3,607	33,067
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	426	520	2,388
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	177	242	975
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	33	49	191

## APPENDIX

Pharmaceutical preparation manufacturing	0	95	345	1,297
In-vitro diagnostic substance manufacturing	0	21	31	101
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	6,737	11,957	66,685
Polish and other sanitation good manufacturing	0	1,800	3,170	12,180
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1,909	3,797	13,377
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	1,146	1,169	5,589
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,031	1,745	7,868
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	2,862	4,896	15,580
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	720	1,220	4,478
Other plastics product manufacturing	0	3,357	5,093	18,439
Tire manufacturing	0	448	632	2,898
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	0

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	1,002	1,069	2,357
Brick, tile, and other structural clay product manufacturing	0	988	1,268	4,052
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	3,197	3,815	11,596
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	2,124	2,335	8,059
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	8,927	13,577	38,701
Concrete block and brick manufacturing	0	646	1,011	2,829
Concrete pipe manufacturing	0	237	355	941
Other concrete product manufacturing	0	4,084	5,506	11,478
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	1,387	1,537	3,393
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	852	1,716	3,601
Miscellaneous nonmetallic mineral products manufacturing	0	461	875	2,027
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	18	121	214
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	34	90	359
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	587	836	2,510
Fabricated structural metal manufacturing	0	611	902	3,357
Plate work manufacturing	0	2,206	2,292	6,036
Metal window and door manufacturing	0	818	1,244	3,909
Sheet metal work manufacturing	0	713	918	2,735
Ornamental and architectural metal work manufacturing	0	781	1,046	3,204
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	847	1,936	8,349
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	92	152	545
Spring and wire product manufacturing	0	695	957	2,756
Machine shops	0	1,177	1,375	3,806
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	446	768	2,334
Electroplating, anodizing, and coloring metal	0	0	0	0

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	7	18	464
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	2	4	13
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	51	92	412

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0



## APPENDIX

Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	17	34	153
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	1	2	10
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	5	12	124
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	16	18	60
Electromedical and electrotherapeutic apparatus manufacturing	0	1	1	4
Search, detection, and navigation instruments manufacturing	0	1	2	7
Automatic environmental control manufacturing	0	133	174	447
Industrial process variable instruments manufacturing	0	33	45	129
Totalizing fluid meter and counting device manufacturing	0	0	0	0

## APPENDIX

Electricity and signal testing instruments manufacturing	0	1	1	4
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	1	6
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	6	8	296
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	57	66	459
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0

## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	2
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0
Motor vehicle electrical and electronic equipment manufacturing	0	78	149	628
Motor vehicle transmission and power train parts manufacturing	0	7	9	87
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	72	76	493
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	1	2	7
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	3,725	4,404	9,877
Boat building	0	390	502	3,845
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	2,000	1,518	5,713
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	1,133	1,030	3,271
Other household nonupholstered furniture manufacturing	0	87	68	344
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	77	59	224
Custom architectural woodwork and millwork	0	20	18	87
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	17	13	80
Mattress manufacturing	0	290	66	1,720
Blind and shade manufacturing	0	28	27	125
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	37	48	151
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	31	40	116
Dental laboratories	0	524	476	881
Jewelry and silverware manufacturing	0	3,944	5,230	19,239
Sporting and athletic goods manufacturing	0	1,031	1,175	10,786
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	36	40	414
Sign manufacturing	0	1,457	1,062	4,870
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	713	713	1,973
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	0	2,088	2,308	7,443
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	9,553	20,554	53,000
Wholesale - Professional and commercial equipment and supplies	0	39,059	62,356	123,447
Wholesale - Household appliances and electrical and electronic goods	0	11,598	24,528	61,049
Wholesale - Machinery, equipment, and supplies	0	24,095	40,775	78,233
Wholesale - Other durable goods merchant wholesalers	1	75,820	112,215	241,246
Wholesale - Drugs and druggists' sundries	0	32,374	81,706	223,301
Wholesale - Grocery and related product wholesalers	1	76,689	100,179	215,984
Wholesale - Petroleum and petroleum products	0	15,525	148,598	179,586
Wholesale - Other nondurable goods merchant wholesalers	2	121,935	222,616	480,727
Wholesale - Wholesale electronic markets and agents and brokers	1	30,757	12,945	17,393
Retail - Motor vehicle and parts dealers	1	64,869	121,659	161,372
Retail - Furniture and home furnishings stores	1	35,882	55,346	81,434
Retail - Electronics and appliance stores	1	37,043	49,396	73,356
Retail - Building material and garden equipment and supplies stores	1	38,408	86,141	115,843
Retail - Food and beverage stores	4	134,538	212,685	314,794
Retail - Health and personal care stores	2	84,989	116,413	172,129
Retail - Gasoline stores	1	24,094	53,552	86,378
Retail - Clothing and clothing accessories stores	2	71,253	127,531	208,763
Retail - Sporting goods, hobby, musical instrument and book stores	1	35,228	53,075	76,769
Retail - General merchandise stores	3	129,625	219,588	315,101
Retail - Miscellaneous store retailers	2	70,556	93,625	130,768

## APPENDIX

Retail - Nonstore retailers	3	33,748	127,060	326,228
Air transportation	1	88,898	264,066	375,347
Rail transportation	0	(45)	(54)	27
Water transportation	0	24,828	43,309	172,787
Truck transportation	1	59,693	87,577	176,418
Transit and ground passenger transportation	3	80,680	87,358	125,336
Pipeline transportation	0	598	2,706	3,182
Scenic and sightseeing transportation and support activities for transportation	3	205,472	234,390	512,303
Couriers and messengers	1	38,517	56,401	95,275
Warehousing and storage	0	18,180	20,312	40,080
Newspaper publishers	0	28,339	52,217	62,928
Periodical publishers	0	15,111	25,385	45,378
Book publishers	0	1,400	5,669	14,835
Directory, mailing list, and other publishers	0	2,510	10,044	14,193
Greeting card publishing	0	1,767	8,304	10,407
Software publishers	0	8,718	26,320	36,221
Motion picture and video industries	1	65,989	138,862	222,695
Sound recording industries	0	1,510	4,876	10,394
Radio and television broadcasting	1	88,733	60,035	208,624
Cable and other subscription programming	0	1,604	3,648	16,891
Wired telecommunications carriers	1	97,136	194,421	387,967
Wireless telecommunications carriers (except satellite)	0	33,459	139,898	440,865
Satellite, telecommunications resellers, and all other telecommunications	0	6,687	7,961	25,545
Data processing, hosting, and related services	0	19,485	41,825	104,858
News syndicates, libraries, archives and all other information services	0	5,195	9,687	14,877
Internet publishing and broadcasting and web search portals	0	11,950	35,249	112,191
Nondepository credit intermediation and related activities	1	45,779	63,716	126,174
Securities and commodity contracts intermediation and brokerage	1	73,088	72,606	215,492

## APPENDIX

Monetary authorities and depository credit intermediation	4	297,635	656,615	1,203,164
Other financial investment activities	3	36,492	42,771	279,032
Direct life insurance carriers	0	14,379	27,688	43,405
Insurance carriers, except direct life	2	175,399	532,027	1,185,327
Insurance agencies, brokerages, and related activities	3	138,119	196,051	539,375
Funds, trusts, and other financial vehicles	1	27,465	35,921	193,498
Other real estate	24	880,070	2,963,632	5,795,422
Tenant-occupied housing	2	47,770	733,196	797,213
Owner-occupied dwellings	0	0	2,053,467	2,594,532
Automotive equipment rental and leasing	0	25,608	170,400	210,839
General and consumer goods rental except video tapes and discs	0	25,979	48,373	67,166
Video tape and disc rental	0	5,846	10,871	16,501
Commercial and industrial machinery and equipment rental and leasing	0	29,962	109,161	148,457
Lessors of nonfinancial intangible assets	0	2,020	45,096	64,342
Legal services	7	576,892	1,057,885	1,527,693
Accounting, tax preparation, bookkeeping, and payroll services	3	153,767	189,195	287,648
Architectural, engineering, and related services	3	263,772	300,375	532,916
Specialized design services	1	31,154	34,008	44,404
Custom computer programming services	0	24,541	28,019	42,859
Computer systems design services	0	44,638	47,697	64,621
Other computer related services, including facilities management	1	55,239	76,237	158,930
Management consulting services	12	785,896	787,417	1,335,062
Environmental and other technical consulting services	2	132,454	111,752	172,970
Scientific research and development services	139	11,932,001	12,981,970	30,496,970
Advertising, public relations, and related services	2	79,841	106,910	239,642
Photographic services	1	51,611	2,479	25,266
Veterinary services	0	18,428	24,351	37,025

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	10	462,865	441,357	693,260
Management of companies and enterprises	11	1,224,892	1,371,404	2,073,665
Office administrative services	1	30,444	18,741	50,213
Facilities support services	0	26,394	31,751	59,685
Employment services	18	852,121	1,147,594	1,813,183
Business support services	1	43,733	40,478	74,099
Travel arrangement and reservation services	1	45,394	56,738	155,125
Investigation and security services	2	93,831	98,221	138,896
Services to buildings	6	175,223	187,728	288,212
Landscape and horticultural services	3	114,576	124,436	198,042
Other support services	1	27,129	32,409	64,293
Waste management and remediation services	1	63,526	118,527	196,472
Elementary and secondary schools	2	105,216	99,818	115,646
Junior colleges, colleges, universities, and professional schools	1	46,185	72,286	108,457
Other educational services	2	44,085	45,152	89,566
Offices of physicians	3	381,620	442,705	628,871
Offices of dentists	1	97,040	119,169	180,973
Offices of other health practitioners	2	125,809	119,771	163,596
Outpatient care centers	1	129,131	136,351	224,317
Medical and diagnostic laboratories	0	33,199	49,266	82,095
Home health care services	2	117,285	89,449	121,115
Other ambulatory health care services	0	21,887	23,900	37,057
Hospitals	6	642,819	719,789	1,232,732
Nursing and community care facilities	2	103,952	108,326	175,760
Residential mental retardation, mental health, substance abuse and other facilities	1	23,096	23,726	35,689
Individual and family services	5	140,653	138,907	198,258
Child day care services	2	61,090	81,125	101,826
Community food, housing, and other relief services, including rehabilitation services	1	37,731	46,943	95,686
Performing arts companies	1	22,826	46,349	71,294



## APPENDIX

Commercial Sports Except Racing	0	5,815	7,086	18,895
Racing and Track Operation	0	708	1,129	2,013
Independent artists, writers, and performers	2	57,442	80,450	94,011
Promoters of performing arts and sports and agents for public figures	0	9,034	22,303	58,987
Museums, historical sites, zoos, and parks	0	14,780	19,357	34,383
Amusement parks and arcades	0	2,794	17,746	19,510
Gambling industries (except casino hotels)	1	40,350	77,981	118,677
Other amusement and recreation industries	1	34,730	45,561	67,301
Fitness and recreational sports centers	1	15,721	39,654	48,361
Bowling centers	0	3,625	6,938	9,531
Hotels and motels, including casino hotels	1	62,847	128,547	174,477
Other accommodations	0	994	2,532	4,447
Full-service restaurants	8	261,149	364,635	574,845
Limited-service restaurants	6	168,218	253,725	499,166
All other food and drinking places	4	151,951	281,197	365,057
Automotive repair and maintenance, except car washes	2	138,359	176,172	247,013
Car washes	1	67,785	124,098	168,326
Electronic and precision equipment repair and maintenance	0	22,598	28,766	50,630
Commercial and industrial machinery and equipment repair and maintenance	0	32,954	35,214	56,808
Personal and household goods repair and maintenance	1	73,333	52,108	66,728
Personal care services	3	80,950	44,599	63,413
Death care services	0	9,140	10,695	16,796
Dry-cleaning and laundry services	1	23,150	25,019	35,800
Other personal services	4	118,340	67,085	100,692
Religious organizations	2	140,188	26,687	194,268
Grantmaking, giving, and social advocacy organizations	1	83,833	170,184	262,750
Business and professional associations	0	16,477	20,706	36,608
Labor and civic organizations	2	65,757	115,691	201,299
Private households	1	19,132	19,132	19,132
Postal service	1	88,610	88,653	96,229
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	1	34,951	44,264	248,561
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	1	48,398	(13,832)	35,844
Local government electric utilities	0	0	0	0
Other local government enterprises	1	99,415	201,277	370,143
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	5	700,356	855,887	938,803

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 394: Detailed M2M Program Impacts by Types of Impact, Hawaii.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	2	159,875	227,582	428,993
Oilseed farming	0	(0)	(2)	20
Grain farming	0	94	93	947
Vegetable and melon farming	0	115	135	220
Fruit farming	0	171	201	323
Tree nut farming	0	379	223	231

## APPENDIX

Greenhouse, nursery, and floriculture production	0	108	118	133
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	4	3	5
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	6	21	277
Dairy cattle and milk production	0	5	6	42
Poultry and egg production	0	8	8	59
Animal production, except cattle and poultry and eggs	0	87	232	730
Forestry, forest products, and timber tract production	0	13	13	17
Commercial logging	0	12	13	17
Commercial fishing	0	42	23	49
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	270	206	271
Oil and gas extraction	0	5	7	142
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	48	46	77
Sand and gravel mining	0	2	1	3
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	21	13	20
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	0
Metal mining services	0	0	0	10

## APPENDIX

Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	223	664	1,716
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	6	13	20
Electric power generation - Wind	0	6	42	219
Electric power generation - Geothermal	0	8	15	36
Electric power generation - Biomass	0	8	20	70
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	271	836	2,274
Natural gas distribution	0	126	316	628
Water, sewage and other systems	0	43	75	151
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	702	1,017	1,939

## APPENDIX

Maintenance and repair construction of residential structures	0	269	438	832
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1	0	1
Dog and cat food manufacturing	0	0	1	22
Other animal food manufacturing	0	27	51	457
Flour milling	0	0	0	0
Rice milling	0	2	3	36
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	2	9	308
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	1	1	11
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	2	2	23
Chocolate and confectionery manufacturing from cacao beans	0	2	4	33
Confectionery manufacturing from purchased chocolate	0	37	44	233
Frozen fruits, juices and vegetables manufacturing	0	1	2	19
Frozen specialties manufacturing	0	1	1	10
Canned fruits and vegetables manufacturing	0	23	34	261
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	1	1	10
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	56	75	581
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	8	11	58
Frozen cakes and other pastries manufacturing	0	47	74	123
Poultry processing	0	0	1	4
Animal, except poultry, slaughtering	0	26	32	323
Meat processed from carcasses	0	95	102	887

## APPENDIX

Rendering and meat byproduct processing	0	10	9	62
Seafood product preparation and packaging	0	11	13	60
Bread and bakery product, except frozen, manufacturing	0	222	286	746
Cookie and cracker manufacturing	0	93	117	473
Dry pasta, mixes, and dough manufacturing	0	4	6	45
Tortilla manufacturing	0	2	3	14
Roasted nuts and peanut butter manufacturing	0	25	47	207
Other snack food manufacturing	0	22	31	184
Coffee and tea manufacturing	0	15	22	173
Flavoring syrup and concentrate manufacturing	0	8	31	200
Mayonnaise, dressing, and sauce manufacturing	0	3	5	32
Spice and extract manufacturing	0	2	2	19
All other food manufacturing	0	73	88	545
Bottled and canned soft drinks & water	0	100	155	864
Manufactured ice	0	8	5	14
Breweries	0	24	44	148
Wineries	0	0	1	3
Distilleries	0	9	34	88
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	1	4
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	5	5	17
Textile bag and canvas mills	0	3	3	7
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	3	3	10
Hosiery and sock mills	0	0	1	1
Other apparel knitting mills	0	1	1	2
Cut and sew apparel contractors	0	5	6	19

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	3	4	14
Womens and girls cut and sew apparel manufacturing	0	3	3	30
Other cut and sew apparel manufacturing	0	0	1	1
Apparel accessories and other apparel manufacturing	0	0	1	1
Leather and hide tanning and finishing	0	0	0	1
Footwear manufacturing	0	0	0	1
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	2	2	35
Wood preservation	0	1	3	27
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	3	4	27
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	15	19	124
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	0	1	8
Wood container and pallet manufacturing	0	0	1	12
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	0	0
All other miscellaneous wood product manufacturing	0	0	1	20
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	26	37	195
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0

## APPENDIX

All other converted paper product manufacturing	0	0	0	0
Printing	0	152	254	553
Support activities for printing	0	0	0	0
Petroleum refineries	0	121	768	4,162
Asphalt paving mixture and block manufacturing	0	3	4	22
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	13	35	117
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	6	13	49
Other basic organic chemical manufacturing	0	9	19	176
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	3	4	16
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1	1	6
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	1	2
Pharmaceutical preparation manufacturing	0	1	4	12
In-vitro diagnostic substance manufacturing	0	0	0	2
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	36	80	366



## APPENDIX

Polish and other sanitation good manufacturing	0	12	25	79
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	14	33	104
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	6	7	33
Plastics packaging materials and unlaminated film and sheet manufacturing	0	8	13	57
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	17	28	89
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	6	9	33
Other plastics product manufacturing	0	21	32	109
Tire manufacturing	0	2	2	12
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	0
Pottery, ceramics, and plumbing fixture manufacturing	0	6	6	13
Brick, tile, and other structural clay product manufacturing	0	5	6	20
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	23	28	84
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	13	14	47

## APPENDIX

Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	45	66	190
Concrete block and brick manufacturing	0	3	5	14
Concrete pipe manufacturing	0	1	2	5
Other concrete product manufacturing	0	22	28	59
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	7	8	17
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	5	10	22
Miscellaneous nonmetallic mineral products manufacturing	0	3	5	12
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	0	1	1
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0

## APPENDIX

Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	1	3
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	3	5	14
Fabricated structural metal manufacturing	0	3	5	18
Plate work manufacturing	0	12	13	33
Metal window and door manufacturing	0	4	7	21
Sheet metal work manufacturing	0	4	5	16
Ornamental and architectural metal work manufacturing	0	4	6	17
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	5	11	48
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	1	1	3
Spring and wire product manufacturing	0	6	8	24
Machine shops	0	8	9	25
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	3	5	15
Electroplating, anodizing, and coloring metal	0	0	0	0
Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0

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Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	0	0	3
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	1	3
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0

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Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	0	0	1
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0

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Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	1
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	1
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	2	2	5
Industrial process variable instruments manufacturing	0	0	0	1
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0

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Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	2
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	3
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	0	1	3
Motor vehicle transmission and power train parts manufacturing	0	0	0	1
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	3
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	29	35	77
Boat building	0	2	2	18
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	11	8	31
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	7	6	19
Other household nonupholstered furniture manufacturing	0	1	0	2
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0



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Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	2	0	10
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	0	0	1
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	1
Dental laboratories	0	4	4	7
Jewelry and silverware manufacturing	0	26	34	120
Sporting and athletic goods manufacturing	0	6	7	61
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	0	0	3
Sign manufacturing	0	7	5	21
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	9	9	20
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	12	14	42
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	57	123	316
Wholesale - Professional and commercial equipment and supplies	0	235	376	728
Wholesale - Household appliances and electrical and electronic goods	0	66	140	344
Wholesale - Machinery, equipment, and supplies	0	126	214	408
Wholesale - Other durable goods merchant wholesalers	0	421	624	1,331

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Wholesale - Drugs and druggists' sundries	0	186	461	1,231
Wholesale - Grocery and related product wholesalers	0	422	547	1,179
Wholesale - Petroleum and petroleum products	0	81	872	1,037
Wholesale - Other nondurable goods merchant wholesalers	0	683	1,287	2,723
Wholesale - Wholesale electronic markets and agents and brokers	0	173	69	93
Retail - Motor vehicle and parts dealers	0	350	661	869
Retail - Furniture and home furnishings stores	0	202	311	450
Retail - Electronics and appliance stores	0	206	276	402
Retail - Building material and garden equipment and supplies stores	0	216	484	643
Retail - Food and beverage stores	0	801	1,253	1,810
Retail - Health and personal care stores	0	460	635	935
Retail - Gasoline stores	0	149	308	469
Retail - Clothing and clothing accessories stores	0	413	734	1,166
Retail - Sporting goods, hobby, musical instrument and book stores	0	194	293	416
Retail - General merchandise stores	0	682	1,164	1,659
Retail - Miscellaneous store retailers	0	407	536	722
Retail - Nonstore retailers	0	202	771	1,885
Air transportation	0	506	1,541	2,156
Rail transportation	0	(0)	(0)	0
Water transportation	0	183	312	1,214
Truck transportation	0	376	540	1,059
Transit and ground passenger transportation	0	592	646	869
Pipeline transportation	0	2	12	14
Scenic and sightseeing transportation and support activities for transportation	0	1,208	1,397	3,056
Couriers and messengers	0	232	351	579
Warehousing and storage	0	109	122	238

## APPENDIX

Newspaper publishers	0	146	261	310
Periodical publishers	0	101	166	274
Book publishers	0	8	30	79
Directory, mailing list, and other publishers	0	10	42	59
Greeting card publishing	0	7	36	44
Software publishers	0	54	161	216
Motion picture and video industries	0	499	1,060	1,411
Sound recording industries	0	11	34	68
Radio and television broadcasting	0	707	525	1,224
Cable and other subscription programming	0	13	24	91
Wired telecommunications carriers	0	562	1,044	2,024
Wireless telecommunications carriers (except satellite)	0	257	879	2,687
Satellite, telecommunications resellers, and all other telecommunications	0	48	49	140
Data processing, hosting, and related services	0	114	231	552
News syndicates, libraries, archives and all other information services	0	36	66	95
Internet publishing and broadcasting and web search portals	0	109	306	841
Nondepository credit intermediation and related activities	0	283	399	744
Securities and commodity contracts intermediation and brokerage	0	431	421	1,169
Monetary authorities and depository credit intermediation	0	1,511	3,440	6,123
Other financial investment activities	0	281	320	1,663
Direct life insurance carriers	0	69	138	211
Insurance carriers, except direct life	0	927	2,890	6,196
Insurance agencies, brokerages, and related activities	0	694	992	2,643
Funds, trusts, and other financial vehicles	0	185	238	1,084
Other real estate	0	5,750	19,245	32,603
Tenant-occupied housing	0	316	4,569	4,896

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Owner-occupied dwellings	0	0	12,642	15,972
Automotive equipment rental and leasing	0	181	987	1,170
General and consumer goods rental except video tapes and discs	0	160	280	363
Video tape and disc rental	0	34	61	90
Commercial and industrial machinery and equipment rental and leasing	0	193	603	796
Lessors of nonfinancial intangible assets	0	11	246	349
Legal services	0	3,173	6,059	8,530
Accounting, tax preparation, bookkeeping, and payroll services	0	848	1,048	1,554
Architectural, engineering, and related services	0	1,530	1,751	3,059
Specialized design services	0	171	187	240
Custom computer programming services	0	131	149	222
Computer systems design services	0	255	272	362
Other computer related services, including facilities management	0	349	464	922
Management consulting services	0	2,233	2,241	3,696
Environmental and other technical consulting services	0	839	714	1,090
Scientific research and development services	1	77,768	85,761	186,202
Advertising, public relations, and related services	0	434	578	1,235
Photographic services	0	271	14	132
Veterinary services	0	105	140	207
Marketing research and all other miscellaneous professional, scientific, and technical services	0	2,776	2,639	4,082
Management of companies and enterprises	0	7,052	7,971	11,675
Office administrative services	0	214	134	325
Facilities support services	0	154	185	328
Employment services	0	4,835	6,685	10,163
Business support services	0	208	196	348
Travel arrangement and reservation services	0	266	335	878
Investigation and security services	0	542	569	780
Services to buildings	0	1,062	1,141	1,666

## APPENDIX

Landscape and horticultural services	0	579	630	967
Other support services	0	139	167	328
Waste management and remediation services	0	355	667	1,089
Elementary and secondary schools	0	767	724	825
Junior colleges, colleges, universities, and professional schools	0	372	577	822
Other educational services	0	287	295	564
Offices of physicians	0	2,110	2,467	3,477
Offices of dentists	0	563	699	1,046
Offices of other health practitioners	0	697	669	912
Outpatient care centers	0	789	837	1,356
Medical and diagnostic laboratories	0	189	288	465
Home health care services	0	645	498	679
Other ambulatory health care services	0	126	138	211
Hospitals	0	3,973	4,430	7,404
Nursing and community care facilities	0	607	634	1,002
Residential mental retardation, mental health, substance abuse and other facilities	0	152	156	230
Individual and family services	0	903	908	1,288
Child day care services	0	368	496	608
Community food, housing, and other relief services, including rehabilitation services	0	259	326	642
Performing arts companies	0	154	303	423
Commercial Sports Except Racing	0	32	39	102
Racing and Track Operation	0	4	7	12
Independent artists, writers, and performers	0	391	535	597
Promoters of performing arts and sports and agents for public figures	0	60	136	336
Museums, historical sites, zoos, and parks	0	94	122	210
Amusement parks and arcades	0	18	100	111
Gambling industries (except casino hotels)	0	249	454	682
Other amusement and recreation industries	0	191	241	355

## APPENDIX

Fitness and recreational sports centers	0	99	234	282
Bowling centers	0	21	38	52
Hotels and motels, including casino hotels	0	457	895	1,196
Other accommodations	0	8	21	36
Full-service restaurants	0	1,450	2,037	3,142
Limited-service restaurants	0	987	1,479	2,808
All other food and drinking places	0	911	1,659	2,093
Automotive repair and maintenance, except car washes	0	838	1,028	1,433
Car washes	0	393	717	965
Electronic and precision equipment repair and maintenance	0	138	177	297
Commercial and industrial machinery and equipment repair and maintenance	0	177	185	297
Personal and household goods repair and maintenance	0	429	273	349
Personal care services	0	510	257	369
Death care services	0	60	66	104
Dry-cleaning and laundry services	0	136	145	206
Other personal services	0	740	368	568
Religious organizations	0	961	142	1,222
Grantmaking, giving, and social advocacy organizations	0	661	1,152	1,778
Business and professional associations	0	100	114	194
Labor and civic organizations	0	450	700	1,244
Private households	0	125	125	125
Postal service	0	493	494	535
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	67	105	408
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	298	(107)	151
Local government electric utilities	0	0	0	0
Other local government enterprises	0	591	1,108	2,019

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 14. Idaho

**Table 395: Detailed NASA Impacts by Types of Impact, Idaho.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>176</i>	<i>11,889,287</i>	<i>18,027,900</i>	<i>29,140,527</i>
Oilseed farming	0	784	1,580	2,218
Grain farming	0	21,139	37,467	115,659
Vegetable and melon farming	0	8,794	12,243	29,993
Fruit farming	0	954	1,427	2,970
Tree nut farming	0	23	24	35
Greenhouse, nursery, and floriculture production	0	2,013	2,516	5,511
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	4,713	6,392	15,493
All other crop farming	0	3,455	4,001	8,906
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	7,415	15,127	55,388

## APPENDIX

Dairy cattle and milk production	0	5,978	9,416	62,948
Poultry and egg production	0	561	691	9,252
Animal production, except cattle and poultry and eggs	0	12,809	27,908	42,201
Forestry, forest products, and timber tract production	0	100	106	152
Commercial logging	0	1,799	1,851	3,367
Commercial fishing	0	333	448	494
Commercial hunting and trapping	0	404	1,196	1,404
Support activities for agriculture and forestry	0	18,189	17,180	20,152
Oil and gas extraction	0	1,361	1,632	39,194
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	6,984	3,681	32,919
Iron ore mining	0	0	0	0
Gold ore mining	0	947	941	2,594
Silver ore mining	0	5,900	3,352	10,635
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	36	36	132
Stone mining and quarrying	0	874	531	2,652
Sand and gravel mining	0	1,254	1,043	2,616
Other clay, ceramic, refractory minerals mining	0	14	14	77
Potash, soda, and borate mineral mining	0	84	92	249
Phosphate rock mining	0	310	241	682
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	172	142	485
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	3	7	74
Metal mining services	0	57	148	852
Other nonmetallic minerals services	0	6	13	43
Electric power generation - Hydroelectric	0	2,913	10,665	23,767
Electric power generation - Fossil fuel	0	1,223	4,711	10,970
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	156	558	2,766
Electric power generation - Wind	0	755	6,953	20,370



## APPENDIX

Electric power generation - Geothermal	0	656	1,626	2,711
Electric power generation - Biomass	0	91	470	2,546
Electric power generation - All other	0	368	134	572
Electric power transmission and distribution	0	33,806	128,753	327,660
Natural gas distribution	0	5,771	17,066	34,229
Water, sewage and other systems	0	2,763	6,806	15,084
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	29,533	45,111	111,649
Maintenance and repair construction of residential structures	0	14,455	24,545	60,055
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	42	41	86
Dog and cat food manufacturing	0	655	790	2,764
Other animal food manufacturing	0	3,825	4,676	32,265
Flour milling	0	1,866	2,441	19,184
Rice milling	0	0	0	0
Malt manufacturing	0	1,275	1,723	12,356

## APPENDIX

Wet corn milling	0	2,374	3,551	19,386
Soybean and other oilseed processing	0	95	219	2,483
Fats and oils refining and blending	0	55	71	593
Breakfast cereal manufacturing	0	4,029	6,857	28,030
Beet sugar manufacturing	0	3,979	5,910	32,376
Sugar cane mills and refining	0	339	532	3,130
Nonchocolate confectionery manufacturing	0	381	402	779
Chocolate and confectionery manufacturing from cacao beans	0	325	381	1,688
Confectionery manufacturing from purchased chocolate	0	560	557	1,380
Frozen fruits, juices and vegetables manufacturing	0	6,032	8,342	38,138
Frozen specialties manufacturing	0	4,715	5,755	31,543
Canned fruits and vegetables manufacturing	0	933	1,122	3,643
Canned specialties	0	722	1,146	5,779
Dehydrated food products manufacturing	0	3,366	4,582	20,148
Cheese manufacturing	0	8,427	10,454	123,590
Dry, condensed, and evaporated dairy product manufacturing	0	1,359	2,316	25,212
Fluid milk manufacturing	0	3,736	4,821	40,572
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	431	428	592
Frozen cakes and other pastries manufacturing	0	1,338	1,751	3,221
Poultry processing	0	2,992	2,943	4,770
Animal, except poultry, slaughtering	0	3,518	4,107	34,963
Meat processed from carcasses	0	12,805	13,270	107,311
Rendering and meat byproduct processing	0	431	391	1,793
Seafood product preparation and packaging	0	2,698	2,829	11,672
Bread and bakery product, except frozen, manufacturing	0	13,780	14,752	26,692
Cookie and cracker manufacturing	0	3,217	3,498	9,466
Dry pasta, mixes, and dough manufacturing	0	335	402	1,456
Tortilla manufacturing	0	1,843	1,968	5,347

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	370	394	2,347
Other snack food manufacturing	0	1,309	1,535	5,723
Coffee and tea manufacturing	0	399	456	2,023
Flavoring syrup and concentrate manufacturing	0	715	2,465	5,841
Mayonnaise, dressing, and sauce manufacturing	0	746	1,028	4,911
Spice and extract manufacturing	0	129	129	265
All other food manufacturing	0	4,348	4,532	10,847
Bottled and canned soft drinks & water	0	2,575	3,937	28,240
Manufactured ice	0	302	52	806
Breweries	0	2,041	4,459	21,230
Wineries	0	39	61	434
Distilleries	0	237	955	2,582
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	110	156	575
Broadwoven fabric mills	0	1	1	15
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	8	13	98
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	3	4	21
Fabric coating mills	0	50	63	234
Carpet and rug mills	0	236	370	1,865
Curtain and linen mills	0	27	31	83
Textile bag and canvas mills	0	125	138	330
Rope, cordage, twine, tire cord and tire fabric mills	0	233	347	1,015
Other textile product mills	0	184	205	456
Hosiery and sock mills	0	4	6	18
Other apparel knitting mills	0	4	7	20
Cut and sew apparel contractors	0	16	20	137
Mens and boys cut and sew apparel manufacturing	0	14	24	108
Womens and girls cut and sew apparel manufacturing	0	3	5	104
Other cut and sew apparel manufacturing	0	4	8	37
Apparel accessories and other apparel manufacturing	0	61	99	269
Leather and hide tanning and finishing	0	5	12	75

## APPENDIX

Footwear manufacturing	0	19	24	84
Other leather and allied product manufacturing	0	6	7	56
Sawmills	0	2,554	3,957	10,975
Wood preservation	0	214	551	1,664
Veneer and plywood manufacturing	0	242	368	1,037
Engineered wood member and truss manufacturing	0	643	925	2,419
Reconstituted wood product manufacturing	0	184	476	1,376
Wood windows and door manufacturing	0	2,715	3,871	10,023
Cut stock, resawing lumber, and planing	0	583	1,030	2,494
Other millwork, including flooring	0	1,365	2,009	4,789
Wood container and pallet manufacturing	0	1,527	1,751	4,001
Manufactured home (mobile home) manufacturing	0	3	5	13
Prefabricated wood building manufacturing	0	296	350	946
All other miscellaneous wood product manufacturing	0	1,221	1,381	3,332
Pulp mills	0	52	66	344
Paper mills	0	2,485	4,012	19,248
Paperboard mills	0	741	1,298	6,387
Paperboard container manufacturing	0	3,573	4,434	18,178
Paper bag and coated and treated paper manufacturing	0	249	344	1,523
Stationery product manufacturing	0	23	29	203
Sanitary paper product manufacturing	0	73	139	631
All other converted paper product manufacturing	0	4	5	21
Printing	0	8,436	20,476	37,806
Support activities for printing	0	153	370	685
Petroleum refineries	0	441	2,917	29,983
Asphalt paving mixture and block manufacturing	0	21	33	346
Asphalt shingle and coating materials manufacturing	0	53	122	662
Petroleum lubricating oil and grease manufacturing	0	133	359	2,455

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	130	315	6,584
Industrial gas manufacturing	0	121	144	1,232
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	66	74	513
Other basic organic chemical manufacturing	0	43	56	1,182
Plastics material and resin manufacturing	0	8	11	293
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	354	407	3,425
Phosphatic fertilizer manufacturing	0	882	1,061	6,569
Fertilizer mixing	0	36	34	240
Pesticide and other agricultural chemical manufacturing	0	70	94	1,039
Medicinal and botanical manufacturing	0	91	86	459
Pharmaceutical preparation manufacturing	0	271	383	2,814
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	68	76	364
Paint and coating manufacturing	0	17	17	228
Adhesive manufacturing	0	50	49	329
Soap and other detergent manufacturing	0	96	119	1,679
Polish and other sanitation good manufacturing	0	21	21	204
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1,475	1,560	11,633
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	2,914	3,095	12,725
Other miscellaneous chemical product manufacturing	0	843	839	3,449

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	304	587	2,146
Unlaminated plastics profile shape manufacturing	0	104	282	967
Plastics pipe and pipe fitting manufacturing	0	172	520	1,788
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	100	220	610
Polystyrene foam product manufacturing	0	279	545	1,522
Urethane and other foam product (except polystyrene) manufacturing	0	72	135	543
Plastics bottle manufacturing	0	80	156	642
Other plastics product manufacturing	0	1,616	2,697	9,006
Tire manufacturing	0	379	577	2,687
Rubber and plastics hoses and belting manufacturing	0	158	285	618
Other rubber product manufacturing	0	149	234	1,006
Pottery, ceramics, and plumbing fixture manufacturing	0	29	37	121
Brick, tile, and other structural clay product manufacturing	0	105	163	664
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	142	210	1,138
Cement manufacturing	0	61	132	369
Ready-mix concrete manufacturing	0	1,651	2,619	9,379
Concrete block and brick manufacturing	0	348	597	1,781
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	194	270	765
Lime manufacturing	0	15	34	127
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	2	3	25
Cut stone and stone product manufacturing	0	430	495	1,320

## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	3	6	33
Miscellaneous nonmetallic mineral products manufacturing	0	29	59	278
Iron and steel mills and ferroalloy manufacturing	0	36	97	269
Iron, steel pipe and tube manufacturing from purchased steel	0	36	84	228
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	13	48	243
Secondary smelting and alloying of aluminum	0	6	17	137
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	8	16	66
Nonferrous metal (exc aluminum) smelting and refining	0	5	54	111
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	(3)	(1)	33
Secondary processing of other nonferrous metals	0	8	62	216
Ferrous metal foundries	0	40	140	290
Nonferrous metal foundries	0	123	276	480
Custom roll forming	0	39	58	559
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	14	18	100
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	619	1,719	5,105
Handtool manufacturing	0	65	99	253
Prefabricated metal buildings and components manufacturing	0	92	125	428
Fabricated structural metal manufacturing	0	509	723	2,413
Plate work manufacturing	0	388	398	1,198
Metal window and door manufacturing	0	50	72	193

## APPENDIX

Sheet metal work manufacturing	0	605	758	2,351
Ornamental and architectural metal work manufacturing	0	199	252	885
Power boiler and heat exchanger manufacturing	0	13	18	44
Metal tank (heavy gauge) manufacturing	0	131	156	514
Metal cans manufacturing	0	40	82	382
Metal barrels, drums and pails manufacturing	0	32	38	164
Hardware manufacturing	0	132	209	793
Spring and wire product manufacturing	0	27	35	160
Machine shops	0	1,723	1,952	4,487
Turned product and screw, nut, and bolt manufacturing	0	176	237	849
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	61	96	417
Electroplating, anodizing, and coloring metal	0	98	108	291
Valve and fittings, other than plumbing, manufacturing	0	20	28	121
Plumbing fixture fitting and trim manufacturing	0	15	41	202
Ball and roller bearing manufacturing	0	5	8	34
Small arms ammunition manufacturing	0	2,663	5,912	11,775
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	225	511	1,411
Fabricated pipe and pipe fitting manufacturing	0	75	85	292
Other fabricated metal manufacturing	0	793	1,005	3,580
Farm machinery and equipment manufacturing	0	198	273	1,342
Lawn and garden equipment manufacturing	0	5	8	92
Construction machinery manufacturing	0	28	51	215
Mining machinery and equipment manufacturing	0	12	15	59



## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	1	2	7
Semiconductor machinery manufacturing	0	12	14	55
Food product machinery manufacturing	0	13	15	51
Sawmill, woodworking, and paper machinery	0	3	3	11
Printing machinery and equipment manufacturing	0	3	3	16
All other industrial machinery manufacturing	0	7	8	32
Optical instrument and lens manufacturing	0	1	1	2
Photographic and photocopying equipment manufacturing	0	0	1	4
Other commercial service industry machinery manufacturing	0	75	121	462
Air purification and ventilation equipment manufacturing	0	5	7	27
Heating equipment (except warm air furnaces) manufacturing	0	82	111	343
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	8	14	78
Industrial mold manufacturing	0	19	20	45
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	36	39	89
Machine tool manufacturing	0	1	1	8
Rolling mill and other metalworking machinery manufacturing	0	1	1	7
Turbine and turbine generator set units manufacturing	0	0	0	1
Speed changer, industrial high-speed drive, and gear manufacturing	0	40	54	156
Mechanical power transmission equipment manufacturing	0	5	6	22
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	4	7	27

## APPENDIX

Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	1	2	7
Conveyor and conveying equipment manufacturing	0	10	10	35
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	1
Industrial truck, trailer, and stacker manufacturing	0	8	11	60
Power-driven handtool manufacturing	0	3	7	48
Welding and soldering equipment manufacturing	0	7	8	27
Packaging machinery manufacturing	0	1	1	6
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	5	7	25
Fluid power pump and motor manufacturing	0	5	7	45
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	15	19	66
Electronic computer manufacturing	0	1	2	48
Computer storage device manufacturing	0	13	28	93
Computer terminals and other computer peripheral equipment manufacturing	0	563	910	2,458
Telephone apparatus manufacturing	0	20	32	101
Broadcast and wireless communications equipment manufacturing	0	1	1	3
Other communications equipment manufacturing	0	15	22	74
Audio and video equipment manufacturing	0	2	3	26
Printed circuit assembly (electronic assembly) manufacturing	0	11	15	76
Bare printed circuit board manufacturing	0	14	17	52

## APPENDIX

Semiconductor and related device manufacturing	0	3,084	4,664	13,064
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	149	201	649
Other electronic component manufacturing	0	64	70	211
Electromedical and electrotherapeutic apparatus manufacturing	0	4	6	20
Search, detection, and navigation instruments manufacturing	0	1	1	2
Automatic environmental control manufacturing	0	4	5	11
Industrial process variable instruments manufacturing	0	31	41	123
Totalizing fluid meter and counting device manufacturing	0	2	3	8
Electricity and signal testing instruments manufacturing	0	0	0	1
Analytical laboratory instrument manufacturing	0	2	3	8
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	28	42	127
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	161	211	474
Electric lamp bulb and part manufacturing	0	18	38	110
Lighting fixture manufacturing	0	7	13	34
Small electrical appliance manufacturing	0	47	123	290
Household cooking appliance manufacturing	0	94	288	657
Household refrigerator and home freezer manufacturing	0	86	326	715
Household laundry equipment manufacturing	0	123	335	1,094

## APPENDIX

Other major household appliance manufacturing	0	32	112	239
Power, distribution, and specialty transformer manufacturing	0	48	84	248
Motor and generator manufacturing	0	5	9	24
Switchgear and switchboard apparatus manufacturing	0	7	14	32
Relay and industrial control manufacturing	0	7	11	33
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	603	2,109	5,698
Fiber optic cable manufacturing	0	23	43	182
Other communication and energy wire manufacturing	0	31	68	252
Wiring device manufacturing	0	3	8	47
Carbon and graphite product manufacturing	0	40	68	184
All other miscellaneous electrical equipment and component manufacturing	0	9	12	37
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	1,029	1,047	25,311
Heavy duty truck manufacturing	0	4	6	55
Motor vehicle body manufacturing	0	65	68	342
Truck trailer manufacturing	0	18	18	100
Motor home manufacturing	0	397	455	2,402
Travel trailer and camper manufacturing	0	6,174	6,397	30,643
Motor vehicle gasoline engine and engine parts manufacturing	0	32	36	386
Motor vehicle electrical and electronic equipment manufacturing	0	2,320	2,347	13,019
Motor vehicle transmission and power train parts manufacturing	0	17	18	94
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	360	366	3,226
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	425	437	1,750

## APPENDIX

Aircraft manufacturing	0	3	3	19
Aircraft engine and engine parts manufacturing	0	3	3	19
Other aircraft parts and auxiliary equipment manufacturing	0	6,472	7,688	26,117
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	32	35	213
Ship building and repairing	0	34	36	108
Boat building	0	1,368	1,553	8,504
Motorcycle, bicycle, and parts manufacturing	0	144	198	991
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	921	1,194	5,365
Wood kitchen cabinet and countertop manufacturing	0	1,075	1,436	3,830
Upholstered household furniture manufacturing	0	1,194	1,555	5,061
Nonupholstered wood household furniture manufacturing	0	212	235	818
Other household nonupholstered furniture manufacturing	0	54	78	283
Institutional furniture manufacturing	0	14	15	65
Wood office furniture manufacturing	0	20	26	133
Custom architectural woodwork and millwork	0	7	7	28
Office furniture, except wood, manufacturing	0	5,780	9,127	29,479
Showcase, partition, shelving, and locker manufacturing	0	40	54	190
Mattress manufacturing	0	11	19	139
Blind and shade manufacturing	0	4	5	26
Surgical and medical instrument manufacturing	0	26	47	121
Surgical appliance and supplies manufacturing	0	105	193	608

## APPENDIX

Dental equipment and supplies manufacturing	0	1	2	14
Ophthalmic goods manufacturing	0	24	46	87
Dental laboratories	0	190	180	355
Jewelry and silverware manufacturing	0	183	275	898
Sporting and athletic goods manufacturing	0	290	396	1,848
Doll, toy, and game manufacturing	0	212	329	1,275
Office supplies (except paper) manufacturing	0	8	11	89
Sign manufacturing	0	1,211	946	2,959
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	41	42	126
Fasteners, buttons, needles, and pins manufacturing	0	65	79	210
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	(8)	(5)	169
All other miscellaneous manufacturing	0	2,330	2,842	14,391
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	7,460	17,663	42,769
Wholesale - Professional and commercial equipment and supplies	0	27,253	46,041	81,773
Wholesale - Household appliances and electrical and electronic goods	0	11,383	26,367	52,118
Wholesale - Machinery, equipment, and supplies	0	15,057	26,790	48,673
Wholesale - Other durable goods merchant wholesalers	0	28,982	45,654	94,886
Wholesale - Drugs and druggists' sundries	0	11,327	30,846	66,380
Wholesale - Grocery and related product wholesalers	0	29,257	40,020	81,650
Wholesale - Petroleum and petroleum products	0	3,890	63,701	74,622
Wholesale - Other nondurable goods merchant wholesalers	1	48,704	98,330	196,861
Wholesale - Wholesale electronic markets and agents and brokers	0	27,175	14,143	16,955
Retail - Motor vehicle and parts dealers	1	39,715	59,680	89,313

## APPENDIX

Retail - Furniture and home furnishings stores	0	22,115	27,590	43,457
Retail - Electronics and appliance stores	0	21,071	21,816	38,530
Retail - Building material and garden equipment and supplies stores	1	22,024	37,745	56,431
Retail - Food and beverage stores	2	69,827	90,874	145,433
Retail - Health and personal care stores	1	31,024	36,720	60,343
Retail - Gasoline stores	1	21,788	35,759	68,636
Retail - Clothing and clothing accessories stores	1	17,906	27,685	63,021
Retail - Sporting goods, hobby, musical instrument and book stores	1	17,547	22,527	38,485
Retail - General merchandise stores	2	68,344	92,432	151,252
Retail - Miscellaneous store retailers	2	32,040	37,188	65,429
Retail - Nonstore retailers	2	71,039	126,946	240,100
Air transportation	0	23,422	48,834	81,773
Rail transportation	0	7,403	22,350	36,292
Water transportation	0	1,132	1,244	8,069
Truck transportation	1	68,181	81,076	181,602
Transit and ground passenger transportation	1	14,200	17,450	26,386
Pipeline transportation	0	1,698	5,538	6,187
Scenic and sightseeing transportation and support activities for transportation	0	26,835	30,360	67,832
Couriers and messengers	0	16,324	21,551	39,651
Warehousing and storage	0	14,661	17,154	36,072
Newspaper publishers	0	9,484	15,600	21,589
Periodical publishers	0	3,794	5,755	13,000
Book publishers	0	4,208	13,995	33,939
Directory, mailing list, and other publishers	0	9,363	30,666	51,007
Greeting card publishing	0	0	0	0
Software publishers	0	7,078	17,810	25,556
Motion picture and video industries	0	6,414	10,668	36,952
Sound recording industries	0	1,116	2,683	6,328
Radio and television broadcasting	0	17,517	10,279	78,275

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Cable and other subscription programming	0	264	775	9,181
Wired telecommunications carriers	0	20,665	47,076	109,286
Wireless telecommunications carriers (except satellite)	0	5,357	25,674	85,595
Satellite, telecommunications resellers, and all other telecommunications	0	7,847	9,295	29,531
Data processing, hosting, and related services	0	18,723	48,311	119,527
News syndicates, libraries, archives and all other information services	0	12,506	29,095	43,268
Internet publishing and broadcasting and web search portals	0	11,792	51,154	138,728
Nondepository credit intermediation and related activities	1	46,509	61,594	114,357
Securities and commodity contracts intermediation and brokerage	1	42,761	42,158	122,051
Monetary authorities and depository credit intermediation	2	114,048	261,534	523,064
Other financial investment activities	2	33,926	38,439	177,900
Direct life insurance carriers	0	5,253	8,610	14,828
Insurance carriers, except direct life	1	65,508	159,939	478,466
Insurance agencies, brokerages, and related activities	3	129,499	171,951	568,756
Funds, trusts, and other financial vehicles	0	19,126	22,520	147,410
Other real estate	6	117,496	374,750	1,118,567
Tenant-occupied housing	1	12,904	224,101	253,915
Owner-occupied dwellings	0	0	778,459	983,574
Automotive equipment rental and leasing	0	6,827	22,718	45,513
General and consumer goods rental except video tapes and discs	0	8,730	12,668	24,614
Video tape and disc rental	0	2,905	4,899	8,481
Commercial and industrial machinery and equipment rental and leasing	0	12,324	29,959	69,939
Lessors of nonfinancial intangible assets	0	545	14,340	19,003



## APPENDIX

Legal services	1	62,549	97,731	172,462
Accounting, tax preparation, bookkeeping, and payroll services	1	47,680	69,096	110,892
Architectural, engineering, and related services	1	49,997	63,338	119,954
Specialized design services	0	11,635	12,356	17,465
Custom computer programming services	0	21,564	24,292	39,330
Computer systems design services	0	15,924	16,481	22,935
Other computer related services, including facilities management	0	27,393	32,384	77,239
Management consulting services	1	75,160	75,124	137,591
Environmental and other technical consulting services	0	20,177	18,756	29,921
Scientific research and development services	16	1,451,944	1,874,822	3,843,200
Advertising, public relations, and related services	1	23,310	35,642	76,508
Photographic services	0	9,038	3,864	9,338
Veterinary services	0	7,836	12,555	20,333
Marketing research and all other miscellaneous professional, scientific, and technical services	2	70,747	64,735	107,984
Management of companies and enterprises	1	118,599	136,510	217,239
Office administrative services	1	33,282	20,217	41,540
Facilities support services	0	1,418	1,956	5,788
Employment services	3	103,887	186,550	297,551
Business support services	2	107,438	97,989	157,023
Travel arrangement and reservation services	0	7,271	10,925	28,526
Investigation and security services	0	10,011	10,335	15,484
Services to buildings	1	31,340	33,181	58,334
Landscape and horticultural services	4	116,851	125,864	212,745
Other support services	0	16,460	21,916	48,020
Waste management and remediation services	0	24,947	42,019	66,915
Elementary and secondary schools	0	9,819	8,236	11,095
Junior colleges, colleges, universities, and professional schools	1	22,990	29,044	47,842
Other educational services	1	17,041	15,047	33,833
Offices of physicians	2	194,135	231,740	353,420
Offices of dentists	1	45,024	57,541	95,645

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Offices of other health practitioners	1	61,245	57,581	83,164
Outpatient care centers	1	28,993	30,442	63,462
Medical and diagnostic laboratories	0	12,889	20,152	32,409
Home health care services	2	67,016	52,839	75,206
Other ambulatory health care services	0	13,787	15,069	26,304
Hospitals	4	364,556	409,217	751,592
Nursing and community care facilities	1	52,665	59,771	109,032
Residential mental retardation, mental health, substance abuse and other facilities	1	16,653	17,673	29,772
Individual and family services	1	33,996	32,217	49,428
Child day care services	1	15,387	18,868	28,053
Community food, housing, and other relief services, including rehabilitation services	0	6,284	7,199	18,553
Performing arts companies	0	3,928	6,408	15,142
Commercial Sports Except Racing	0	5,603	6,062	17,562
Racing and Track Operation	0	883	1,418	3,641
Independent artists, writers, and performers	1	12,117	13,577	18,564
Promoters of performing arts and sports and agents for public figures	0	3,997	9,140	25,134
Museums, historical sites, zoos, and parks	0	1,581	1,925	3,929
Amusement parks and arcades	0	1,697	6,087	7,768
Gambling industries (except casino hotels)	0	8,799	20,444	35,560
Other amusement and recreation industries	0	9,944	12,855	23,392
Fitness and recreational sports centers	0	8,401	14,069	21,083
Bowling centers	0	1,326	2,068	3,953
Hotels and motels, including casino hotels	0	3,499	7,137	11,647
Other accommodations	0	1,299	1,647	2,333
Full-service restaurants	4	81,221	119,555	225,668
Limited-service restaurants	3	63,796	100,772	237,818
All other food and drinking places	2	51,926	72,607	120,201
Automotive repair and maintenance, except car washes	1	61,116	72,847	112,161
Car washes	1	32,177	48,018	74,058

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Electronic and precision equipment repair and maintenance	0	14,258	19,522	34,542
Commercial and industrial machinery and equipment repair and maintenance	0	17,140	21,808	34,971
Personal and household goods repair and maintenance	0	22,666	12,891	19,743
Personal care services	1	23,767	19,358	26,856
Death care services	0	2,223	2,807	4,656
Dry-cleaning and laundry services	0	5,339	5,832	8,579
Other personal services	1	22,452	19,619	28,233
Religious organizations	1	29,292	13,927	54,521
Grantmaking, giving, and social advocacy organizations	0	6,577	19,035	32,974
Business and professional associations	0	9,708	14,579	29,723
Labor and civic organizations	0	7,161	17,064	34,187
Private households	1	7,439	7,439	7,439
Postal service	0	25,746	25,778	28,931
Federal electric utilities	0	0	0	0
Other federal government enterprises	9	278,310	(328,008)	658,698
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	28,006	33,578	65,817
Local government passenger transit	0	4,106	(2,091)	3,254
Local government electric utilities	0	0	0	0
Other local government enterprises	0	19,110	40,143	96,623
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	47	5,613,798	8,927,002	9,161,931

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 396: Detailed M2M Program Impacts by Types of Impact, Idaho.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>93</i>	<i>7,892,290</i>	<i>12,418,902</i>	<i>15,988,956</i>
Oilseed farming	0	423	1,218	1,904
Grain farming	0	10,001	19,592	54,835
Vegetable and melon farming	0	5,658	8,252	19,082
Fruit farming	0	784	1,185	2,326
Tree nut farming	0	30	31	45
Greenhouse, nursery, and floriculture production	0	742	955	2,045
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	2,290	3,227	7,180
All other crop farming	0	1,706	2,056	4,441
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	4,336	8,492	27,073
Dairy cattle and milk production	0	3,865	6,271	36,697
Poultry and egg production	0	296	372	4,879
Animal production, except cattle and poultry and eggs	0	4,361	10,519	16,296
Forestry, forest products, and timber tract production	0	46	48	66
Commercial logging	0	841	862	1,439
Commercial fishing	0	234	237	264
Commercial hunting and trapping	0	217	602	628
Support activities for agriculture and forestry	0	9,424	8,834	10,314
Oil and gas extraction	0	323	489	11,851
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	1,960	687	6,345
Iron ore mining	0	0	0	0
Gold ore mining	0	218	182	541

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Silver ore mining	0	649	377	1,205
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	5	4	16
Stone mining and quarrying	0	547	184	933
Sand and gravel mining	0	752	346	733
Other clay, ceramic, refractory minerals mining	0	6	5	28
Potash, soda, and borate mineral mining	0	37	38	109
Phosphate rock mining	0	92	72	203
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	57	31	103
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	1	2	16
Metal mining services	0	12	36	210
Other nonmetallic minerals services	0	1	3	10
Electric power generation - Hydroelectric	0	1,548	5,330	11,253
Electric power generation - Fossil fuel	0	557	2,124	4,652
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	57	200	959
Electric power generation - Wind	0	242	2,154	5,987
Electric power generation - Geothermal	0	455	1,030	1,741
Electric power generation - Biomass	0	70	293	1,645
Electric power generation - All other	0	293	89	329
Electric power transmission and distribution	0	13,198	53,267	129,501
Natural gas distribution	0	2,660	8,106	14,503
Water, sewage and other systems	0	1,732	3,886	7,746
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	11,190	17,165	41,217
Maintenance and repair construction of residential structures	0	9,245	15,793	37,395
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	25	23	49
Dog and cat food manufacturing	0	363	454	1,523
Other animal food manufacturing	0	2,167	2,770	18,193
Flour milling	0	702	923	7,357
Rice milling	0	0	0	0
Malt manufacturing	0	498	729	3,929
Wet corn milling	0	1,550	2,513	13,837
Soybean and other oilseed processing	0	75	174	1,949
Fats and oils refining and blending	0	43	58	441
Breakfast cereal manufacturing	0	2,090	3,481	14,125
Beet sugar manufacturing	0	1,740	2,457	13,546
Sugar cane mills and refining	0	276	435	2,539
Nonchocolate confectionery manufacturing	0	282	293	521
Chocolate and confectionery manufacturing from cacao beans	0	405	477	1,960
Confectionery manufacturing from purchased chocolate	0	392	395	904
Frozen fruits, juices and vegetables manufacturing	0	3,260	4,560	19,613
Frozen specialties manufacturing	0	2,642	3,190	16,507
Canned fruits and vegetables manufacturing	0	534	643	2,069

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Canned specialties	0	309	477	2,482
Dehydrated food products manufacturing	0	2,017	2,714	11,081
Cheese manufacturing	0	4,133	5,115	62,001
Dry, condensed, and evaporated dairy product manufacturing	0	1,029	1,801	17,517
Fluid milk manufacturing	0	2,299	3,036	24,454
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	185	190	231
Frozen cakes and other pastries manufacturing	0	872	1,128	2,026
Poultry processing	0	1,421	1,476	2,262
Animal, except poultry, slaughtering	0	1,476	1,751	14,603
Meat processed from carcasses	0	8,187	8,608	67,398
Rendering and meat byproduct processing	0	321	288	1,312
Seafood product preparation and packaging	0	1,171	1,273	4,651
Bread and bakery product, except frozen, manufacturing	0	8,737	9,368	16,611
Cookie and cracker manufacturing	0	2,260	2,611	6,418
Dry pasta, mixes, and dough manufacturing	0	244	286	1,063
Tortilla manufacturing	0	1,130	1,200	3,190
Roasted nuts and peanut butter manufacturing	0	281	334	1,732
Other snack food manufacturing	0	862	1,016	3,648
Coffee and tea manufacturing	0	195	230	954
Flavoring syrup and concentrate manufacturing	0	577	1,878	4,561
Mayonnaise, dressing, and sauce manufacturing	0	398	532	2,429
Spice and extract manufacturing	0	96	98	183
All other food manufacturing	0	3,276	3,429	7,733
Bottled and canned soft drinks & water	0	1,450	2,304	15,802
Manufactured ice	0	179	34	438
Breweries	0	1,053	2,377	10,948
Wineries	0	54	83	576
Distilleries	0	144	606	1,473
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	41	65	212
Broadwoven fabric mills	0	0	0	7

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Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	5	9	60
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	3	4	21
Fabric coating mills	0	45	55	185
Carpet and rug mills	0	195	330	1,424
Curtain and linen mills	0	20	24	61
Textile bag and canvas mills	0	71	80	184
Rope, cordage, twine, tire cord and tire fabric mills	0	73	115	314
Other textile product mills	0	116	132	276
Hosiery and sock mills	0	2	4	10
Other apparel knitting mills	0	3	5	13
Cut and sew apparel contractors	0	5	7	43
Mens and boys cut and sew apparel manufacturing	0	13	23	90
Womens and girls cut and sew apparel manufacturing	0	3	7	116
Other cut and sew apparel manufacturing	0	4	7	33
Apparel accessories and other apparel manufacturing	0	63	103	244
Leather and hide tanning and finishing	0	3	8	44
Footwear manufacturing	0	14	18	60
Other leather and allied product manufacturing	0	6	6	49
Sawmills	0	1,058	1,702	4,519
Wood preservation	0	79	218	644
Veneer and plywood manufacturing	0	95	149	417
Engineered wood member and truss manufacturing	0	270	401	1,030
Reconstituted wood product manufacturing	0	74	200	558
Wood windows and door manufacturing	0	753	1,110	2,813
Cut stock, resawing lumber, and planing	0	238	447	1,029
Other millwork, including flooring	0	470	720	1,617
Wood container and pallet manufacturing	0	776	914	2,042
Manufactured home (mobile home) manufacturing	0	1	2	4



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Prefabricated wood building manufacturing	0	115	137	377
All other miscellaneous wood product manufacturing	0	628	753	1,616
Pulp mills	0	19	24	128
Paper mills	0	1,090	1,544	8,085
Paperboard mills	0	327	543	2,771
Paperboard container manufacturing	0	2,077	2,516	10,225
Paper bag and coated and treated paper manufacturing	0	123	157	709
Stationery product manufacturing	0	14	17	106
Sanitary paper product manufacturing	0	38	66	314
All other converted paper product manufacturing	0	3	3	12
Printing	0	3,712	8,985	16,032
Support activities for printing	0	67	158	292
Petroleum refineries	0	229	1,370	14,359
Asphalt paving mixture and block manufacturing	0	10	16	152
Asphalt shingle and coating materials manufacturing	0	21	44	240
Petroleum lubricating oil and grease manufacturing	0	83	211	1,403
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	55	133	2,787
Industrial gas manufacturing	0	52	65	538
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	29	34	229
Other basic organic chemical manufacturing	0	20	26	569
Plastics material and resin manufacturing	0	3	5	134
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	179	220	1,748
Phosphatic fertilizer manufacturing	0	297	362	2,277
Fertilizer mixing	0	14	14	96

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Pesticide and other agricultural chemical manufacturing	0	34	47	517
Medicinal and botanical manufacturing	0	94	97	437
Pharmaceutical preparation manufacturing	0	285	426	2,820
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	86	101	448
Paint and coating manufacturing	0	9	9	123
Adhesive manufacturing	0	31	33	205
Soap and other detergent manufacturing	0	50	76	898
Polish and other sanitation good manufacturing	0	12	14	116
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1,174	1,415	9,580
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	816	936	3,556
Other miscellaneous chemical product manufacturing	0	374	392	1,632
Plastics packaging materials and unlaminated film and sheet manufacturing	0	188	359	1,286
Unlaminated plastics profile shape manufacturing	0	38	100	336
Plastics pipe and pipe fitting manufacturing	0	89	265	931
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	42	91	253
Polystyrene foam product manufacturing	0	142	272	758
Urethane and other foam product (except polystyrene) manufacturing	0	43	79	315
Plastics bottle manufacturing	0	60	116	467
Other plastics product manufacturing	0	802	1,336	4,234
Tire manufacturing	0	138	213	1,048

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Rubber and plastics hoses and belting manufacturing	0	73	128	274
Other rubber product manufacturing	0	38	59	261
Pottery, ceramics, and plumbing fixture manufacturing	0	14	16	58
Brick, tile, and other structural clay product manufacturing	0	34	51	220
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	59	85	461
Cement manufacturing	0	19	41	115
Ready-mix concrete manufacturing	0	530	819	2,896
Concrete block and brick manufacturing	0	137	226	679
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	73	99	283
Lime manufacturing	0	4	10	38
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	1	2	13
Cut stone and stone product manufacturing	0	197	225	590
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	1	2	12
Miscellaneous nonmetallic mineral products manufacturing	0	10	20	91
Iron and steel mills and ferroalloy manufacturing	0	13	34	102
Iron, steel pipe and tube manufacturing from purchased steel	0	15	32	86
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	10	32	159
Secondary smelting and alloying of aluminum	0	4	9	70
Aluminum sheet, plate, and foil manufacturing	0	0	0	0

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Other aluminum rolling, drawing and extruding	0	5	9	38
Nonferrous metal (exc aluminum) smelting and refining	0	1	12	26
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	(1)	(0)	16
Secondary processing of other nonferrous metals	0	3	16	67
Ferrous metal foundries	0	17	52	118
Nonferrous metal foundries	0	70	145	260
Custom roll forming	0	22	32	287
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	6	8	45
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	423	1,246	3,512
Handtool manufacturing	0	47	72	185
Prefabricated metal buildings and components manufacturing	0	25	34	119
Fabricated structural metal manufacturing	0	132	188	625
Plate work manufacturing	0	175	180	523
Metal window and door manufacturing	0	21	30	78
Sheet metal work manufacturing	0	262	328	988
Ornamental and architectural metal work manufacturing	0	67	85	290
Power boiler and heat exchanger manufacturing	0	6	9	22
Metal tank (heavy gauge) manufacturing	0	42	50	164
Metal cans manufacturing	0	22	46	213
Metal barrels, drums and pails manufacturing	0	19	23	91
Hardware manufacturing	0	64	101	371
Spring and wire product manufacturing	0	15	20	88
Machine shops	0	783	886	2,000
Turned product and screw, nut, and bolt manufacturing	0	101	136	472
Metal heat treating	0	0	0	0

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Metal coating and nonprecious engraving	0	31	49	212
Electroplating, anodizing, and coloring metal	0	59	66	174
Valve and fittings, other than plumbing, manufacturing	0	8	11	49
Plumbing fixture fitting and trim manufacturing	0	7	18	84
Ball and roller bearing manufacturing	0	2	3	14
Small arms ammunition manufacturing	0	956	2,113	4,254
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	151	336	866
Fabricated pipe and pipe fitting manufacturing	0	23	25	88
Other fabricated metal manufacturing	0	429	545	1,843
Farm machinery and equipment manufacturing	0	72	105	461
Lawn and garden equipment manufacturing	0	2	3	34
Construction machinery manufacturing	0	16	29	118
Mining machinery and equipment manufacturing	0	2	3	12
Oil and gas field machinery and equipment manufacturing	0	0	0	2
Semiconductor machinery manufacturing	0	3	4	15
Food product machinery manufacturing	0	12	14	47
Sawmill, woodworking, and paper machinery	0	1	1	4
Printing machinery and equipment manufacturing	0	1	2	8
All other industrial machinery manufacturing	0	5	6	25
Optical instrument and lens manufacturing	0	1	1	2
Photographic and photocopying equipment manufacturing	0	0	1	4

## APPENDIX

Other commercial service industry machinery manufacturing	0	37	64	234
Air purification and ventilation equipment manufacturing	0	2	2	8
Heating equipment (except warm air furnaces) manufacturing	0	53	75	204
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4	8	41
Industrial mold manufacturing	0	7	8	17
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	17	18	42
Machine tool manufacturing	0	1	1	5
Rolling mill and other metalworking machinery manufacturing	0	1	1	5
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	21	29	76
Mechanical power transmission equipment manufacturing	0	2	3	9
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	2	4	14
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	1	1	5
Conveyor and conveying equipment manufacturing	0	4	4	13
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	1
Industrial truck, trailer, and stacker manufacturing	0	3	5	26
Power-driven handtool manufacturing	0	4	10	66
Welding and soldering equipment manufacturing	0	4	5	16
Packaging machinery manufacturing	0	1	1	6

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Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	1	2	7
Fluid power pump and motor manufacturing	0	3	4	25
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	8	9	32
Electronic computer manufacturing	0	1	3	51
Computer storage device manufacturing	0	11	23	77
Computer terminals and other computer peripheral equipment manufacturing	0	517	814	2,072
Telephone apparatus manufacturing	0	10	15	47
Broadcast and wireless communications equipment manufacturing	0	1	1	3
Other communications equipment manufacturing	0	6	8	29
Audio and video equipment manufacturing	0	2	3	31
Printed circuit assembly (electronic assembly) manufacturing	0	7	10	47
Bare printed circuit board manufacturing	0	4	5	18
Semiconductor and related device manufacturing	0	1,882	2,772	7,502
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	24	32	103
Other electronic component manufacturing	0	36	40	118
Electromedical and electrotherapeutic apparatus manufacturing	0	4	6	20
Search, detection, and navigation instruments manufacturing	0	0	1	2
Automatic environmental control manufacturing	0	3	3	6

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Industrial process variable instruments manufacturing	0	13	17	51
Totalizing fluid meter and counting device manufacturing	0	1	1	3
Electricity and signal testing instruments manufacturing	0	0	0	1
Analytical laboratory instrument manufacturing	0	2	2	8
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	32	47	135
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	69	89	198
Electric lamp bulb and part manufacturing	0	12	26	73
Lighting fixture manufacturing	0	4	7	19
Small electrical appliance manufacturing	0	38	99	220
Household cooking appliance manufacturing	0	58	186	428
Household refrigerator and home freezer manufacturing	0	55	218	500
Household laundry equipment manufacturing	0	81	231	752
Other major household appliance manufacturing	0	21	76	162
Power, distribution, and specialty transformer manufacturing	0	31	55	158
Motor and generator manufacturing	0	3	5	13
Switchgear and switchboard apparatus manufacturing	0	2	5	11
Relay and industrial control manufacturing	0	5	7	21
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	482	1,351	4,159
Fiber optic cable manufacturing	0	11	22	84
Other communication and energy wire manufacturing	0	16	34	127
Wiring device manufacturing	0	2	4	26



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Carbon and graphite product manufacturing	0	10	16	44
All other miscellaneous electrical equipment and component manufacturing	0	9	11	33
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	378	428	9,566
Heavy duty truck manufacturing	0	2	2	21
Motor vehicle body manufacturing	0	36	39	200
Truck trailer manufacturing	0	7	7	39
Motor home manufacturing	0	146	175	864
Travel trailer and camper manufacturing	0	2,813	2,922	13,998
Motor vehicle gasoline engine and engine parts manufacturing	0	16	18	199
Motor vehicle electrical and electronic equipment manufacturing	0	878	877	4,516
Motor vehicle transmission and power train parts manufacturing	0	10	11	50
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	156	147	1,432
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	229	253	943
Aircraft manufacturing	0	1	2	10
Aircraft engine and engine parts manufacturing	0	1	1	4
Other aircraft parts and auxiliary equipment manufacturing	0	4	4	15
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	7	8	45
Ship building and repairing	0	17	18	52
Boat building	0	693	793	4,245
Motorcycle, bicycle, and parts manufacturing	0	143	187	858

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	595	804	3,559
Wood kitchen cabinet and countertop manufacturing	0	503	615	1,685
Upholstered household furniture manufacturing	0	1,206	1,562	5,019
Nonupholstered wood household furniture manufacturing	0	125	135	454
Other household nonupholstered furniture manufacturing	0	39	56	191
Institutional furniture manufacturing	0	4	4	19
Wood office furniture manufacturing	0	0	0	2
Custom architectural woodwork and millwork	0	3	3	12
Office furniture, except wood, manufacturing	0	12	17	61
Showcase, partition, shelving, and locker manufacturing	0	11	14	51
Mattress manufacturing	0	7	11	85
Blind and shade manufacturing	0	2	2	14
Surgical and medical instrument manufacturing	0	17	31	75
Surgical appliance and supplies manufacturing	0	87	164	483
Dental equipment and supplies manufacturing	0	1	2	12
Ophthalmic goods manufacturing	0	18	35	68
Dental laboratories	0	162	153	298
Jewelry and silverware manufacturing	0	132	195	613
Sporting and athletic goods manufacturing	0	191	253	1,148
Doll, toy, and game manufacturing	0	174	255	881
Office supplies (except paper) manufacturing	0	6	8	59
Sign manufacturing	0	410	327	960
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	59	60	138
Fasteners, buttons, needles, and pins manufacturing	0	55	67	159

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Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	(3)	(2)	71
All other miscellaneous manufacturing	0	547	683	3,712
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4,189	9,896	24,000
Wholesale - Professional and commercial equipment and supplies	0	13,864	23,449	40,806
Wholesale - Household appliances and electrical and electronic goods	0	5,744	13,266	26,048
Wholesale - Machinery, equipment, and supplies	0	5,813	10,361	18,776
Wholesale - Other durable goods merchant wholesalers	0	12,937	20,405	42,137
Wholesale - Drugs and druggists' sundries	0	6,899	18,464	38,830
Wholesale - Grocery and related product wholesalers	0	14,831	20,088	41,007
Wholesale - Petroleum and petroleum products	0	1,766	32,892	37,909
Wholesale - Other nondurable goods merchant wholesalers	0	24,570	51,162	100,382
Wholesale - Wholesale electronic markets and agents and brokers	0	8,353	4,090	4,910
Retail - Motor vehicle and parts dealers	0	22,990	34,743	51,575
Retail - Furniture and home furnishings stores	0	13,564	16,915	26,201
Retail - Electronics and appliance stores	0	12,787	13,291	23,021
Retail - Building material and garden equipment and supplies stores	0	12,575	21,535	31,840
Retail - Food and beverage stores	1	45,531	58,620	91,600
Retail - Health and personal care stores	0	18,441	21,960	35,961
Retail - Gasoline stores	0	14,243	21,761	39,456
Retail - Clothing and clothing accessories stores	0	11,385	17,464	38,588
Retail - Sporting goods, hobby, musical instrument and book stores	0	10,529	13,557	22,732

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Retail - General merchandise stores	1	39,198	53,414	86,794
Retail - Miscellaneous store retailers	1	20,180	23,201	39,404
Retail - Nonstore retailers	1	46,152	83,415	150,335
Air transportation	0	11,144	23,821	39,293
Rail transportation	0	3,503	9,369	16,144
Water transportation	0	560	595	3,813
Truck transportation	1	33,124	38,686	84,458
Transit and ground passenger transportation	0	9,257	11,491	16,310
Pipeline transportation	0	532	1,908	2,179
Scenic and sightseeing transportation and support activities for transportation	0	9,674	11,056	24,652
Couriers and messengers	0	8,174	11,105	19,989
Warehousing and storage	0	8,491	9,929	20,665
Newspaper publishers	0	3,705	5,958	8,123
Periodical publishers	0	1,728	2,586	5,387
Book publishers	0	1,819	5,882	14,091
Directory, mailing list, and other publishers	0	371	1,258	2,101
Greeting card publishing	0	0	0	0
Software publishers	0	4,184	11,015	15,436
Motion picture and video industries	0	4,759	7,984	23,137
Sound recording industries	0	568	1,291	2,808
Radio and television broadcasting	0	9,097	5,784	30,934
Cable and other subscription programming	0	144	344	3,420
Wired telecommunications carriers	0	10,546	22,147	50,096
Wireless telecommunications carriers (except satellite)	0	3,817	14,802	48,119
Satellite, telecommunications resellers, and all other telecommunications	0	4,574	4,285	11,991
Data processing, hosting, and related services	0	5,492	13,368	31,788
News syndicates, libraries, archives and all other information services	0	2,583	6,063	8,560
Internet publishing and broadcasting and web search portals	0	5,313	22,261	53,361

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Nondepository credit intermediation and related activities	0	23,402	31,463	55,073
Securities and commodity contracts intermediation and brokerage	0	24,238	23,492	63,752
Monetary authorities and depository credit intermediation	1	49,274	118,335	228,742
Other financial investment activities	1	27,194	29,965	110,612
Direct life insurance carriers	0	2,685	4,545	7,632
Insurance carriers, except direct life	0	33,406	83,774	241,561
Insurance agencies, brokerages, and related activities	1	27,468	36,975	117,664
Funds, trusts, and other financial vehicles	0	13,470	15,565	86,176
Other real estate	2	43,744	137,226	357,303
Tenant-occupied housing	0	9,371	153,448	171,352
Owner-occupied dwellings	0	0	525,714	664,233
Automotive equipment rental and leasing	0	2,758	7,696	14,818
General and consumer goods rental except video tapes and discs	0	5,050	6,868	12,446
Video tape and disc rental	0	1,857	3,021	5,100
Commercial and industrial machinery and equipment rental and leasing	0	2,951	6,255	14,172
Lessors of nonfinancial intangible assets	0	173	4,648	6,133
Legal services	0	16,471	26,596	45,956
Accounting, tax preparation, bookkeeping, and payroll services	0	18,964	27,515	43,229
Architectural, engineering, and related services	0	8,247	10,535	19,591
Specialized design services	0	3,449	3,657	5,096
Custom computer programming services	0	6,435	7,204	11,419
Computer systems design services	0	5,510	5,675	7,780
Other computer related services, including facilities management	0	7,059	8,079	18,562
Management consulting services	0	18,991	19,000	33,973
Environmental and other technical consulting services	0	7,657	7,169	11,236

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Scientific research and development services	0	9,660	12,584	24,129
Advertising, public relations, and related services	0	9,040	13,749	28,306
Photographic services	0	4,387	1,960	4,487
Veterinary services	0	4,758	7,731	12,189
Marketing research and all other miscellaneous professional, scientific, and technical services	0	14,577	13,425	22,278
Management of companies and enterprises	0	42,121	48,865	75,426
Office administrative services	0	13,730	8,446	16,010
Facilities support services	0	545	775	2,210
Employment services	1	31,183	57,184	88,302
Business support services	0	14,589	13,542	21,078
Travel arrangement and reservation services	0	3,536	5,351	13,469
Investigation and security services	0	4,482	4,636	6,763
Services to buildings	1	13,078	13,873	23,300
Landscape and horticultural services	0	10,728	11,584	18,810
Other support services	0	3,154	4,207	9,140
Waste management and remediation services	0	11,224	19,012	29,879
Elementary and secondary schools	0	7,824	6,534	8,656
Junior colleges, colleges, universities, and professional schools	0	20,151	25,227	39,479
Other educational services	1	12,001	10,629	23,026
Offices of physicians	1	117,801	141,727	214,448
Offices of dentists	1	28,665	37,024	60,687
Offices of other health practitioners	1	37,257	35,311	50,881
Outpatient care centers	0	19,451	20,506	42,107
Medical and diagnostic laboratories	0	8,060	12,938	20,139
Home health care services	1	40,471	32,276	46,257
Other ambulatory health care services	0	8,690	9,555	16,410
Hospitals	3	247,186	276,322	495,257
Nursing and community care facilities	1	33,824	38,447	68,306
Residential mental retardation, mental health, substance abuse and other facilities	0	12,006	12,749	21,040

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Individual and family services	1	23,938	23,085	35,209
Child day care services	0	10,166	12,650	18,352
Community food, housing, and other relief services, including rehabilitation services	0	4,723	5,479	13,645
Performing arts companies	0	2,739	4,325	9,316
Commercial Sports Except Racing	0	2,817	3,040	8,661
Racing and Track Operation	0	610	931	2,299
Independent artists, writers, and performers	0	6,899	7,545	9,894
Promoters of performing arts and sports and agents for public figures	0	2,645	5,553	14,337
Museums, historical sites, zoos, and parks	0	1,107	1,332	2,635
Amusement parks and arcades	0	1,189	3,723	4,802
Gambling industries (except casino hotels)	0	5,969	13,072	22,454
Other amusement and recreation industries	0	5,892	7,298	13,252
Fitness and recreational sports centers	0	5,683	8,895	13,158
Bowling centers	0	826	1,242	2,348
Hotels and motels, including casino hotels	0	2,182	4,264	6,863
Other accommodations	0	1,178	1,469	2,039
Full-service restaurants	2	44,867	66,436	122,827
Limited-service restaurants	2	39,801	62,503	142,353
All other food and drinking places	1	29,341	40,360	65,056
Automotive repair and maintenance, except car washes	1	37,199	42,869	65,626
Car washes	0	19,496	29,013	44,428
Electronic and precision equipment repair and maintenance	0	3,952	5,432	9,440
Commercial and industrial machinery and equipment repair and maintenance	0	7,443	9,303	14,877
Personal and household goods repair and maintenance	0	11,631	5,997	9,182
Personal care services	1	16,420	12,240	17,168
Death care services	0	1,602	1,913	3,157
Dry-cleaning and laundry services	0	3,027	3,259	4,782
Other personal services	1	14,350	11,022	16,316
Religious organizations	0	22,027	8,152	37,623
Grantmaking, giving, and social advocacy organizations	0	5,682	14,108	24,439

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Business and professional associations	0	4,055	5,564	10,922
Labor and civic organizations	0	5,377	11,331	23,177
Private households	0	5,319	5,319	5,319
Postal service	0	12,623	12,640	14,161
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	890	(1,367)	1,886
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	7,794	9,087	16,837
Local government passenger transit	0	2,321	(1,453)	1,279
Local government electric utilities	0	0	0	0
Other local government enterprises	0	10,176	19,800	47,404
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	46	5,664,977	8,594,066	8,616,907

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.



## APPENDIX

### 15. Illinois

**Table 397: Detailed NASA Impacts by Types of Impact, Illinois.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>519</i>	<i>40,309,633</i>	<i>62,727,458</i>	<i>113,105,575</i>
Oilseed farming	1	51,123	170,238	566,834
Grain farming	1	14,845	42,697	261,682
Vegetable and melon farming	0	990	1,591	7,198
Fruit farming	0	196	355	1,362
Tree nut farming	0	17	17	44
Greenhouse, nursery, and floriculture production	0	3,332	4,471	17,442
Tobacco farming	0	13	13	45
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	456	532	2,304
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	0	795	3,045	22,845
Dairy cattle and milk production	0	428	1,001	12,019
Poultry and egg production	0	190	277	5,868
Animal production, except cattle and poultry and eggs	1	10,760	36,474	114,997
Forestry, forest products, and timber tract production	0	931	1,059	1,429
Commercial logging	0	971	1,145	2,124
Commercial fishing	0	(26)	263	290
Commercial hunting and trapping	0	107	302	771
Support activities for agriculture and forestry	0	12,448	10,766	12,711
Oil and gas extraction	0	2,620	2,857	85,113
Coal mining	0	10,556	21,790	36,807
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	200	318	836
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	38	66	252
Stone mining and quarrying	0	4,600	9,138	15,422
Sand and gravel mining	0	4,240	5,800	8,385

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Other clay, ceramic, refractory minerals mining	0	51	76	174
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	293	490	837
Other nonmetallic minerals	0	43	57	137
Drilling oil and gas wells	0	1	1	14
Support activities for oil and gas operations	0	25	43	319
Metal mining services	0	58	74	2,780
Other nonmetallic minerals services	0	12	20	204
Electric power generation - Hydroelectric	0	2,468	7,107	11,189
Electric power generation - Fossil fuel	0	31,333	114,056	294,904
Electric power generation - Nuclear	0	66,513	143,529	298,665
Electric power generation - Solar	0	4,392	6,147	12,986
Electric power generation - Wind	0	10,534	54,564	99,846
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	678	1,497	3,785
Electric power generation - All other	0	704	701	2,037
Electric power transmission and distribution	1	117,950	404,237	963,599
Natural gas distribution	0	37,048	99,999	227,962
Water, sewage and other systems	0	7,301	13,923	24,809
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	113,481	161,760	358,596
Maintenance and repair construction of residential structures	1	42,673	67,870	151,028
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	190	138	296
Dog and cat food manufacturing	0	2,258	9,927	43,452
Other animal food manufacturing	0	4,161	7,638	50,929
Flour milling	0	3,275	6,922	40,708
Rice milling	0	2	6	156
Malt manufacturing	0	128	323	3,679
Wet corn milling	0	31,298	85,991	413,893
Soybean and other oilseed processing	0	1,169	6,965	64,080
Fats and oils refining and blending	0	860	1,818	15,975
Breakfast cereal manufacturing	0	9,950	26,589	71,140
Beet sugar manufacturing	0	1,152	2,477	10,749
Sugar cane mills and refining	0	30	77	433
Nonchocolate confectionery manufacturing	0	6,638	10,170	31,859
Chocolate and confectionery manufacturing from cacao beans	0	1,693	3,949	16,472
Confectionery manufacturing from purchased chocolate	0	10,909	15,602	48,547
Frozen fruits, juices and vegetables manufacturing	0	1,879	3,612	15,773
Frozen specialties manufacturing	0	9,048	14,183	53,258
Canned fruits and vegetables manufacturing	0	7,705	14,666	37,260
Canned specialties	0	718	1,922	9,536
Dehydrated food products manufacturing	0	2,497	4,797	16,062
Cheese manufacturing	0	4,308	6,479	61,177

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	2,652	6,960	50,788
Fluid milk manufacturing	0	4,824	8,116	56,859
Creamery butter manufacturing	0	197	908	6,429
Ice cream and frozen dessert manufacturing	0	1,372	2,270	10,796
Frozen cakes and other pastries manufacturing	0	5,983	9,228	17,338
Poultry processing	0	1,301	1,743	4,962
Animal, except poultry, slaughtering	0	13,508	19,334	149,128
Meat processed from carcasses	0	23,505	25,581	180,071
Rendering and meat byproduct processing	0	798	910	3,563
Seafood product preparation and packaging	0	958	1,241	6,817
Bread and bakery product, except frozen, manufacturing	1	29,769	41,476	94,862
Cookie and cracker manufacturing	0	5,953	8,620	25,486
Dry pasta, mixes, and dough manufacturing	0	4,403	11,102	45,406
Tortilla manufacturing	0	2,823	3,498	9,734
Roasted nuts and peanut butter manufacturing	0	2,002	3,557	13,112
Other snack food manufacturing	0	4,393	9,734	36,402
Coffee and tea manufacturing	0	1,057	2,161	13,399
Flavoring syrup and concentrate manufacturing	0	6,385	52,550	113,710
Mayonnaise, dressing, and sauce manufacturing	0	1,346	2,748	11,508
Spice and extract manufacturing	0	8,506	13,524	52,391
All other food manufacturing	0	8,849	12,472	52,137
Bottled and canned soft drinks & water	0	8,903	19,273	97,416
Manufactured ice	0	431	213	1,280
Breweries	0	5,068	14,366	45,813
Wineries	0	224	426	2,368
Distilleries	0	3,522	19,504	40,214
Tobacco product manufacturing	0	1,025	24,102	38,841
Fiber, yarn, and thread mills	0	535	850	2,691
Broadwoven fabric mills	0	154	242	859
Narrow fabric mills and schiffli machine embroidery	0	300	345	918
Nonwoven fabric mills	0	1,001	2,006	6,439
Knit fabric mills	0	26	37	103

## APPENDIX

Textile and fabric finishing mills	0	326	444	1,496
Fabric coating mills	0	347	484	2,016
Carpet and rug mills	0	292	547	1,529
Curtain and linen mills	0	1,057	1,662	4,889
Textile bag and canvas mills	0	2,500	3,305	8,320
Rope, cordage, twine, tire cord and tire fabric mills	0	305	542	1,633
Other textile product mills	0	889	1,154	3,105
Hosiery and sock mills	0	110	195	471
Other apparel knitting mills	0	128	226	605
Cut and sew apparel contractors	0	557	676	1,719
Mens and boys cut and sew apparel manufacturing	0	2,797	3,540	9,986
Womens and girls cut and sew apparel manufacturing	0	133	241	1,523
Other cut and sew apparel manufacturing	0	722	958	2,689
Apparel accessories and other apparel manufacturing	0	1,096	1,401	3,175
Leather and hide tanning and finishing	0	180	316	1,013
Footwear manufacturing	0	771	889	2,285
Other leather and allied product manufacturing	0	260	277	784
Sawmills	0	550	887	4,357
Wood preservation	0	541	1,903	6,174
Veneer and plywood manufacturing	0	173	284	1,268
Engineered wood member and truss manufacturing	0	193	279	865
Reconstituted wood product manufacturing	0	177	498	1,914
Wood windows and door manufacturing	0	3,439	5,043	13,278
Cut stock, resawing lumber, and planing	0	111	214	657
Other millwork, including flooring	0	1,522	2,358	6,580
Wood container and pallet manufacturing	0	3,626	4,488	11,918
Manufactured home (mobile home) manufacturing	0	0	0	1
Prefabricated wood building manufacturing	0	359	428	1,197
All other miscellaneous wood product manufacturing	0	1,620	2,159	5,890

## APPENDIX

Pulp mills	0	25	31	113
Paper mills	0	6,350	10,793	33,895
Paperboard mills	0	2,315	4,065	19,529
Paperboard container manufacturing	0	24,521	32,448	142,054
Paper bag and coated and treated paper manufacturing	0	16,307	23,797	80,899
Stationery product manufacturing	0	2,278	2,873	10,167
Sanitary paper product manufacturing	0	1,097	2,249	7,270
All other converted paper product manufacturing	0	2,810	3,644	11,385
Printing	2	152,273	224,477	388,282
Support activities for printing	0	9,850	14,312	20,254
Petroleum refineries	0	21,782	239,192	926,845
Asphalt paving mixture and block manufacturing	0	1,018	2,270	8,824
Asphalt shingle and coating materials manufacturing	0	243	1,735	5,353
Petroleum lubricating oil and grease manufacturing	0	13,635	62,885	148,145
All other petroleum and coal products manufacturing	0	1,801	7,764	18,100
Petrochemical manufacturing	0	278	1,620	11,240
Industrial gas manufacturing	0	2,699	5,072	16,347
Synthetic dye and pigment manufacturing	0	959	1,647	6,624
Other basic inorganic chemical manufacturing	0	4,945	8,327	25,762
Other basic organic chemical manufacturing	0	5,465	9,103	68,706
Plastics material and resin manufacturing	0	9,263	13,272	85,702
Synthetic rubber manufacturing	0	371	521	3,225
Artificial and synthetic fibers and filaments manufacturing	0	305	395	2,659
Nitrogenous fertilizer manufacturing	0	686	1,110	3,367
Phosphatic fertilizer manufacturing	0	13	23	86
Fertilizer mixing	0	447	466	1,366
Pesticide and other agricultural chemical manufacturing	0	2,977	7,239	32,981
Medicinal and botanical manufacturing	0	3,298	4,484	14,931

## APPENDIX

Pharmaceutical preparation manufacturing	0	100,526	267,922	634,888
In-vitro diagnostic substance manufacturing	0	1,767	2,340	6,378
Biological product (except diagnostic) manufacturing	0	1,588	2,960	7,838
Paint and coating manufacturing	0	8,363	12,492	47,077
Adhesive manufacturing	0	3,818	5,133	20,807
Soap and other detergent manufacturing	0	13,445	28,958	101,173
Polish and other sanitation good manufacturing	0	3,108	3,836	11,960
Surface active agent manufacturing	0	3,606	8,489	22,626
Toilet preparation manufacturing	0	12,788	24,782	76,063
Printing ink manufacturing	0	6,538	6,959	24,045
Explosives manufacturing	0	171	193	784
Custom compounding of purchased resins	0	5,410	7,866	30,963
Photographic film and chemical manufacturing	0	8,921	14,836	57,056
Other miscellaneous chemical product manufacturing	0	7,155	8,989	30,302
Plastics packaging materials and unlaminated film and sheet manufacturing	0	14,460	28,105	79,524
Unlaminated plastics profile shape manufacturing	0	10,038	27,624	65,477
Plastics pipe and pipe fitting manufacturing	0	3,127	9,242	24,096
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,447	3,227	7,815
Polystyrene foam product manufacturing	0	4,558	9,058	25,901
Urethane and other foam product (except polystyrene) manufacturing	0	2,204	4,157	12,105
Plastics bottle manufacturing	0	2,506	4,925	16,972
Other plastics product manufacturing	1	64,208	109,341	270,404
Tire manufacturing	0	8,327	13,045	49,088
Rubber and plastics hoses and belting manufacturing	0	1,988	3,735	9,274
Other rubber product manufacturing	0	8,902	15,227	41,033

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	1,073	1,303	2,690
Brick, tile, and other structural clay product manufacturing	0	2,183	3,652	7,112
Flat glass manufacturing	0	750	1,489	3,707
Other pressed and blown glass and glassware manufacturing	0	911	1,107	2,471
Glass container manufacturing	0	2,180	3,786	9,293
Glass product manufacturing made of purchased glass	0	3,126	4,751	10,930
Cement manufacturing	0	851	2,001	5,170
Ready-mix concrete manufacturing	0	6,904	11,391	33,747
Concrete block and brick manufacturing	0	3,126	5,591	12,643
Concrete pipe manufacturing	0	339	553	1,306
Other concrete product manufacturing	0	5,403	7,728	15,834
Lime manufacturing	0	19	46	125
Gypsum product manufacturing	0	493	1,294	3,802
Abrasive product manufacturing	0	3,588	10,926	19,204
Cut stone and stone product manufacturing	0	2,433	2,816	5,729
Ground or treated mineral and earth manufacturing	0	1,000	2,809	5,487
Mineral wool manufacturing	0	490	1,130	2,841
Miscellaneous nonmetallic mineral products manufacturing	0	317	729	1,637
Iron and steel mills and ferroalloy manufacturing	0	10,091	16,102	79,685
Iron, steel pipe and tube manufacturing from purchased steel	0	4,209	5,861	18,014
Rolled steel shape manufacturing	0	2,147	4,069	17,013
Steel wire drawing	0	672	920	3,259
Alumina refining and primary aluminum production	0	(20)	(14)	350
Secondary smelting and alloying of aluminum	0	257	423	3,384
Aluminum sheet, plate, and foil manufacturing	0	4,099	7,137	29,987
Other aluminum rolling, drawing and extruding	0	2,062	2,817	13,358
Nonferrous metal (exc aluminum) smelting and refining	0	31	117	364



## APPENDIX

Copper rolling, drawing, extruding and alloying	0	15,696	20,931	124,302
Nonferrous metal, except copper and aluminum, shaping	0	1,441	1,880	7,390
Secondary processing of other nonferrous metals	0	50	170	981
Ferrous metal foundries	0	5,541	8,895	18,762
Nonferrous metal foundries	0	6,363	9,128	21,295
Custom roll forming	0	354	590	2,407
Crown and closure manufacturing and metal stamping	0	18,334	28,233	67,044
Iron and steel forging	0	16,646	24,178	67,423
Nonferrous forging	0	2,167	2,859	9,209
Cutlery, utensil, pot, and pan manufacturing	0	464	1,580	2,734
Handtool manufacturing	0	5,396	9,561	17,241
Prefabricated metal buildings and components manufacturing	0	1,032	1,566	4,215
Fabricated structural metal manufacturing	0	4,836	7,720	20,925
Plate work manufacturing	0	2,090	2,187	6,201
Metal window and door manufacturing	0	2,558	4,236	9,882
Sheet metal work manufacturing	0	14,054	19,030	42,747
Ornamental and architectural metal work manufacturing	0	2,490	3,493	7,827
Power boiler and heat exchanger manufacturing	0	46	68	139
Metal tank (heavy gauge) manufacturing	0	506	649	1,987
Metal cans manufacturing	0	2,012	5,146	21,330
Metal barrels, drums and pails manufacturing	0	2,124	2,764	9,388
Hardware manufacturing	0	2,538	4,587	13,098
Spring and wire product manufacturing	0	4,053	5,871	14,590
Machine shops	0	29,236	34,851	64,816
Turned product and screw, nut, and bolt manufacturing	0	19,783	29,377	68,811
Metal heat treating	0	2,602	4,389	10,408
Metal coating and nonprecious engraving	0	4,763	9,226	19,306
Electroplating, anodizing, and coloring metal	0	7,881	9,026	18,606

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	29,706	52,635	128,469
Plumbing fixture fitting and trim manufacturing	0	2,511	8,949	22,974
Ball and roller bearing manufacturing	0	5,373	10,997	24,497
Small arms ammunition manufacturing	0	3,396	9,124	14,380
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	987	2,813	6,033
Fabricated pipe and pipe fitting manufacturing	0	1,819	2,185	5,022
Other fabricated metal manufacturing	5	392,988	547,740	1,180,776
Farm machinery and equipment manufacturing	0	792	1,242	4,319
Lawn and garden equipment manufacturing	0	1,407	2,849	11,620
Construction machinery manufacturing	0	1,523	3,343	5,951
Mining machinery and equipment manufacturing	0	68	88	264
Oil and gas field machinery and equipment manufacturing	0	4	5	23
Semiconductor machinery manufacturing	0	3	3	8
Food product machinery manufacturing	0	78	99	263
Sawmill, woodworking, and paper machinery	0	228	259	697
Printing machinery and equipment manufacturing	0	296	347	859
All other industrial machinery manufacturing	0	174	236	632
Optical instrument and lens manufacturing	0	12	19	58
Photographic and photocopying equipment manufacturing	0	65	105	326
Other commercial service industry machinery manufacturing	0	1,620	3,307	8,161
Air purification and ventilation equipment manufacturing	0	767	1,205	2,974

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	1,127	1,819	4,577
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	2,116	4,418	12,171
Industrial mold manufacturing	0	1,397	1,642	2,941
Special tool, die, jig, and fixture manufacturing	0	1,116	1,496	2,596
Cutting tool and machine tool accessory manufacturing	0	1,341	1,503	3,179
Machine tool manufacturing	0	573	661	1,672
Rolling mill and other metalworking machinery manufacturing	0	206	268	522
Turbine and turbine generator set units manufacturing	0	262	375	873
Speed changer, industrial high-speed drive, and gear manufacturing	0	5,582	8,877	22,768
Mechanical power transmission equipment manufacturing	0	2,189	3,522	8,001
Other engine equipment manufacturing	0	11,724	24,336	58,616
Pump and pumping equipment manufacturing	0	599	1,162	2,648
Air and gas compressor manufacturing	0	25,776	49,030	122,480
Elevator and moving stairway manufacturing	0	143	244	730
Conveyor and conveying equipment manufacturing	0	318	337	899
Overhead cranes, hoists, and monorail systems manufacturing	0	14	29	74
Industrial truck, trailer, and stacker manufacturing	0	400	678	1,879
Power-driven handtool manufacturing	0	77	222	559
Welding and soldering equipment manufacturing	0	1,343	1,854	2,714
Packaging machinery manufacturing	0	350	564	1,341
Industrial process furnace and oven manufacturing	0	383	496	1,100
Fluid power cylinder and actuator manufacturing	0	1,682	2,479	5,374

## APPENDIX

Fluid power pump and motor manufacturing	0	4,124	6,905	16,617
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	308	421	1,148
Electronic computer manufacturing	0	131	367	1,135
Computer storage device manufacturing	0	7	25	72
Computer terminals and other computer peripheral equipment manufacturing	2	259,355	561,665	1,184,971
Telephone apparatus manufacturing	0	878	2,005	6,298
Broadcast and wireless communications equipment manufacturing	0	462	764	1,489
Other communications equipment manufacturing	0	1,146	2,153	5,097
Audio and video equipment manufacturing	0	1,141	2,420	5,670
Printed circuit assembly (electronic assembly) manufacturing	0	6,304	11,314	36,825
Bare printed circuit board manufacturing	0	4,664	6,833	18,846
Semiconductor and related device manufacturing	0	545	1,171	3,851
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,622	2,607	6,993
Electronic connector manufacturing	0	17,560	29,614	48,980
Other electronic component manufacturing	0	7,509	9,214	31,065
Electromedical and electrotherapeutic apparatus manufacturing	0	198	516	1,056
Search, detection, and navigation instruments manufacturing	0	117	226	415
Automatic environmental control manufacturing	0	16,677	24,056	40,208
Industrial process variable instruments manufacturing	0	796	1,325	2,746
Totalizing fluid meter and counting device manufacturing	0	363	957	1,890

## APPENDIX

Electricity and signal testing instruments manufacturing	0	6,802	11,336	32,256
Analytical laboratory instrument manufacturing	1	157,747	333,426	684,583
Irradiation apparatus manufacturing	0	30	72	164
Watch, clock, and other measuring and controlling device manufacturing	0	182	382	844
Blank magnetic and optical recording media manufacturing	0	20	79	320
Software and other prerecorded and record reproducing	0	2,701	4,445	7,163
Electric lamp bulb and part manufacturing	0	888	1,155	2,131
Lighting fixture manufacturing	0	5,187	7,324	15,868
Small electrical appliance manufacturing	0	2,804	5,467	11,246
Household cooking appliance manufacturing	0	1,913	3,835	7,830
Household refrigerator and home freezer manufacturing	0	1,803	4,377	8,494
Household laundry equipment manufacturing	0	3,495	6,527	17,945
Other major household appliance manufacturing	0	606	1,387	2,578
Power, distribution, and specialty transformer manufacturing	0	359	510	1,257
Motor and generator manufacturing	0	3,871	5,892	14,554
Switchgear and switchboard apparatus manufacturing	0	3,678	6,017	14,499
Relay and industrial control manufacturing	0	9,221	12,089	28,355
Storage battery manufacturing	0	3,198	4,871	12,034
Primary battery manufacturing	0	766	936	1,755
Fiber optic cable manufacturing	0	970	1,512	4,939
Other communication and energy wire manufacturing	0	1,713	2,924	8,679
Wiring device manufacturing	0	11,496	22,012	48,492
Carbon and graphite product manufacturing	0	304	349	676
All other miscellaneous electrical equipment and component manufacturing	0	17,233	19,201	46,001

## APPENDIX

Automobile manufacturing	0	6,717	13,923	113,257
Light truck and utility vehicle manufacturing	0	108	185	2,105
Heavy duty truck manufacturing	0	18	30	177
Motor vehicle body manufacturing	0	508	582	2,064
Truck trailer manufacturing	0	10	11	52
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	805	840	2,872
Motor vehicle gasoline engine and engine parts manufacturing	0	4,646	5,593	30,105
Motor vehicle electrical and electronic equipment manufacturing	0	11,179	12,548	71,361
Motor vehicle transmission and power train parts manufacturing	0	13,851	17,250	89,027
Motor vehicle seating and interior trim manufacturing	0	581	643	4,657
Motor vehicle metal stamping	0	15,932	17,945	54,287
Other motor vehicle parts manufacturing	0	12,483	14,918	86,455
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3,657	4,411	15,224
Aircraft manufacturing	0	18,666	25,871	144,867
Aircraft engine and engine parts manufacturing	0	2,107	4,030	12,228
Other aircraft parts and auxiliary equipment manufacturing	0	31,010	43,494	98,463
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	298	392	1,919
Ship building and repairing	0	162	187	527
Boat building	0	746	942	3,960
Motorcycle, bicycle, and parts manufacturing	0	767	1,777	3,731
Military armored vehicle, tank, and tank component manufacturing	0	24	39	178
All other transportation equipment manufacturing	0	858	1,379	6,113

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	4,590	8,738	16,295
Upholstered household furniture manufacturing	0	2,152	3,721	8,754
Nonupholstered wood household furniture manufacturing	0	2,500	3,333	7,362
Other household nonupholstered furniture manufacturing	0	129	262	690
Institutional furniture manufacturing	0	197	235	678
Wood office furniture manufacturing	0	711	1,378	2,743
Custom architectural woodwork and millwork	0	221	222	477
Office furniture, except wood, manufacturing	0	24,221	61,589	126,194
Showcase, partition, shelving, and locker manufacturing	0	3,282	6,224	13,132
Mattress manufacturing	0	842	2,951	6,704
Blind and shade manufacturing	0	377	413	1,391
Surgical and medical instrument manufacturing	0	7,756	12,005	23,380
Surgical appliance and supplies manufacturing	0	6,036	9,178	19,480
Dental equipment and supplies manufacturing	0	816	1,130	2,767
Ophthalmic goods manufacturing	0	559	838	2,165
Dental laboratories	0	2,692	2,593	4,041
Jewelry and silverware manufacturing	0	3,614	4,762	9,807
Sporting and athletic goods manufacturing	0	6,221	7,420	14,756
Doll, toy, and game manufacturing	0	3,204	3,516	7,474
Office supplies (except paper) manufacturing	0	2,955	3,441	7,468
Sign manufacturing	0	8,663	7,200	11,580
Gasket, packing, and sealing device manufacturing	0	3,971	4,524	9,861
Musical instrument manufacturing	0	875	886	1,393
Fasteners, buttons, needles, and pins manufacturing	0	1,841	2,064	3,389
Broom, brush, and mop manufacturing	0	2,578	3,072	8,148
Burial casket manufacturing	0	1,117	1,224	1,851

## APPENDIX

All other miscellaneous manufacturing	0	9,777	10,941	17,643
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	23,651	63,373	121,156
Wholesale - Professional and commercial equipment and supplies	1	145,887	274,222	435,960
Wholesale - Household appliances and electrical and electronic goods	1	66,604	173,675	321,917
Wholesale - Machinery, equipment, and supplies	1	74,379	145,862	226,380
Wholesale - Other durable goods merchant wholesalers	1	130,669	223,917	390,059
Wholesale - Drugs and druggists' sundries	0	69,817	235,510	380,053
Wholesale - Grocery and related product wholesalers	1	106,796	156,864	271,246
Wholesale - Petroleum and petroleum products	0	23,241	245,728	275,098
Wholesale - Other nondurable goods merchant wholesalers	2	195,096	417,099	685,370
Wholesale - Wholesale electronic markets and agents and brokers	1	170,950	104,700	116,061
Retail - Motor vehicle and parts dealers	1	83,381	135,758	192,685
Retail - Furniture and home furnishings stores	1	50,623	66,424	104,058
Retail - Electronics and appliance stores	1	72,083	71,960	108,942
Retail - Building material and garden equipment and supplies stores	1	50,355	100,148	145,916
Retail - Food and beverage stores	5	146,464	217,587	358,235
Retail - Health and personal care stores	2	111,718	138,388	205,287
Retail - Gasoline stores	1	33,131	67,895	129,224
Retail - Clothing and clothing accessories stores	2	67,822	114,577	225,934
Retail - Sporting goods, hobby, musical instrument and book stores	1	39,752	52,559	83,455
Retail - General merchandise stores	5	157,572	237,681	381,021
Retail - Miscellaneous store retailers	3	71,173	86,761	137,219



## APPENDIX

Retail - Nonstore retailers	3	96,034	312,630	531,565
Air transportation	1	160,650	307,051	478,560
Rail transportation	0	39,314	72,981	145,925
Water transportation	0	15,384	25,998	109,113
Truck transportation	5	316,912	376,791	781,801
Transit and ground passenger transportation	5	97,642	112,328	183,466
Pipeline transportation	0	13,121	71,850	78,179
Scenic and sightseeing transportation and support activities for transportation	3	203,253	238,025	485,985
Couriers and messengers	2	85,091	125,329	227,365
Warehousing and storage	2	133,080	152,107	296,308
Newspaper publishers	0	28,090	45,652	58,746
Periodical publishers	0	57,871	87,421	118,648
Book publishers	0	29,322	94,316	150,712
Directory, mailing list, and other publishers	1	60,046	194,564	282,716
Greeting card publishing	0	1,413	5,377	8,904
Software publishers	2	273,656	660,207	784,953
Motion picture and video industries	1	95,147	188,764	365,576
Sound recording industries	0	10,492	56,259	71,746
Radio and television broadcasting	1	110,654	76,221	240,971
Cable and other subscription programming	0	22,350	107,540	293,147
Wired telecommunications carriers	3	403,042	946,252	1,815,465
Wireless telecommunications carriers (except satellite)	0	46,973	238,754	547,539
Satellite, telecommunications resellers, and all other telecommunications	0	48,378	68,515	164,486
Data processing, hosting, and related services	1	141,046	368,244	624,246
News syndicates, libraries, archives and all other information services	0	31,452	54,353	74,928
Internet publishing and broadcasting and web search portals	1	197,679	712,976	1,351,152
Nondepository credit intermediation and related activities	2	203,635	301,932	473,131
Securities and commodity contracts intermediation and brokerage	3	488,868	493,869	803,065

## APPENDIX

Monetary authorities and depository credit intermediation	5	550,981	1,662,362	2,357,841
Other financial investment activities	6	267,005	399,224	841,061
Direct life insurance carriers	1	90,059	207,740	289,371
Insurance carriers, except direct life	2	245,828	1,025,761	1,656,758
Insurance agencies, brokerages, and related activities	6	459,839	828,757	1,573,825
Funds, trusts, and other financial vehicles	1	58,784	71,627	404,291
Other real estate	22	883,444	2,305,807	4,840,642
Tenant-occupied housing	2	59,299	668,575	740,041
Owner-occupied dwellings	0	0	2,215,567	2,799,342
Automotive equipment rental and leasing	1	46,458	194,855	255,544
General and consumer goods rental except video tapes and discs	1	41,078	57,155	83,336
Video tape and disc rental	0	9,322	16,453	25,322
Commercial and industrial machinery and equipment rental and leasing	1	77,739	231,189	311,338
Lessors of nonfinancial intangible assets	0	5,155	177,977	205,836
Legal services	7	848,219	1,631,579	2,055,618
Accounting, tax preparation, bookkeeping, and payroll services	4	391,530	456,058	593,577
Architectural, engineering, and related services	5	463,336	504,900	891,265
Specialized design services	1	117,758	123,100	142,281
Custom computer programming services	2	188,475	214,522	295,604
Computer systems design services	1	176,580	185,948	239,537
Other computer related services, including facilities management	1	76,097	127,949	215,459
Management consulting services	8	1,057,547	1,028,813	1,391,225
Environmental and other technical consulting services	1	105,950	86,229	120,808
Scientific research and development services	105	11,667,292	16,537,076	29,822,660
Advertising, public relations, and related services	4	409,017	497,556	773,137
Photographic services	1	53,667	13,501	26,024
Veterinary services	1	27,166	32,660	53,127

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	7	698,827	576,428	732,769
Management of companies and enterprises	9	1,325,492	1,541,905	2,113,843
Office administrative services	3	272,245	91,925	205,450
Facilities support services	0	12,379	15,904	43,476
Employment services	17	737,966	1,163,355	1,790,262
Business support services	5	265,481	228,066	358,934
Travel arrangement and reservation services	1	48,177	65,351	144,952
Investigation and security services	2	95,405	97,884	142,169
Services to buildings	6	179,070	186,450	295,068
Landscape and horticultural services	8	300,053	317,599	498,055
Other support services	2	100,356	130,197	224,514
Waste management and remediation services	1	62,941	120,557	191,511
Elementary and secondary schools	3	117,348	101,110	125,711
Junior colleges, colleges, universities, and professional schools	4	248,110	327,039	430,812
Other educational services	4	103,399	94,133	184,997
Offices of physicians	5	599,761	710,925	1,014,985
Offices of dentists	2	129,850	164,267	250,049
Offices of other health practitioners	3	159,165	147,141	207,256
Outpatient care centers	1	67,826	71,248	137,594
Medical and diagnostic laboratories	0	35,790	55,156	89,379
Home health care services	3	146,171	111,752	154,578
Other ambulatory health care services	1	41,576	45,827	78,238
Hospitals	13	1,070,882	1,311,198	2,358,976
Nursing and community care facilities	4	163,791	205,539	346,013
Residential mental retardation, mental health, substance abuse and other facilities	2	60,801	68,085	102,291
Individual and family services	5	157,235	141,429	211,341
Child day care services	4	98,145	112,285	155,806
Community food, housing, and other relief services, including rehabilitation services	1	53,358	58,908	127,700
Performing arts companies	1	23,329	43,891	73,695

## APPENDIX

Commercial Sports Except Racing	1	63,021	72,725	98,147
Racing and Track Operation	0	5,341	10,371	16,748
Independent artists, writers, and performers	5	106,160	144,404	171,483
Promoters of performing arts and sports and agents for public figures	1	20,901	60,121	107,304
Museums, historical sites, zoos, and parks	0	18,252	23,903	37,308
Amusement parks and arcades	0	5,999	10,433	13,767
Gambling industries (except casino hotels)	1	48,438	133,419	184,559
Other amusement and recreation industries	1	46,620	54,184	81,300
Fitness and recreational sports centers	1	44,543	56,260	77,362
Bowling centers	0	6,974	9,254	14,913
Hotels and motels, including casino hotels	2	115,289	221,376	311,752
Other accommodations	1	42,174	55,077	68,874
Full-service restaurants	11	299,784	469,413	775,096
Limited-service restaurants	9	201,457	346,333	719,826
All other food and drinking places	7	232,541	314,587	453,990
Automotive repair and maintenance, except car washes	4	194,043	228,952	343,127
Car washes	2	92,267	150,411	221,475
Electronic and precision equipment repair and maintenance	1	65,886	101,755	153,195
Commercial and industrial machinery and equipment repair and maintenance	2	159,788	197,896	290,252
Personal and household goods repair and maintenance	1	57,830	45,931	61,696
Personal care services	5	135,174	101,158	135,579
Death care services	0	12,006	14,810	23,085
Dry-cleaning and laundry services	1	25,528	28,209	40,275
Other personal services	3	101,734	63,338	92,545
Religious organizations	5	285,715	99,887	452,156
Grantmaking, giving, and social advocacy organizations	1	70,593	181,131	287,705
Business and professional associations	1	99,609	138,809	206,578
Labor and civic organizations	2	69,589	148,382	253,404
Private households	2	38,962	38,962	38,962
Postal service	1	121,850	121,985	134,575
Federal electric utilities	0	8	16	135

## APPENDIX

Other federal government enterprises	16	1,068,978	(879,118)	854,861
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	39,598	(10,868)	29,683
Local government electric utilities	0	395	1,159	1,999
Other local government enterprises	0	57,982	82,469	153,922
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	21	2,357,253	4,418,652	7,742,425

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 398: Detailed M2M Program Impacts by Types of Impact, Illinois.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	53	4,580,130	7,642,898	13,385,739
Oilseed farming	0	4,836	23,627	89,670
Grain farming	0	1,285	4,098	22,932
Vegetable and melon farming	0	110	185	788
Fruit farming	0	27	50	181
Tree nut farming	0	4	4	10

## APPENDIX

Greenhouse, nursery, and floriculture production	0	259	359	1,368
Tobacco farming	0	2	2	9
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	39	47	199
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	79	291	1,933
Dairy cattle and milk production	0	49	118	1,236
Poultry and egg production	0	17	25	523
Animal production, except cattle and poultry and eggs	0	735	2,776	8,993
Forestry, forest products, and timber tract production	0	103	117	151
Commercial logging	0	102	120	206
Commercial fishing	0	(3)	26	28
Commercial hunting and trapping	0	10	27	61
Support activities for agriculture and forestry	0	1,193	1,022	1,204
Oil and gas extraction	0	172	246	7,112
Coal mining	0	656	1,185	2,217
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	16	21	59
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	4	5	20
Stone mining and quarrying	0	829	830	1,437
Sand and gravel mining	0	988	673	815
Other clay, ceramic, refractory minerals mining	0	7	9	20
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	40	46	71
Other nonmetallic minerals	0	9	7	15
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	1	3	20
Metal mining services	0	6	10	352

## APPENDIX

Other nonmetallic minerals services	0	1	2	16
Electric power generation - Hydroelectric	0	333	871	1,279
Electric power generation - Fossil fuel	0	3,158	11,031	27,238
Electric power generation - Nuclear	0	6,698	15,211	30,745
Electric power generation - Solar	0	370	498	1,019
Electric power generation - Wind	0	847	4,208	7,241
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	125	215	544
Electric power generation - All other	0	135	105	265
Electric power transmission and distribution	0	10,377	36,517	84,148
Natural gas distribution	0	3,830	10,684	21,477
Water, sewage and other systems	0	874	1,469	2,351
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	11,298	16,174	34,831

## APPENDIX

Maintenance and repair construction of residential structures	0	4,645	7,432	16,004
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	20	14	29
Dog and cat food manufacturing	0	212	968	4,064
Other animal food manufacturing	0	431	828	5,244
Flour milling	0	227	483	2,879
Rice milling	0	0	0	9
Malt manufacturing	0	8	23	201
Wet corn milling	0	3,626	10,829	52,424
Soybean and other oilseed processing	0	161	972	8,788
Fats and oils refining and blending	0	102	224	1,811
Breakfast cereal manufacturing	0	871	2,278	6,050
Beet sugar manufacturing	0	86	175	764
Sugar cane mills and refining	0	4	11	59
Nonchocolate confectionery manufacturing	0	827	1,252	3,592
Chocolate and confectionery manufacturing from cacao beans	0	355	834	3,221
Confectionery manufacturing from purchased chocolate	0	1,290	1,863	5,362
Frozen fruits, juices and vegetables manufacturing	0	171	331	1,361
Frozen specialties manufacturing	0	843	1,308	4,639
Canned fruits and vegetables manufacturing	0	704	1,344	3,380
Canned specialties	0	52	135	691
Dehydrated food products manufacturing	0	249	472	1,470
Cheese manufacturing	0	351	526	5,087
Dry, condensed, and evaporated dairy product manufacturing	0	322	867	5,666
Fluid milk manufacturing	0	507	873	5,855
Creamery butter manufacturing	0	26	114	781
Ice cream and frozen dessert manufacturing	0	110	188	789
Frozen cakes and other pastries manufacturing	0	659	1,004	1,843
Poultry processing	0	106	149	402
Animal, except poultry, slaughtering	0	974	1,417	10,708
Meat processed from carcasses	0	2,569	2,837	19,329



## APPENDIX

Rendering and meat byproduct processing	0	98	110	430
Seafood product preparation and packaging	0	75	101	491
Bread and bakery product, except frozen, manufacturing	0	3,192	4,454	9,982
Cookie and cracker manufacturing	0	706	1,086	2,919
Dry pasta, mixes, and dough manufacturing	0	539	1,329	5,581
Tortilla manufacturing	0	293	361	984
Roasted nuts and peanut butter manufacturing	0	260	514	1,650
Other snack food manufacturing	0	493	1,097	3,951
Coffee and tea manufacturing	0	88	186	1,083
Flavoring syrup and concentrate manufacturing	0	967	7,504	16,660
Mayonnaise, dressing, and sauce manufacturing	0	123	245	979
Spice and extract manufacturing	0	1,061	1,719	6,062
All other food manufacturing	0	1,129	1,597	6,295
Bottled and canned soft drinks & water	0	857	1,926	9,311
Manufactured ice	0	44	24	118
Breweries	0	444	1,300	4,012
Wineries	0	53	100	545
Distilleries	0	388	2,238	4,157
Tobacco product manufacturing	0	103	3,207	4,506
Fiber, yarn, and thread mills	0	49	87	244
Broadwoven fabric mills	0	13	23	81
Narrow fabric mills and schiffli machine embroidery	0	45	52	128
Nonwoven fabric mills	0	135	289	839
Knit fabric mills	0	5	7	18
Textile and fabric finishing mills	0	82	111	361
Fabric coating mills	0	56	75	287
Carpet and rug mills	0	39	79	190
Curtain and linen mills	0	138	226	621
Textile bag and canvas mills	0	267	358	868
Rope, cordage, twine, tire cord and tire fabric mills	0	21	39	109
Other textile product mills	0	110	145	368
Hosiery and sock mills	0	12	23	48
Other apparel knitting mills	0	18	30	75
Cut and sew apparel contractors	0	66	80	193

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	415	532	1,301
Womens and girls cut and sew apparel manufacturing	0	29	52	287
Other cut and sew apparel manufacturing	0	126	165	415
Apparel accessories and other apparel manufacturing	0	192	246	486
Leather and hide tanning and finishing	0	18	34	104
Footwear manufacturing	0	96	114	274
Other leather and allied product manufacturing	0	41	44	115
Sawmills	0	53	89	416
Wood preservation	0	46	177	544
Veneer and plywood manufacturing	0	14	24	106
Engineered wood member and truss manufacturing	0	17	25	76
Reconstituted wood product manufacturing	0	15	43	168
Wood windows and door manufacturing	0	282	428	1,097
Cut stock, resawing lumber, and planing	0	12	24	69
Other millwork, including flooring	0	138	224	583
Wood container and pallet manufacturing	0	354	450	1,167
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	38	46	126
All other miscellaneous wood product manufacturing	0	180	251	616
Pulp mills	0	2	2	9
Paper mills	0	550	816	2,806
Paperboard mills	0	228	369	1,883
Paperboard container manufacturing	0	3,358	4,290	18,684
Paper bag and coated and treated paper manufacturing	0	1,654	2,203	7,737
Stationery product manufacturing	0	298	349	1,111
Sanitary paper product manufacturing	0	102	188	640

## APPENDIX

All other converted paper product manufacturing	0	312	382	1,203
Printing	0	11,510	16,952	28,027
Support activities for printing	0	983	1,399	1,962
Petroleum refineries	0	2,618	25,683	101,368
Asphalt paving mixture and block manufacturing	0	103	219	793
Asphalt shingle and coating materials manufacturing	0	22	139	441
Petroleum lubricating oil and grease manufacturing	0	492	2,350	5,117
All other petroleum and coal products manufacturing	0	148	604	1,415
Petrochemical manufacturing	0	21	125	867
Industrial gas manufacturing	0	268	533	1,651
Synthetic dye and pigment manufacturing	0	108	190	825
Other basic inorganic chemical manufacturing	0	447	804	2,411
Other basic organic chemical manufacturing	0	496	835	6,530
Plastics material and resin manufacturing	0	1,375	2,012	13,525
Synthetic rubber manufacturing	0	40	57	366
Artificial and synthetic fibers and filaments manufacturing	0	46	58	391
Nitrogenous fertilizer manufacturing	0	73	125	351
Phosphatic fertilizer manufacturing	0	1	2	6
Fertilizer mixing	0	36	40	115
Pesticide and other agricultural chemical manufacturing	0	260	644	2,914
Medicinal and botanical manufacturing	0	589	874	2,453
Pharmaceutical preparation manufacturing	0	18,055	50,950	108,725
In-vitro diagnostic substance manufacturing	0	499	666	1,799
Biological product (except diagnostic) manufacturing	0	380	748	1,818
Paint and coating manufacturing	0	1,022	1,634	5,996
Adhesive manufacturing	0	687	1,017	3,805
Soap and other detergent manufacturing	0	1,335	3,599	10,312

## APPENDIX

Polish and other sanitation good manufacturing	0	381	553	1,416
Surface active agent manufacturing	0	276	761	1,825
Toilet preparation manufacturing	0	1,770	3,923	10,915
Printing ink manufacturing	0	747	805	2,718
Explosives manufacturing	0	18	20	86
Custom compounding of purchased resins	0	892	1,517	6,216
Photographic film and chemical manufacturing	0	848	1,555	5,419
Other miscellaneous chemical product manufacturing	0	885	1,185	4,023
Plastics packaging materials and unlaminated film and sheet manufacturing	0	4,183	8,065	22,325
Unlaminated plastics profile shape manufacturing	0	3,112	8,445	19,837
Plastics pipe and pipe fitting manufacturing	0	476	1,483	3,678
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	155	345	828
Polystyrene foam product manufacturing	0	470	921	2,614
Urethane and other foam product (except polystyrene) manufacturing	0	263	489	1,416
Plastics bottle manufacturing	0	351	683	2,307
Other plastics product manufacturing	0	8,103	13,750	32,223
Tire manufacturing	0	542	863	3,459
Rubber and plastics hoses and belting manufacturing	0	211	388	940
Other rubber product manufacturing	0	904	1,535	4,261
Pottery, ceramics, and plumbing fixture manufacturing	0	285	329	700
Brick, tile, and other structural clay product manufacturing	0	453	722	1,461
Flat glass manufacturing	0	126	233	605
Other pressed and blown glass and glassware manufacturing	0	128	154	341
Glass container manufacturing	0	229	372	957
Glass product manufacturing made of purchased glass	0	362	534	1,227

## APPENDIX

Cement manufacturing	0	104	231	604
Ready-mix concrete manufacturing	0	622	988	2,946
Concrete block and brick manufacturing	0	620	1,045	2,398
Concrete pipe manufacturing	0	34	54	129
Other concrete product manufacturing	0	982	1,349	2,796
Lime manufacturing	0	2	4	10
Gypsum product manufacturing	0	77	193	582
Abrasive product manufacturing	0	1,042	2,998	5,391
Cut stone and stone product manufacturing	0	219	252	507
Ground or treated mineral and earth manufacturing	0	147	398	803
Mineral wool manufacturing	0	55	119	301
Miscellaneous nonmetallic mineral products manufacturing	0	38	82	180
Iron and steel mills and ferroalloy manufacturing	0	2,438	3,302	16,942
Iron, steel pipe and tube manufacturing from purchased steel	0	1,175	1,440	4,447
Rolled steel shape manufacturing	0	446	773	3,575
Steel wire drawing	0	221	191	840
Alumina refining and primary aluminum production	0	(6)	(4)	93
Secondary smelting and alloying of aluminum	0	63	83	701
Aluminum sheet, plate, and foil manufacturing	0	1,196	1,813	8,465
Other aluminum rolling, drawing and extruding	0	842	978	5,035
Nonferrous metal (exc aluminum) smelting and refining	0	3	11	37
Copper rolling, drawing, extruding and alloying	0	5,040	6,257	35,928
Nonferrous metal, except copper and aluminum, shaping	0	597	707	3,050
Secondary processing of other nonferrous metals	0	13	26	199
Ferrous metal foundries	0	927	1,179	2,804
Nonferrous metal foundries	0	1,537	1,958	4,730
Custom roll forming	0	110	181	673
Crown and closure manufacturing and metal stamping	0	4,905	7,611	17,650

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Iron and steel forging	0	8,792	12,832	34,312
Nonferrous forging	0	1,193	1,592	4,820
Cutlery, utensil, pot, and pan manufacturing	0	72	263	431
Handtool manufacturing	0	976	1,738	3,135
Prefabricated metal buildings and components manufacturing	0	137	210	537
Fabricated structural metal manufacturing	0	572	917	2,444
Plate work manufacturing	0	284	298	815
Metal window and door manufacturing	0	258	428	976
Sheet metal work manufacturing	0	4,631	6,304	13,651
Ornamental and architectural metal work manufacturing	0	242	341	730
Power boiler and heat exchanger manufacturing	0	8	13	27
Metal tank (heavy gauge) manufacturing	0	106	137	408
Metal cans manufacturing	0	264	691	2,812
Metal barrels, drums and pails manufacturing	0	383	501	1,583
Hardware manufacturing	0	509	925	2,565
Spring and wire product manufacturing	0	717	1,029	2,502
Machine shops	0	5,906	7,078	12,847
Turned product and screw, nut, and bolt manufacturing	0	7,484	11,106	24,873
Metal heat treating	0	677	1,141	2,706
Metal coating and nonprecious engraving	0	1,095	2,124	4,453
Electroplating, anodizing, and coloring metal	0	2,057	2,360	4,764
Valve and fittings, other than plumbing, manufacturing	0	624	1,097	2,688
Plumbing fixture fitting and trim manufacturing	0	751	2,760	6,686
Ball and roller bearing manufacturing	0	1,478	3,023	6,478
Small arms ammunition manufacturing	0	213	569	907
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	118	329	658

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	176	212	487
Other fabricated metal manufacturing	2	142,538	197,906	410,244
Farm machinery and equipment manufacturing	0	97	166	493
Lawn and garden equipment manufacturing	0	164	327	1,215
Construction machinery manufacturing	0	454	1,068	1,786
Mining machinery and equipment manufacturing	0	5	7	19
Oil and gas field machinery and equipment manufacturing	0	0	0	2
Semiconductor machinery manufacturing	0	0	1	1
Food product machinery manufacturing	0	14	18	46
Sawmill, woodworking, and paper machinery	0	30	34	84
Printing machinery and equipment manufacturing	0	32	38	85
All other industrial machinery manufacturing	0	26	36	92
Optical instrument and lens manufacturing	0	2	4	10
Photographic and photocopying equipment manufacturing	0	32	52	154
Other commercial service industry machinery manufacturing	0	166	376	881
Air purification and ventilation equipment manufacturing	0	84	136	323
Heating equipment (except warm air furnaces) manufacturing	0	158	266	586
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	201	434	1,160
Industrial mold manufacturing	0	353	422	724
Special tool, die, jig, and fixture manufacturing	0	327	447	739
Cutting tool and machine tool accessory manufacturing	0	343	388	808
Machine tool manufacturing	0	237	277	656

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Rolling mill and other metalworking machinery manufacturing	0	31	41	79
Turbine and turbine generator set units manufacturing	0	27	40	77
Speed changer, industrial high-speed drive, and gear manufacturing	0	555	912	2,108
Mechanical power transmission equipment manufacturing	0	235	380	858
Other engine equipment manufacturing	0	1,480	3,047	6,770
Pump and pumping equipment manufacturing	0	80	169	347
Air and gas compressor manufacturing	0	3,860	8,765	17,584
Elevator and moving stairway manufacturing	0	23	43	113
Conveyor and conveying equipment manufacturing	0	53	56	149
Overhead cranes, hoists, and monorail systems manufacturing	0	1	3	8
Industrial truck, trailer, and stacker manufacturing	0	48	84	231
Power-driven handtool manufacturing	0	22	63	142
Welding and soldering equipment manufacturing	0	103	144	184
Packaging machinery manufacturing	0	79	135	307
Industrial process furnace and oven manufacturing	0	198	257	552
Fluid power cylinder and actuator manufacturing	0	119	181	404
Fluid power pump and motor manufacturing	0	982	1,784	3,708
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	58	82	205
Electronic computer manufacturing	0	65	184	439
Computer storage device manufacturing	0	3	11	30
Computer terminals and other computer peripheral equipment manufacturing	1	126,251	272,676	579,475



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Telephone apparatus manufacturing	0	76	170	535
Broadcast and wireless communications equipment manufacturing	0	131	214	405
Other communications equipment manufacturing	0	112	208	519
Audio and video equipment manufacturing	0	257	533	1,170
Printed circuit assembly (electronic assembly) manufacturing	0	3,237	5,802	18,299
Bare printed circuit board manufacturing	0	1,538	2,246	6,641
Semiconductor and related device manufacturing	0	180	378	1,191
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	617	976	2,521
Electronic connector manufacturing	0	5,312	8,892	14,975
Other electronic component manufacturing	0	3,362	4,116	13,321
Electromedical and electrotherapeutic apparatus manufacturing	0	36	90	178
Search, detection, and navigation instruments manufacturing	0	21	41	73
Automatic environmental control manufacturing	0	3,242	4,593	7,088
Industrial process variable instruments manufacturing	0	207	340	696
Totalizing fluid meter and counting device manufacturing	0	44	117	230
Electricity and signal testing instruments manufacturing	0	2,805	4,679	12,511
Analytical laboratory instrument manufacturing	0	53,846	117,594	216,398
Irradiation apparatus manufacturing	0	5	13	29
Watch, clock, and other measuring and controlling device manufacturing	0	87	178	365
Blank magnetic and optical recording media manufacturing	0	10	40	126

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Software and other prerecorded and record reproducing	0	388	641	926
Electric lamp bulb and part manufacturing	0	124	163	296
Lighting fixture manufacturing	0	736	1,007	2,135
Small electrical appliance manufacturing	0	446	849	1,639
Household cooking appliance manufacturing	0	208	435	893
Household refrigerator and home freezer manufacturing	0	198	507	1,027
Household laundry equipment manufacturing	0	393	764	2,091
Other major household appliance manufacturing	0	68	165	307
Power, distribution, and specialty transformer manufacturing	0	102	146	345
Motor and generator manufacturing	0	1,040	1,526	3,900
Switchgear and switchboard apparatus manufacturing	0	890	1,443	3,490
Relay and industrial control manufacturing	0	3,075	4,033	9,009
Storage battery manufacturing	0	788	1,129	2,846
Primary battery manufacturing	0	156	158	331
Fiber optic cable manufacturing	0	225	348	1,001
Other communication and energy wire manufacturing	0	475	786	2,238
Wiring device manufacturing	0	4,390	8,355	16,916
Carbon and graphite product manufacturing	0	25	28	58
All other miscellaneous electrical equipment and component manufacturing	0	248	282	730
Automobile manufacturing	0	791	1,427	12,521
Light truck and utility vehicle manufacturing	0	7	13	135
Heavy duty truck manufacturing	0	1	2	13
Motor vehicle body manufacturing	0	52	60	220
Truck trailer manufacturing	0	1	1	5
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	65	68	231
Motor vehicle gasoline engine and engine parts manufacturing	0	498	600	3,404

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Motor vehicle electrical and electronic equipment manufacturing	0	1,008	1,121	5,856
Motor vehicle transmission and power train parts manufacturing	0	1,659	2,112	9,475
Motor vehicle seating and interior trim manufacturing	0	39	45	315
Motor vehicle metal stamping	0	1,271	1,452	4,293
Other motor vehicle parts manufacturing	0	1,447	1,574	10,317
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	418	545	1,756
Aircraft manufacturing	0	0	0	2
Aircraft engine and engine parts manufacturing	0	102	186	616
Other aircraft parts and auxiliary equipment manufacturing	0	30	41	96
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	28	38	173
Ship building and repairing	0	23	27	73
Boat building	0	64	82	335
Motorcycle, bicycle, and parts manufacturing	0	131	288	551
Military armored vehicle, tank, and tank component manufacturing	0	3	4	17
All other transportation equipment manufacturing	0	99	165	719
Wood kitchen cabinet and countertop manufacturing	0	656	1,145	2,189
Upholstered household furniture manufacturing	0	367	631	1,466
Nonupholstered wood household furniture manufacturing	0	251	325	693
Other household nonupholstered furniture manufacturing	0	16	32	80
Institutional furniture manufacturing	0	11	13	39
Wood office furniture manufacturing	0	2	3	6

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Custom architectural woodwork and millwork	0	27	27	56
Office furniture, except wood, manufacturing	0	12	30	64
Showcase, partition, shelving, and locker manufacturing	0	328	575	1,253
Mattress manufacturing	0	91	283	701
Blind and shade manufacturing	0	33	36	133
Surgical and medical instrument manufacturing	0	964	1,450	2,658
Surgical appliance and supplies manufacturing	0	909	1,400	2,780
Dental equipment and supplies manufacturing	0	122	166	387
Ophthalmic goods manufacturing	0	72	110	284
Dental laboratories	0	389	375	574
Jewelry and silverware manufacturing	0	443	575	1,138
Sporting and athletic goods manufacturing	0	697	808	1,562
Doll, toy, and game manufacturing	0	465	478	906
Office supplies (except paper) manufacturing	0	438	513	1,021
Sign manufacturing	0	716	609	914
Gasket, packing, and sealing device manufacturing	0	400	446	950
Musical instrument manufacturing	0	211	213	258
Fasteners, buttons, needles, and pins manufacturing	0	265	296	438
Broom, brush, and mop manufacturing	0	362	495	1,068
Burial casket manufacturing	0	81	89	131
All other miscellaneous manufacturing	0	1,066	1,186	1,846
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,649	7,101	13,570
Wholesale - Professional and commercial equipment and supplies	0	23,332	43,937	68,178
Wholesale - Household appliances and electrical and electronic goods	0	12,355	32,095	58,521
Wholesale - Machinery, equipment, and supplies	0	8,127	16,004	24,716
Wholesale - Other durable goods merchant wholesalers	0	16,659	28,575	49,353

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Wholesale - Drugs and druggists' sundries	0	7,484	24,851	39,165
Wholesale - Grocery and related product wholesalers	0	9,636	14,022	24,250
Wholesale - Petroleum and petroleum products	0	2,288	27,261	30,037
Wholesale - Other nondurable goods merchant wholesalers	0	20,049	44,254	71,264
Wholesale - Wholesale electronic markets and agents and brokers	0	14,035	8,132	9,013
Retail - Motor vehicle and parts dealers	0	8,460	13,854	19,501
Retail - Furniture and home furnishings stores	0	5,272	6,915	10,653
Retail - Electronics and appliance stores	0	7,426	7,442	11,049
Retail - Building material and garden equipment and supplies stores	0	5,263	10,470	15,073
Retail - Food and beverage stores	1	16,215	23,832	38,309
Retail - Health and personal care stores	0	11,233	14,000	20,695
Retail - Gasoline stores	0	4,288	8,151	14,607
Retail - Clothing and clothing accessories stores	0	7,269	12,182	23,314
Retail - Sporting goods, hobby, musical instrument and book stores	0	4,050	5,370	8,369
Retail - General merchandise stores	1	15,445	23,476	37,366
Retail - Miscellaneous store retailers	0	7,611	9,190	14,031
Retail - Nonstore retailers	0	10,746	35,394	57,328
Air transportation	0	16,073	31,499	48,341
Rail transportation	0	4,606	7,584	16,113
Water transportation	0	2,031	3,342	13,711
Truck transportation	1	64,176	74,095	148,902
Transit and ground passenger transportation	1	13,186	15,323	23,444
Pipeline transportation	0	898	5,322	5,914
Scenic and sightseeing transportation and support activities for transportation	0	22,123	26,238	53,594
Couriers and messengers	0	10,237	15,608	27,652
Warehousing and storage	0	17,289	19,716	38,087

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Newspaper publishers	0	2,571	4,056	5,143
Periodical publishers	0	6,496	9,627	12,048
Book publishers	0	1,775	5,493	8,712
Directory, mailing list, and other publishers	0	1,161	3,842	5,566
Greeting card publishing	0	96	387	633
Software publishers	0	75,892	158,186	183,256
Motion picture and video industries	0	6,096	12,169	20,098
Sound recording industries	0	925	4,675	5,521
Radio and television broadcasting	0	14,399	10,846	23,236
Cable and other subscription programming	0	2,101	8,137	18,509
Wired telecommunications carriers	0	10,429	22,631	42,630
Wireless telecommunications carriers (except satellite)	0	6,593	27,408	61,020
Satellite, telecommunications resellers, and all other telecommunications	0	3,221	3,742	8,069
Data processing, hosting, and related services	0	11,752	28,848	46,728
News syndicates, libraries, archives and all other information services	0	2,566	4,434	5,765
Internet publishing and broadcasting and web search portals	0	28,175	97,002	159,131
Nondepository credit intermediation and related activities	0	20,823	31,276	46,164
Securities and commodity contracts intermediation and brokerage	0	53,330	52,948	80,586
Monetary authorities and depository credit intermediation	0	51,608	161,277	221,906
Other financial investment activities	1	37,715	54,824	92,113
Direct life insurance carriers	0	7,958	18,954	25,760
Insurance carriers, except direct life	0	24,574	105,496	163,923
Insurance agencies, brokerages, and related activities	0	27,612	50,211	91,726
Funds, trusts, and other financial vehicles	0	7,187	8,590	41,018
Other real estate	2	100,744	261,093	475,829
Tenant-occupied housing	0	7,276	77,347	84,379

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Owner-occupied dwellings	0	0	253,164	319,870
Automotive equipment rental and leasing	0	4,522	15,739	19,819
General and consumer goods rental except video tapes and discs	0	4,599	5,997	8,169
Video tape and disc rental	0	1,008	1,716	2,576
Commercial and industrial machinery and equipment rental and leasing	0	5,853	15,037	19,664
Lessors of nonfinancial intangible assets	0	549	18,706	21,495
Legal services	1	82,620	165,379	203,218
Accounting, tax preparation, bookkeeping, and payroll services	0	38,402	44,893	57,018
Architectural, engineering, and related services	0	47,954	52,494	91,266
Specialized design services	0	6,772	7,082	8,050
Custom computer programming services	0	19,958	22,562	30,357
Computer systems design services	0	17,460	18,318	23,202
Other computer related services, including facilities management	0	6,769	10,960	17,642
Management consulting services	1	111,602	108,745	142,872
Environmental and other technical consulting services	0	11,915	9,779	13,479
Scientific research and development services	10	1,275,939	1,832,947	3,055,340
Advertising, public relations, and related services	0	39,881	48,261	71,561
Photographic services	0	5,227	1,383	2,519
Veterinary services	0	2,848	3,472	5,498
Marketing research and all other miscellaneous professional, scientific, and technical services	1	67,118	55,263	69,175
Management of companies and enterprises	1	147,476	173,175	229,995
Office administrative services	0	33,321	11,459	23,205
Facilities support services	0	927	1,198	3,094
Employment services	2	73,374	118,676	175,873
Business support services	0	13,599	11,905	18,160
Travel arrangement and reservation services	0	5,149	7,041	15,002
Investigation and security services	0	10,155	10,444	14,710
Services to buildings	1	19,449	20,307	30,603

## APPENDIX

Landscape and horticultural services	0	11,036	11,704	17,684
Other support services	0	6,363	8,270	14,138
Waste management and remediation services	0	6,305	12,155	19,039
Elementary and secondary schools	0	15,872	13,614	16,647
Junior colleges, colleges, universities, and professional schools	0	37,040	48,382	60,549
Other educational services	0	9,951	9,077	17,219
Offices of physicians	1	61,559	73,543	104,174
Offices of dentists	0	13,981	17,874	26,831
Offices of other health practitioners	0	16,376	15,261	21,446
Outpatient care centers	0	7,697	8,117	15,441
Medical and diagnostic laboratories	0	3,785	5,989	9,394
Home health care services	0	14,929	11,544	16,079
Other ambulatory health care services	0	4,435	4,918	8,261
Hospitals	1	122,851	149,799	262,997
Nursing and community care facilities	0	17,767	22,330	36,612
Residential mental retardation, mental health, substance abuse and other facilities	0	7,411	8,304	12,222
Individual and family services	1	18,739	17,153	25,480
Child day care services	0	10,982	12,750	17,264
Community food, housing, and other relief services, including rehabilitation services	0	6,788	7,588	15,896
Performing arts companies	0	2,916	5,307	8,098
Commercial Sports Except Racing	0	5,910	6,800	9,001
Racing and Track Operation	0	625	1,153	1,791
Independent artists, writers, and performers	0	8,566	11,381	12,945
Promoters of performing arts and sports and agents for public figures	0	2,431	6,413	10,725
Museums, historical sites, zoos, and parks	0	2,162	2,799	4,233
Amusement parks and arcades	0	714	1,084	1,446
Gambling industries (except casino hotels)	0	5,556	14,424	19,704
Other amusement and recreation industries	0	4,782	5,327	7,972



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Fitness and recreational sports centers	0	5,223	6,165	8,363
Bowling centers	0	735	941	1,499
Hotels and motels, including casino hotels	0	14,569	26,784	37,164
Other accommodations	0	6,657	8,552	10,472
Full-service restaurants	1	30,667	48,304	78,071
Limited-service restaurants	1	21,906	37,439	75,072
All other food and drinking places	1	25,432	33,846	47,481
Automotive repair and maintenance, except car washes	0	22,083	25,109	37,400
Car washes	0	9,875	16,045	23,452
Electronic and precision equipment repair and maintenance	0	4,820	7,470	10,784
Commercial and industrial machinery and equipment repair and maintenance	0	7,147	8,698	12,732
Personal and household goods repair and maintenance	0	6,100	4,344	5,834
Personal care services	1	15,795	10,818	14,659
Death care services	0	1,463	1,706	2,645
Dry-cleaning and laundry services	0	2,766	3,008	4,285
Other personal services	0	11,750	6,417	9,644
Religious organizations	1	36,355	9,893	52,796
Grantmaking, giving, and social advocacy organizations	0	10,335	22,750	36,133
Business and professional associations	0	10,033	12,691	18,195
Labor and civic organizations	0	8,843	16,675	29,075
Private households	0	4,720	4,720	4,720
Postal service	0	13,010	13,025	14,341
Federal electric utilities	0	0	1	6
Other federal government enterprises	0	534	(567)	372
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	4,533	(1,562)	2,315
Local government electric utilities	0	38	102	171
Other local government enterprises	0	6,142	8,084	14,970

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	4	325,648	754,858	1,578,384

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 16. Indiana

**Table 399: Detailed NASA Impacts by Types of Impact, Indiana.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,778</i>	<i>113,991,270</i>	<i>182,067,037</i>	<i>332,894,563</i>
Oilseed farming	2	100,064	362,033	1,273,467
Grain farming	4	51,052	143,319	859,727
Vegetable and melon farming	1	9,030	13,417	52,375
Fruit farming	0	949	1,574	5,340
Tree nut farming	0	91	94	181
Greenhouse, nursery, and floriculture production	0	7,651	9,688	30,947
Tobacco farming	0	133	124	367
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	4,697	5,476	18,423
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	3,166	17,964	97,381

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Dairy cattle and milk production	0	4,645	11,359	113,235
Poultry and egg production	0	9,055	12,197	214,193
Animal production, except cattle and poultry and eggs	6	53,199	185,044	559,182
Forestry, forest products, and timber tract production	0	2,723	2,879	3,659
Commercial logging	0	14,150	14,090	19,680
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	53	1,542	4,834
Support activities for agriculture and forestry	1	98,988	64,837	75,463
Oil and gas extraction	1	8,342	6,718	206,138
Coal mining	0	42,098	83,072	142,068
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	1,965	4,894	3,779
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	15,322	29,448	53,913
Sand and gravel mining	0	11,896	15,485	26,880
Other clay, ceramic, refractory minerals mining	0	239	331	722
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	1,165	1,417	2,449
Drilling oil and gas wells	0	2	3	22
Support activities for oil and gas operations	0	45	41	544
Metal mining services	0	77	74	2,013
Other nonmetallic minerals services	0	42	48	472
Electric power generation - Hydroelectric	0	461	1,489	2,618
Electric power generation - Fossil fuel	1	152,121	558,996	1,449,081
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	(305)	949	10,765
Electric power generation - Wind	0	2,139	15,469	24,088

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Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	(85)	871	9,929
Electric power generation - All other	0	627	176	786
Electric power transmission and distribution	2	293,569	1,048,398	2,720,066
Natural gas distribution	1	65,000	186,123	435,700
Water, sewage and other systems	0	18,293	42,317	81,267
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	6	371,762	474,748	1,189,110
Maintenance and repair construction of residential structures	2	134,830	189,471	480,689
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	767	455	1,163
Dog and cat food manufacturing	0	6,317	35,215	124,421
Other animal food manufacturing	0	18,100	35,330	239,265
Flour milling	0	6,554	17,143	105,841
Rice milling	0	1,269	2,691	16,866
Malt manufacturing	0	0	0	0

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Wet corn milling	0	49,483	171,549	820,595
Soybean and other oilseed processing	0	2,982	23,758	143,044
Fats and oils refining and blending	0	1,911	4,898	35,991
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	5,522	9,757	37,630
Chocolate and confectionery manufacturing from cacao beans	0	24	52	387
Confectionery manufacturing from purchased chocolate	0	4,222	6,882	38,990
Frozen fruits, juices and vegetables manufacturing	0	150	241	1,537
Frozen specialties manufacturing	0	11,256	20,480	79,808
Canned fruits and vegetables manufacturing	0	11,500	26,634	87,007
Canned specialties	0	9,295	31,451	105,118
Dehydrated food products manufacturing	0	4,586	10,679	32,864
Cheese manufacturing	0	9,495	15,848	104,998
Dry, condensed, and evaporated dairy product manufacturing	0	12,601	41,851	160,441
Fluid milk manufacturing	0	18,532	36,597	201,279
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	4,983	9,528	37,259
Frozen cakes and other pastries manufacturing	0	16,692	29,979	48,025
Poultry processing	1	39,041	58,824	249,202
Animal, except poultry, slaughtering	1	38,478	60,696	482,636
Meat processed from carcasses	1	46,712	51,659	430,500
Rendering and meat byproduct processing	0	1,837	1,805	8,800
Seafood product preparation and packaging	0	1,075	1,253	7,726
Bread and bakery product, except frozen, manufacturing	1	45,144	67,122	159,503
Cookie and cracker manufacturing	0	9,517	15,795	54,465
Dry pasta, mixes, and dough manufacturing	0	2,330	7,379	22,794
Tortilla manufacturing	0	3,319	4,460	14,447

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	3,950	10,649	34,229
Other snack food manufacturing	0	15,304	47,198	151,367
Coffee and tea manufacturing	0	440	867	6,677
Flavoring syrup and concentrate manufacturing	0	2,720	30,855	56,467
Mayonnaise, dressing, and sauce manufacturing	0	683	1,680	6,005
Spice and extract manufacturing	0	755	1,372	5,323
All other food manufacturing	0	15,562	24,335	93,093
Bottled and canned soft drinks & water	0	33,338	88,375	331,697
Manufactured ice	0	2,024	1,604	6,308
Breweries	0	13,622	38,487	133,343
Wineries	0	1,372	2,604	13,238
Distilleries	0	9,364	55,837	119,370
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	455	626	3,241
Broadwoven fabric mills	0	372	504	2,223
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	4,253	6,645	30,247
Knit fabric mills	0	132	166	632
Textile and fabric finishing mills	0	119	146	779
Fabric coating mills	0	659	802	3,794
Carpet and rug mills	0	992	1,504	5,609
Curtain and linen mills	0	2,554	3,441	13,123
Textile bag and canvas mills	0	7,999	9,428	23,957
Rope, cordage, twine, tire cord and tire fabric mills	0	906	1,308	4,036
Other textile product mills	0	3,363	3,949	11,896
Hosiery and sock mills	0	741	818	1,895
Other apparel knitting mills	0	316	399	784
Cut and sew apparel contractors	0	1,741	1,891	4,306
Mens and boys cut and sew apparel manufacturing	0	601	759	2,821
Womens and girls cut and sew apparel manufacturing	0	665	986	3,376
Other cut and sew apparel manufacturing	0	612	789	2,253
Apparel accessories and other apparel manufacturing	0	296	380	1,073
Leather and hide tanning and finishing	0	0	0	0

## APPENDIX

Footwear manufacturing	0	336	384	1,232
Other leather and allied product manufacturing	0	1,045	1,096	2,966
Sawmills	0	11,394	14,385	60,698
Wood preservation	0	1,103	2,528	9,530
Veneer and plywood manufacturing	0	8,390	11,471	40,998
Engineered wood member and truss manufacturing	0	4,575	5,747	16,868
Reconstituted wood product manufacturing	0	208	411	1,906
Wood windows and door manufacturing	0	19,241	24,297	68,019
Cut stock, resawing lumber, and planing	0	4,888	7,233	20,449
Other millwork, including flooring	0	10,009	12,771	35,014
Wood container and pallet manufacturing	0	15,361	16,998	44,873
Manufactured home (mobile home) manufacturing	0	107	164	392
Prefabricated wood building manufacturing	0	2,006	2,207	5,719
All other miscellaneous wood product manufacturing	0	9,066	10,296	28,444
Pulp mills	0	2,273	3,231	14,408
Paper mills	0	1,343	2,064	6,557
Paperboard mills	0	9,840	19,223	86,261
Paperboard container manufacturing	1	48,901	64,715	286,220
Paper bag and coated and treated paper manufacturing	0	24,523	37,271	137,618
Stationery product manufacturing	0	3,946	5,067	20,168
Sanitary paper product manufacturing	0	4,731	11,025	37,893
All other converted paper product manufacturing	0	6,791	8,773	28,598
Printing	5	276,346	428,984	869,568
Support activities for printing	0	8,199	12,593	21,036
Petroleum refineries	0	57,411	595,759	2,239,151
Asphalt paving mixture and block manufacturing	0	5,780	10,675	28,655
Asphalt shingle and coating materials manufacturing	0	3,391	13,172	31,745
Petroleum lubricating oil and grease manufacturing	0	5,616	25,077	68,117

## APPENDIX

All other petroleum and coal products manufacturing	0	2,605	9,682	23,475
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	8,556	28,219	67,627
Synthetic dye and pigment manufacturing	0	1,770	4,841	13,859
Other basic inorganic chemical manufacturing	0	3,317	8,959	26,744
Other basic organic chemical manufacturing	0	9,736	24,707	198,276
Plastics material and resin manufacturing	0	13,430	26,006	137,607
Synthetic rubber manufacturing	0	761	1,440	7,689
Artificial and synthetic fibers and filaments manufacturing	0	221	395	2,177
Nitrogenous fertilizer manufacturing	0	83	243	628
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1,338	3,040	8,570
Pesticide and other agricultural chemical manufacturing	0	15,690	67,826	191,073
Medicinal and botanical manufacturing	0	768	1,638	6,025
Pharmaceutical preparation manufacturing	1	226,939	1,147,414	2,178,569
In-vitro diagnostic substance manufacturing	0	21,622	39,905	77,797
Biological product (except diagnostic) manufacturing	0	185	571	1,848
Paint and coating manufacturing	0	4,876	11,956	41,298
Adhesive manufacturing	0	3,047	6,055	21,974
Soap and other detergent manufacturing	0	6,630	28,964	68,967
Polish and other sanitation good manufacturing	0	11,283	27,819	83,346
Surface active agent manufacturing	0	264	990	2,732
Toilet preparation manufacturing	0	8,869	38,192	100,591
Printing ink manufacturing	0	757	809	3,243
Explosives manufacturing	0	160	195	687
Custom compounding of purchased resins	0	7,113	15,198	45,179
Photographic film and chemical manufacturing	0	812	2,174	7,664
Other miscellaneous chemical product manufacturing	0	6,637	11,882	43,214



## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	17,929	29,723	107,359
Unlaminated plastics profile shape manufacturing	0	7,308	16,295	50,462
Plastics pipe and pipe fitting manufacturing	0	1,521	3,619	11,370
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	4,926	8,999	26,055
Polystyrene foam product manufacturing	0	4,305	7,259	24,508
Urethane and other foam product (except polystyrene) manufacturing	0	13,022	21,124	84,896
Plastics bottle manufacturing	0	3,309	5,543	24,515
Other plastics product manufacturing	2	136,212	202,637	645,059
Tire manufacturing	0	19,289	26,778	110,018
Rubber and plastics hoses and belting manufacturing	0	4,159	6,611	20,673
Other rubber product manufacturing	0	29,069	43,134	147,013
Pottery, ceramics, and plumbing fixture manufacturing	0	111	160	829
Brick, tile, and other structural clay product manufacturing	0	3,712	6,501	14,655
Flat glass manufacturing	0	276	558	1,982
Other pressed and blown glass and glassware manufacturing	0	597	899	3,237
Glass container manufacturing	0	6,666	11,264	29,672
Glass product manufacturing made of purchased glass	0	15,443	25,565	66,813
Cement manufacturing	0	3,403	7,831	23,779
Ready-mix concrete manufacturing	0	18,838	30,943	107,026
Concrete block and brick manufacturing	0	3,047	5,471	15,634
Concrete pipe manufacturing	0	737	1,172	3,184
Other concrete product manufacturing	0	6,806	9,754	24,973
Lime manufacturing	0	648	1,532	4,314
Gypsum product manufacturing	0	4,932	12,517	36,248
Abrasive product manufacturing	0	2,485	7,509	14,649
Cut stone and stone product manufacturing	0	21,965	25,724	57,960

## APPENDIX

Ground or treated mineral and earth manufacturing	0	4,313	12,104	25,724
Mineral wool manufacturing	0	4,409	10,007	24,800
Miscellaneous nonmetallic mineral products manufacturing	0	685	1,639	4,288
Iron and steel mills and ferroalloy manufacturing	0	73,711	160,612	522,807
Iron, steel pipe and tube manufacturing from purchased steel	0	2,140	4,032	14,678
Rolled steel shape manufacturing	0	6,277	18,859	49,627
Steel wire drawing	0	2,729	5,486	16,287
Alumina refining and primary aluminum production	0	1,929	5,356	22,857
Secondary smelting and alloying of aluminum	0	1,955	4,133	25,823
Aluminum sheet, plate, and foil manufacturing	0	18,832	48,136	126,618
Other aluminum rolling, drawing and extruding	0	4,888	8,441	31,102
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	12,783	21,738	131,800
Nonferrous metal, except copper and aluminum, shaping	0	3,767	5,746	16,268
Secondary processing of other nonferrous metals	0	861	4,921	14,899
Ferrous metal foundries	0	11,543	29,217	52,867
Nonferrous metal foundries	0	15,015	28,467	50,232
Custom roll forming	0	104	141	558
Crown and closure manufacturing and metal stamping	0	10,502	17,669	44,708
Iron and steel forging	0	3,532	5,510	17,040
Nonferrous forging	0	386	533	1,583
Cutlery, utensil, pot, and pan manufacturing	0	1,921	6,302	13,982
Handtool manufacturing	0	2,435	4,494	8,859
Prefabricated metal buildings and components manufacturing	0	2,696	4,418	9,967
Fabricated structural metal manufacturing	0	14,939	25,651	65,952
Plate work manufacturing	0	4,111	4,261	12,831
Metal window and door manufacturing	0	11,397	21,024	48,868

## APPENDIX

Sheet metal work manufacturing	0	11,952	17,014	39,979
Ornamental and architectural metal work manufacturing	0	4,479	6,405	14,610
Power boiler and heat exchanger manufacturing	0	112	181	467
Metal tank (heavy gauge) manufacturing	0	2,816	3,763	9,180
Metal cans manufacturing	0	1,404	4,173	12,588
Metal barrels, drums and pails manufacturing	0	1,119	1,512	6,568
Hardware manufacturing	0	17,271	34,870	71,283
Spring and wire product manufacturing	0	4,672	7,265	19,452
Machine shops	1	58,494	70,942	131,503
Turned product and screw, nut, and bolt manufacturing	0	8,484	13,653	32,516
Metal heat treating	0	3,851	7,087	14,919
Metal coating and nonprecious engraving	0	10,471	22,316	42,755
Electroplating, anodizing, and coloring metal	0	6,167	7,172	15,383
Valve and fittings, other than plumbing, manufacturing	0	2,877	5,668	12,853
Plumbing fixture fitting and trim manufacturing	0	3,218	13,779	33,560
Ball and roller bearing manufacturing	0	6,591	15,403	33,336
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	17,006	37,721	75,575
Fabricated pipe and pipe fitting manufacturing	0	4,542	5,659	14,953
Other fabricated metal manufacturing	1	58,794	87,981	216,694
Farm machinery and equipment manufacturing	0	3,182	4,560	16,810
Lawn and garden equipment manufacturing	0	1,128	2,019	9,301
Construction machinery manufacturing	0	159	312	947
Mining machinery and equipment manufacturing	0	179	218	712

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	149	176	620
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	81	97	266
Sawmill, woodworking, and paper machinery	0	1,548	1,694	5,096
Printing machinery and equipment manufacturing	0	100	113	393
All other industrial machinery manufacturing	0	132	167	487
Optical instrument and lens manufacturing	0	15	23	88
Photographic and photocopying equipment manufacturing	0	894	1,325	5,330
Other commercial service industry machinery manufacturing	0	484	886	2,740
Air purification and ventilation equipment manufacturing	0	1,562	2,259	6,428
Heating equipment (except warm air furnaces) manufacturing	0	3,075	4,523	11,648
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	8,360	15,472	40,146
Industrial mold manufacturing	0	1,578	1,786	3,750
Special tool, die, jig, and fixture manufacturing	0	1,920	2,412	4,634
Cutting tool and machine tool accessory manufacturing	0	566	613	1,385
Machine tool manufacturing	0	115	128	382
Rolling mill and other metalworking machinery manufacturing	0	109	133	289
Turbine and turbine generator set units manufacturing	0	20	27	135
Speed changer, industrial high-speed drive, and gear manufacturing	0	7,983	11,612	31,864
Mechanical power transmission equipment manufacturing	0	3,653	5,319	12,676
Other engine equipment manufacturing	1	100,382	184,018	613,199
Pump and pumping equipment manufacturing	0	440	762	2,345

## APPENDIX

Air and gas compressor manufacturing	0	185	287	1,031
Elevator and moving stairway manufacturing	0	307	471	1,758
Conveyor and conveying equipment manufacturing	0	571	591	1,704
Overhead cranes, hoists, and monorail systems manufacturing	0	71	134	470
Industrial truck, trailer, and stacker manufacturing	0	2,683	4,134	14,083
Power-driven handtool manufacturing	0	25	64	206
Welding and soldering equipment manufacturing	0	183	238	691
Packaging machinery manufacturing	0	44	64	177
Industrial process furnace and oven manufacturing	0	80	97	223
Fluid power cylinder and actuator manufacturing	0	2,739	3,739	10,810
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	805	1,027	3,154
Electronic computer manufacturing	0	168	499	2,474
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	191	1,098	23,621
Telephone apparatus manufacturing	0	448	1,058	3,733
Broadcast and wireless communications equipment manufacturing	0	544	929	1,921
Other communications equipment manufacturing	0	32	69	334
Audio and video equipment manufacturing	0	33	78	504
Printed circuit assembly (electronic assembly) manufacturing	0	2,321	4,282	12,303
Bare printed circuit board manufacturing	0	439	644	1,430

## APPENDIX

Semiconductor and related device manufacturing	0	114	255	814
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,717	2,768	5,748
Electronic connector manufacturing	0	35,412	62,092	130,511
Other electronic component manufacturing	0	1,067	1,303	5,023
Electromedical and electrotherapeutic apparatus manufacturing	0	28	76	146
Search, detection, and navigation instruments manufacturing	0	264	536	1,089
Automatic environmental control manufacturing	0	6,189	9,176	19,708
Industrial process variable instruments manufacturing	0	1,094	1,865	3,974
Totalizing fluid meter and counting device manufacturing	0	95	270	814
Electricity and signal testing instruments manufacturing	0	255	434	1,205
Analytical laboratory instrument manufacturing	0	29,492	64,312	104,159
Irradiation apparatus manufacturing	0	19	50	159
Watch, clock, and other measuring and controlling device manufacturing	0	749	1,636	3,730
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	3,939	6,730	14,293
Electric lamp bulb and part manufacturing	0	4,106	6,374	12,703
Lighting fixture manufacturing	0	11,854	16,947	43,796
Small electrical appliance manufacturing	0	411	776	2,459
Household cooking appliance manufacturing	0	289	618	2,111
Household refrigerator and home freezer manufacturing	0	271	677	2,151
Household laundry equipment manufacturing	0	617	1,203	5,675

## APPENDIX

Other major household appliance manufacturing	0	94	223	751
Power, distribution, and specialty transformer manufacturing	0	89	128	390
Motor and generator manufacturing	0	3,519	5,229	16,587
Switchgear and switchboard apparatus manufacturing	0	696	1,100	3,223
Relay and industrial control manufacturing	0	1,357	1,780	5,797
Storage battery manufacturing	0	3,354	5,082	15,379
Primary battery manufacturing	0	12,666	18,681	72,833
Fiber optic cable manufacturing	0	79	121	558
Other communication and energy wire manufacturing	0	651	1,092	4,559
Wiring device manufacturing	0	1,453	2,659	7,864
Carbon and graphite product manufacturing	0	138	204	1,312
All other miscellaneous electrical equipment and component manufacturing	0	7,024	7,971	32,474
Automobile manufacturing	0	12,919	50,899	220,620
Light truck and utility vehicle manufacturing	0	21,881	67,904	467,147
Heavy duty truck manufacturing	0	1,487	3,688	20,898
Motor vehicle body manufacturing	0	1,912	2,546	9,065
Truck trailer manufacturing	0	175	223	857
Motor home manufacturing	1	49,977	89,825	272,163
Travel trailer and camper manufacturing	1	75,459	81,397	248,549
Motor vehicle gasoline engine and engine parts manufacturing	0	18,425	26,819	144,556
Motor vehicle electrical and electronic equipment manufacturing	0	40,718	54,183	213,206
Motor vehicle transmission and power train parts manufacturing	4	456,866	704,576	2,663,285
Motor vehicle seating and interior trim manufacturing	0	9,066	12,288	76,279
Motor vehicle metal stamping	1	52,006	68,950	233,540
Other motor vehicle parts manufacturing	1	61,373	95,557	451,260
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	27,272	42,842	179,197

## APPENDIX

Aircraft manufacturing	0	2	2	7
Aircraft engine and engine parts manufacturing	0	2,032	5,261	10,450
Other aircraft parts and auxiliary equipment manufacturing	0	286	460	1,000
Guided missile and space vehicle manufacturing	0	30	37	110
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	493	799	3,542
Ship building and repairing	0	2,583	3,354	6,732
Boat building	0	30,194	41,787	118,222
Motorcycle, bicycle, and parts manufacturing	0	2,031	6,181	14,320
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	9,790	15,389	46,791
Wood kitchen cabinet and countertop manufacturing	1	35,452	53,477	105,915
Upholstered household furniture manufacturing	0	15,574	22,299	58,145
Nonupholstered wood household furniture manufacturing	0	6,282	7,251	17,794
Other household nonupholstered furniture manufacturing	0	5,163	8,465	23,372
Institutional furniture manufacturing	1	30,451	33,798	106,235
Wood office furniture manufacturing	0	12,223	18,843	48,728
Custom architectural woodwork and millwork	0	140	136	418
Office furniture, except wood, manufacturing	1	35,499	66,036	184,076
Showcase, partition, shelving, and locker manufacturing	0	2,863	4,282	11,316
Mattress manufacturing	0	3,522	8,433	24,921
Blind and shade manufacturing	0	1,169	1,233	4,758
Surgical and medical instrument manufacturing	0	15,537	29,907	85,788
Surgical appliance and supplies manufacturing	0	53,531	102,107	220,658



## APPENDIX

Dental equipment and supplies manufacturing	0	345	573	1,579
Ophthalmic goods manufacturing	0	1,459	2,899	7,431
Dental laboratories	0	4,174	3,977	7,240
Jewelry and silverware manufacturing	0	3,896	5,112	11,159
Sporting and athletic goods manufacturing	0	3,006	3,966	14,034
Doll, toy, and game manufacturing	0	3,892	5,825	21,193
Office supplies (except paper) manufacturing	0	1,958	2,534	7,457
Sign manufacturing	0	16,449	13,962	34,622
Gasket, packing, and sealing device manufacturing	0	12,166	15,036	35,935
Musical instrument manufacturing	0	2,583	2,589	5,028
Fasteners, buttons, needles, and pins manufacturing	0	280	319	952
Broom, brush, and mop manufacturing	0	3,371	4,898	12,943
Burial casket manufacturing	0	4,083	4,741	8,548
All other miscellaneous manufacturing	0	11,789	13,359	38,891
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	59,027	143,497	299,548
Wholesale - Professional and commercial equipment and supplies	3	329,087	574,395	1,000,678
Wholesale - Household appliances and electrical and electronic goods	1	93,149	224,032	476,634
Wholesale - Machinery, equipment, and supplies	2	144,136	258,129	450,167
Wholesale - Other durable goods merchant wholesalers	3	214,631	345,727	661,761
Wholesale - Drugs and druggists' sundries	1	141,444	497,123	860,139
Wholesale - Grocery and related product wholesalers	3	201,038	285,881	566,856
Wholesale - Petroleum and petroleum products	1	64,771	633,537	747,867
Wholesale - Other nondurable goods merchant wholesalers	5	410,323	809,447	1,518,740
Wholesale - Wholesale electronic markets and agents and brokers	4	414,215	226,394	259,608
Retail - Motor vehicle and parts dealers	6	306,546	465,081	697,177

## APPENDIX

Retail - Furniture and home furnishings stores	4	151,426	197,237	330,410
Retail - Electronics and appliance stores	3	157,206	161,327	288,895
Retail - Building material and garden equipment and supplies stores	5	188,309	330,562	498,622
Retail - Food and beverage stores	13	349,440	487,994	865,490
Retail - Health and personal care stores	8	352,964	416,271	649,221
Retail - Gasoline stores	6	151,530	271,588	554,334
Retail - Clothing and clothing accessories stores	7	433,264	506,917	803,721
Retail - Sporting goods, hobby, musical instrument and book stores	5	107,993	146,312	259,565
Retail - General merchandise stores	19	526,477	740,851	1,265,609
Retail - Miscellaneous store retailers	12	234,101	277,973	496,629
Retail - Nonstore retailers	12	353,930	998,299	1,873,487
Air transportation	1	140,778	302,124	488,604
Rail transportation	1	92,324	208,490	384,675
Water transportation	0	35,792	63,885	245,195
Truck transportation	10	664,936	809,920	1,671,927
Transit and ground passenger transportation	10	191,061	217,562	360,027
Pipeline transportation	0	47,199	91,408	114,170
Scenic and sightseeing transportation and support activities for transportation	7	421,373	473,683	1,048,982
Couriers and messengers	5	247,038	323,375	579,670
Warehousing and storage	8	380,509	432,115	887,625
Newspaper publishers	2	108,611	165,588	236,454
Periodical publishers	0	22,525	31,513	72,947
Book publishers	1	60,348	174,743	338,043
Directory, mailing list, and other publishers	1	45,450	129,918	224,051
Greeting card publishing	0	2,490	8,318	12,066
Software publishers	1	135,462	304,155	392,226
Motion picture and video industries	2	59,520	117,476	341,448
Sound recording industries	0	15,312	60,448	91,508
Radio and television broadcasting	3	332,882	222,594	925,776

## APPENDIX

Cable and other subscription programming	0	6,165	15,301	70,061
Wired telecommunications carriers	2	162,464	313,713	788,098
Wireless telecommunications carriers (except satellite)	1	181,149	637,569	1,806,574
Satellite, telecommunications resellers, and all other telecommunications	1	56,017	65,510	208,289
Data processing, hosting, and related services	3	238,361	459,281	1,170,226
News syndicates, libraries, archives and all other information services	0	16,002	23,732	53,605
Internet publishing and broadcasting and web search portals	2	221,890	591,039	1,766,981
Nondepository credit intermediation and related activities	6	465,600	612,265	1,092,166
Securities and commodity contracts intermediation and brokerage	6	597,304	604,335	1,492,628
Monetary authorities and depository credit intermediation	19	1,367,200	3,040,311	6,050,329
Other financial investment activities	9	265,449	316,724	1,083,125
Direct life insurance carriers	1	191,963	498,622	658,837
Insurance carriers, except direct life	4	457,183	2,271,061	3,815,726
Insurance agencies, brokerages, and related activities	17	992,881	1,952,215	4,241,617
Funds, trusts, and other financial vehicles	3	133,380	106,807	781,360
Other real estate	73	5,303,385	7,889,747	16,359,634
Tenant-occupied housing	7	434,460	1,721,284	1,980,555
Owner-occupied dwellings	0	0	6,108,411	7,717,906
Automotive equipment rental and leasing	3	112,893	466,308	684,105
General and consumer goods rental except video tapes and discs	2	110,704	154,020	267,501
Video tape and disc rental	1	28,522	46,764	78,451
Commercial and industrial machinery and equipment rental and leasing	2	117,070	326,421	553,685
Lessors of nonfinancial intangible assets	0	11,136	241,155	313,984

## APPENDIX

Legal services	21	1,565,547	2,738,189	4,151,355
Accounting, tax preparation, bookkeeping, and payroll services	13	962,931	1,314,620	1,833,702
Architectural, engineering, and related services	11	833,768	1,040,427	1,894,381
Specialized design services	3	170,300	219,042	261,393
Custom computer programming services	4	325,070	376,335	558,477
Computer systems design services	5	462,914	487,075	661,593
Other computer related services, including facilities management	2	154,967	263,063	475,369
Management consulting services	280	21,837,376	23,257,741	36,213,922
Environmental and other technical consulting services	5	362,132	329,676	482,958
Scientific research and development services	369	30,399,945	63,833,376	110,581,264
Advertising, public relations, and related services	6	378,982	587,279	1,066,524
Photographic services	3	149,937	96,991	149,284
Veterinary services	2	85,344	127,964	201,706
Marketing research and all other miscellaneous professional, scientific, and technical services	17	1,135,045	1,109,869	1,540,312
Management of companies and enterprises	25	2,822,248	3,219,120	4,801,293
Office administrative services	8	485,526	129,024	414,217
Facilities support services	3	137,804	173,373	395,174
Employment services	73	2,693,538	3,928,163	6,576,573
Business support services	15	659,757	545,935	990,677
Travel arrangement and reservation services	2	147,181	188,847	451,576
Investigation and security services	8	299,737	305,856	456,747
Services to buildings	17	478,881	495,685	810,163
Landscape and horticultural services	23	805,525	843,298	1,389,324
Other support services	5	241,755	299,987	592,268
Waste management and remediation services	3	192,832	440,552	709,088
Elementary and secondary schools	6	240,174	201,180	256,937
Junior colleges, colleges, universities, and professional schools	9	388,651	498,657	739,854
Other educational services	8	187,912	168,353	366,423
Offices of physicians	20	2,418,776	2,793,461	3,957,085
Offices of dentists	7	486,265	592,030	882,693

## APPENDIX

Offices of other health practitioners	9	651,889	603,096	799,975
Outpatient care centers	7	407,293	423,407	814,422
Medical and diagnostic laboratories	2	172,086	250,338	401,468
Home health care services	10	558,262	418,009	548,010
Other ambulatory health care services	3	161,330	173,130	286,168
Hospitals	46	3,555,478	4,060,551	7,863,784
Nursing and community care facilities	16	632,709	722,110	1,252,067
Residential mental retardation, mental health, substance abuse and other facilities	5	198,116	210,154	325,007
Individual and family services	15	458,248	414,244	609,367
Child day care services	9	213,664	246,500	347,260
Community food, housing, and other relief services, including rehabilitation services	5	144,977	160,933	383,068
Performing arts companies	2	37,472	87,621	166,684
Commercial Sports Except Racing	2	164,731	219,906	313,925
Racing and Track Operation	0	11,146	29,515	46,958
Independent artists, writers, and performers	8	82,576	175,425	224,185
Promoters of performing arts and sports and agents for public figures	1	33,173	132,226	252,778
Museums, historical sites, zoos, and parks	1	27,869	41,327	70,242
Amusement parks and arcades	0	7,912	25,163	34,233
Gambling industries (except casino hotels)	4	157,582	394,440	592,052
Other amusement and recreation industries	4	74,196	119,999	216,688
Fitness and recreational sports centers	3	43,631	78,537	127,214
Bowling centers	1	11,658	20,184	39,102
Hotels and motels, including casino hotels	3	118,905	219,801	342,392
Other accommodations	1	43,214	55,384	75,088
Full-service restaurants	44	911,276	1,378,620	2,571,586
Limited-service restaurants	32	570,910	941,567	2,204,975
All other food and drinking places	29	752,671	1,009,837	1,615,597
Automotive repair and maintenance, except car washes	13	624,998	746,960	1,139,813
Car washes	7	316,325	485,366	748,208

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Electronic and precision equipment repair and maintenance	3	158,248	224,542	388,708
Commercial and industrial machinery and equipment repair and maintenance	4	271,824	317,377	502,617
Personal and household goods repair and maintenance	4	211,726	183,820	242,780
Personal care services	11	284,088	233,737	309,641
Death care services	1	29,411	37,321	62,150
Dry-cleaning and laundry services	2	79,485	85,959	122,566
Other personal services	10	259,399	230,934	315,134
Religious organizations	18	826,768	437,463	1,621,484
Grantmaking, giving, and social advocacy organizations	2	123,966	380,319	592,461
Business and professional associations	2	120,991	185,164	348,370
Labor and civic organizations	6	129,574	324,066	621,394
Private households	4	56,313	56,313	56,313
Postal service	5	473,236	473,616	524,480
Federal electric utilities	0	0	0	0
Other federal government enterprises	8	527,097	(2,882,985)	391,441
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	3	138,262	32,461	252,581
Local government electric utilities	0	7,825	27,243	48,402
Other local government enterprises	3	256,039	644,698	1,178,603
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	21	2,413,447	3,891,522	5,808,203

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 400: Detailed M2M Program Impacts by Types of Impact, Indiana.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>65</i>	<i>4,418,424</i>	<i>5,908,496</i>	<i>13,384,273</i>
Oilseed farming	0	3,539	19,011	77,176
Grain farming	0	1,960	6,152	33,962
Vegetable and melon farming	0	344	536	1,976
Fruit farming	0	53	89	286
Tree nut farming	0	7	7	14
Greenhouse, nursery, and floriculture production	0	460	605	1,892
Tobacco farming	0	8	9	26
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	149	181	591
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	127	699	3,471
Dairy cattle and milk production	0	257	647	5,669
Poultry and egg production	0	310	426	7,333
Animal production, except cattle and poultry and eggs	0	1,353	5,256	16,335
Forestry, forest products, and timber tract production	0	124	130	159
Commercial logging	0	924	919	1,200
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	3	90	245
Support activities for agriculture and forestry	0	3,483	2,261	2,625
Oil and gas extraction	0	357	388	11,232
Coal mining	0	1,572	2,730	5,155
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	781	753	444
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,222	1,161	2,186
Sand and gravel mining	0	993	643	934
Other clay, ceramic, refractory minerals mining	0	12	13	29
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	89	58	93
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	1	1	15
Metal mining services	0	2	2	59
Other nonmetallic minerals services	0	1	1	14
Electric power generation - Hydroelectric	0	47	133	215
Electric power generation - Fossil fuel	0	10,090	34,277	86,451
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	(17)	52	568
Electric power generation - Wind	0	128	883	1,284
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	(11)	86	941
Electric power generation - All other	0	86	18	69
Electric power transmission and distribution	0	17,330	61,227	155,701
Natural gas distribution	0	4,958	14,736	29,907
Water, sewage and other systems	0	1,646	2,912	4,988
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0



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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	13,234	16,973	41,303
Maintenance and repair construction of residential structures	0	4,965	7,022	17,234
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	27	15	39
Dog and cat food manufacturing	0	201	1,160	3,932
Other animal food manufacturing	0	685	1,401	9,014
Flour milling	0	547	1,446	8,968
Rice milling	0	361	754	4,614
Malt manufacturing	0	0	0	0
Wet corn milling	0	2,756	10,405	50,068
Soybean and other oilseed processing	0	172	1,388	8,184
Fats and oils refining and blending	0	116	306	2,070
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	294	513	1,815
Chocolate and confectionery manufacturing from cacao beans	0	2	4	30
Confectionery manufacturing from purchased chocolate	0	196	323	1,692
Frozen fruits, juices and vegetables manufacturing	0	16	26	152
Frozen specialties manufacturing	0	1,028	1,866	6,910
Canned fruits and vegetables manufacturing	0	1,526	3,569	11,296

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Canned specialties	0	820	2,808	8,862
Dehydrated food products manufacturing	0	622	1,444	4,139
Cheese manufacturing	0	913	1,527	10,045
Dry, condensed, and evaporated dairy product manufacturing	0	943	3,175	10,914
Fluid milk manufacturing	0	921	1,859	9,837
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	506	999	3,515
Frozen cakes and other pastries manufacturing	0	813	1,443	2,257
Poultry processing	0	1,755	2,778	11,197
Animal, except poultry, slaughtering	0	2,249	3,594	27,980
Meat processed from carcasses	0	1,781	1,998	16,117
Rendering and meat byproduct processing	0	98	94	460
Seafood product preparation and packaging	0	66	79	443
Bread and bakery product, except frozen, manufacturing	0	2,090	3,114	7,250
Cookie and cracker manufacturing	0	425	749	2,351
Dry pasta, mixes, and dough manufacturing	0	111	345	1,094
Tortilla manufacturing	0	128	171	542
Roasted nuts and peanut butter manufacturing	0	197	592	1,652
Other snack food manufacturing	0	659	2,042	6,303
Coffee and tea manufacturing	0	47	91	714
Flavoring syrup and concentrate manufacturing	0	195	2,095	3,922
Mayonnaise, dressing, and sauce manufacturing	0	75	182	620
Spice and extract manufacturing	0	85	158	560
All other food manufacturing	0	1,012	1,589	5,759
Bottled and canned soft drinks & water	0	1,454	4,001	14,376
Manufactured ice	0	89	77	253
Breweries	0	911	2,622	8,809
Wineries	0	110	209	1,036
Distilleries	0	543	3,351	6,494
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	15	23	106
Broadwoven fabric mills	0	24	36	157

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	220	366	1,503
Knit fabric mills	0	15	20	75
Textile and fabric finishing mills	0	12	14	73
Fabric coating mills	0	107	126	546
Carpet and rug mills	0	38	62	199
Curtain and linen mills	0	114	160	571
Textile bag and canvas mills	0	375	448	1,097
Rope, cordage, twine, tire cord and tire fabric mills	0	31	47	134
Other textile product mills	0	166	199	563
Hosiery and sock mills	0	29	35	70
Other apparel knitting mills	0	28	34	61
Cut and sew apparel contractors	0	303	326	698
Mens and boys cut and sew apparel manufacturing	0	36	46	146
Womens and girls cut and sew apparel manufacturing	0	49	72	217
Other cut and sew apparel manufacturing	0	39	50	126
Apparel accessories and other apparel manufacturing	0	18	23	57
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	14	17	50
Other leather and allied product manufacturing	0	58	61	153
Sawmills	0	751	1,003	3,947
Wood preservation	0	69	177	613
Veneer and plywood manufacturing	0	624	869	3,121
Engineered wood member and truss manufacturing	0	330	434	1,229
Reconstituted wood product manufacturing	0	15	31	159
Wood windows and door manufacturing	0	639	836	2,276
Cut stock, resawing lumber, and planing	0	316	507	1,311
Other millwork, including flooring	0	367	492	1,260
Wood container and pallet manufacturing	0	785	893	2,300
Manufactured home (mobile home) manufacturing	0	3	6	13

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Prefabricated wood building manufacturing	0	81	91	226
All other miscellaneous wood product manufacturing	0	673	789	1,974
Pulp mills	0	58	80	365
Paper mills	0	43	57	199
Paperboard mills	0	264	480	2,272
Paperboard container manufacturing	0	2,284	2,916	12,839
Paper bag and coated and treated paper manufacturing	0	958	1,323	5,063
Stationery product manufacturing	0	201	239	854
Sanitary paper product manufacturing	0	152	320	1,159
All other converted paper product manufacturing	0	269	327	1,082
Printing	0	12,024	18,620	36,104
Support activities for printing	0	488	733	1,212
Petroleum refineries	0	3,520	32,714	125,088
Asphalt paving mixture and block manufacturing	0	212	369	925
Asphalt shingle and coating materials manufacturing	0	162	554	1,391
Petroleum lubricating oil and grease manufacturing	0	2,373	9,970	27,693
All other petroleum and coal products manufacturing	0	69	244	594
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	386	1,348	3,108
Synthetic dye and pigment manufacturing	0	81	230	710
Other basic inorganic chemical manufacturing	0	132	384	1,110
Other basic organic chemical manufacturing	0	435	1,117	9,305
Plastics material and resin manufacturing	0	631	1,249	6,892
Synthetic rubber manufacturing	0	25	48	267
Artificial and synthetic fibers and filaments manufacturing	0	11	19	105
Nitrogenous fertilizer manufacturing	0	7	22	52
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	108	257	722

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	638	2,808	7,919
Medicinal and botanical manufacturing	0	46	108	336
Pharmaceutical preparation manufacturing	0	13,801	73,889	126,329
In-vitro diagnostic substance manufacturing	0	2,048	3,807	7,358
Biological product (except diagnostic) manufacturing	0	15	49	147
Paint and coating manufacturing	0	349	921	3,064
Adhesive manufacturing	0	171	372	1,246
Soap and other detergent manufacturing	0	206	1,126	2,202
Polish and other sanitation good manufacturing	0	460	1,333	3,278
Surface active agent manufacturing	0	7	29	71
Toilet preparation manufacturing	0	417	2,056	4,907
Printing ink manufacturing	0	46	49	194
Explosives manufacturing	0	6	8	29
Custom compounding of purchased resins	0	563	1,430	4,504
Photographic film and chemical manufacturing	0	23	69	220
Other miscellaneous chemical product manufacturing	0	251	478	1,753
Plastics packaging materials and unlaminated film and sheet manufacturing	0	965	1,582	5,603
Unlaminated plastics profile shape manufacturing	0	281	616	1,885
Plastics pipe and pipe fitting manufacturing	0	68	165	510
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	850	1,556	4,448
Polystyrene foam product manufacturing	0	175	291	973
Urethane and other foam product (except polystyrene) manufacturing	0	685	1,096	4,371
Plastics bottle manufacturing	0	198	328	1,418
Other plastics product manufacturing	0	7,085	10,503	31,667
Tire manufacturing	0	480	678	2,977

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Rubber and plastics hoses and belting manufacturing	0	147	228	698
Other rubber product manufacturing	0	1,066	1,570	5,513
Pottery, ceramics, and plumbing fixture manufacturing	0	4	5	28
Brick, tile, and other structural clay product manufacturing	0	125	209	492
Flat glass manufacturing	0	11	20	76
Other pressed and blown glass and glassware manufacturing	0	28	41	148
Glass container manufacturing	0	326	515	1,419
Glass product manufacturing made of purchased glass	0	595	957	2,496
Cement manufacturing	0	122	265	814
Ready-mix concrete manufacturing	0	662	1,046	3,645
Concrete block and brick manufacturing	0	107	181	524
Concrete pipe manufacturing	0	25	38	106
Other concrete product manufacturing	0	269	371	960
Lime manufacturing	0	26	64	182
Gypsum product manufacturing	0	660	1,599	4,771
Abrasive product manufacturing	0	241	690	1,377
Cut stone and stone product manufacturing	0	186	216	483
Ground or treated mineral and earth manufacturing	0	292	791	1,736
Mineral wool manufacturing	0	237	498	1,249
Miscellaneous nonmetallic mineral products manufacturing	0	30	66	170
Iron and steel mills and ferroalloy manufacturing	0	4,700	8,776	29,814
Iron, steel pipe and tube manufacturing from purchased steel	0	175	290	1,058
Rolled steel shape manufacturing	0	373	1,024	2,992
Steel wire drawing	0	239	320	1,149
Alumina refining and primary aluminum production	0	344	861	3,456
Secondary smelting and alloying of aluminum	0	290	486	3,211
Aluminum sheet, plate, and foil manufacturing	0	1,555	3,429	10,267

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Other aluminum rolling, drawing and extruding	0	507	746	2,976
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	561	899	5,296
Nonferrous metal, except copper and aluminum, shaping	0	196	275	847
Secondary processing of other nonferrous metals	0	38	131	516
Ferrous metal foundries	0	616	1,255	2,546
Nonferrous metal foundries	0	996	1,688	3,085
Custom roll forming	0	9	12	43
Crown and closure manufacturing and metal stamping	0	975	1,650	4,075
Iron and steel forging	0	205	320	959
Nonferrous forging	0	25	35	96
Cutlery, utensil, pot, and pan manufacturing	0	114	400	841
Handtool manufacturing	0	149	276	544
Prefabricated metal buildings and components manufacturing	0	111	184	395
Fabricated structural metal manufacturing	0	1,222	2,110	5,322
Plate work manufacturing	0	180	187	543
Metal window and door manufacturing	0	435	806	1,831
Sheet metal work manufacturing	0	576	823	1,866
Ornamental and architectural metal work manufacturing	0	193	278	603
Power boiler and heat exchanger manufacturing	0	7	11	28
Metal tank (heavy gauge) manufacturing	0	184	248	590
Metal cans manufacturing	0	91	277	815
Metal barrels, drums and pails manufacturing	0	72	98	391
Hardware manufacturing	0	943	1,912	3,798
Spring and wire product manufacturing	0	285	440	1,151
Machine shops	0	2,561	3,118	5,649
Turned product and screw, nut, and bolt manufacturing	0	562	904	2,066
Metal heat treating	0	326	599	1,260

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Metal coating and nonprecious engraving	0	657	1,401	2,687
Electroplating, anodizing, and coloring metal	0	439	511	1,075
Valve and fittings, other than plumbing, manufacturing	0	176	346	775
Plumbing fixture fitting and trim manufacturing	0	147	646	1,495
Ball and roller bearing manufacturing	0	1,153	2,697	5,606
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	35	80	150
Fabricated pipe and pipe fitting manufacturing	0	184	230	608
Other fabricated metal manufacturing	0	536	805	1,897
Farm machinery and equipment manufacturing	0	141	220	693
Lawn and garden equipment manufacturing	0	85	149	624
Construction machinery manufacturing	0	18	39	110
Mining machinery and equipment manufacturing	0	10	13	39
Oil and gas field machinery and equipment manufacturing	0	6	7	26
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	5	6	17
Sawmill, woodworking, and paper machinery	0	127	141	380
Printing machinery and equipment manufacturing	0	6	7	21
All other industrial machinery manufacturing	0	7	9	24
Optical instrument and lens manufacturing	0	1	1	5
Photographic and photocopying equipment manufacturing	0	75	112	431



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Other commercial service industry machinery manufacturing	0	16	32	94
Air purification and ventilation equipment manufacturing	0	187	285	779
Heating equipment (except warm air furnaces) manufacturing	0	155	238	536
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	268	515	1,295
Industrial mold manufacturing	0	72	83	167
Special tool, die, jig, and fixture manufacturing	0	140	179	328
Cutting tool and machine tool accessory manufacturing	0	33	36	79
Machine tool manufacturing	0	10	11	31
Rolling mill and other metalworking machinery manufacturing	0	5	6	12
Turbine and turbine generator set units manufacturing	0	1	1	5
Speed changer, industrial high-speed drive, and gear manufacturing	0	449	677	1,663
Mechanical power transmission equipment manufacturing	0	147	216	510
Other engine equipment manufacturing	0	4,353	7,948	24,312
Pump and pumping equipment manufacturing	0	23	44	121
Air and gas compressor manufacturing	0	7	11	40
Elevator and moving stairway manufacturing	0	16	26	88
Conveyor and conveying equipment manufacturing	0	26	27	77
Overhead cranes, hoists, and monorail systems manufacturing	0	2	4	14
Industrial truck, trailer, and stacker manufacturing	0	105	167	564
Power-driven handtool manufacturing	0	2	6	18
Welding and soldering equipment manufacturing	0	10	14	33
Packaging machinery manufacturing	0	3	4	11

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Industrial process furnace and oven manufacturing	0	6	7	15
Fluid power cylinder and actuator manufacturing	0	87	123	366
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	46	61	173
Electronic computer manufacturing	0	11	32	151
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	4
Telephone apparatus manufacturing	0	16	38	135
Broadcast and wireless communications equipment manufacturing	0	37	63	126
Other communications equipment manufacturing	0	1	3	13
Audio and video equipment manufacturing	0	2	5	30
Printed circuit assembly (electronic assembly) manufacturing	0	259	473	1,317
Bare printed circuit board manufacturing	0	25	36	86
Semiconductor and related device manufacturing	0	14	30	92
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	124	196	391
Electronic connector manufacturing	0	1,899	3,304	7,068
Other electronic component manufacturing	0	79	96	358
Electromedical and electrotherapeutic apparatus manufacturing	0	2	5	8
Search, detection, and navigation instruments manufacturing	0	5	11	21
Automatic environmental control manufacturing	0	472	687	1,361

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Industrial process variable instruments manufacturing	0	66	110	232
Totalizing fluid meter and counting device manufacturing	0	3	10	30
Electricity and signal testing instruments manufacturing	0	2	3	8
Analytical laboratory instrument manufacturing	0	4	8	13
Irradiation apparatus manufacturing	0	1	3	10
Watch, clock, and other measuring and controlling device manufacturing	0	65	139	297
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	234	402	757
Electric lamp bulb and part manufacturing	0	150	237	465
Lighting fixture manufacturing	0	758	1,059	2,656
Small electrical appliance manufacturing	0	21	39	116
Household cooking appliance manufacturing	0	11	25	87
Household refrigerator and home freezer manufacturing	0	11	28	93
Household laundry equipment manufacturing	0	23	48	223
Other major household appliance manufacturing	0	4	10	33
Power, distribution, and specialty transformer manufacturing	0	11	15	45
Motor and generator manufacturing	0	160	230	756
Switchgear and switchboard apparatus manufacturing	0	80	125	368
Relay and industrial control manufacturing	0	112	146	456
Storage battery manufacturing	0	179	257	789
Primary battery manufacturing	0	577	683	3,030
Fiber optic cable manufacturing	0	8	12	47
Other communication and energy wire manufacturing	0	34	55	223
Wiring device manufacturing	0	100	182	497

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Carbon and graphite product manufacturing	0	4	6	40
All other miscellaneous electrical equipment and component manufacturing	0	10	11	47
Automobile manufacturing	0	515	1,764	8,252
Light truck and utility vehicle manufacturing	0	462	1,595	10,136
Heavy duty truck manufacturing	0	35	87	467
Motor vehicle body manufacturing	0	70	94	345
Truck trailer manufacturing	0	6	8	30
Motor home manufacturing	0	1,057	1,991	5,637
Travel trailer and camper manufacturing	0	3,876	4,196	12,886
Motor vehicle gasoline engine and engine parts manufacturing	0	900	1,310	7,434
Motor vehicle electrical and electronic equipment manufacturing	0	1,785	2,356	8,472
Motor vehicle transmission and power train parts manufacturing	0	44,971	70,847	228,784
Motor vehicle seating and interior trim manufacturing	0	235	336	1,994
Motor vehicle metal stamping	0	1,365	1,834	6,076
Other motor vehicle parts manufacturing	0	2,339	3,318	17,703
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,203	2,050	8,025
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	365	924	1,946
Other aircraft parts and auxiliary equipment manufacturing	0	13	21	46
Guided missile and space vehicle manufacturing	0	1	1	3
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	78	129	526
Ship building and repairing	0	133	177	343
Boat building	0	875	1,220	3,376
Motorcycle, bicycle, and parts manufacturing	0	120	346	731

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Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	400	654	1,955
Wood kitchen cabinet and countertop manufacturing	0	2,335	3,224	6,546
Upholstered household furniture manufacturing	0	939	1,333	3,439
Nonupholstered wood household furniture manufacturing	0	407	453	1,092
Other household nonupholstered furniture manufacturing	0	291	468	1,241
Institutional furniture manufacturing	0	25,952	28,998	91,777
Wood office furniture manufacturing	0	2,735	4,444	11,340
Custom architectural woodwork and millwork	0	6	6	16
Office furniture, except wood, manufacturing	0	11,530	21,577	62,648
Showcase, partition, shelving, and locker manufacturing	0	317	435	1,189
Mattress manufacturing	0	128	273	879
Blind and shade manufacturing	0	35	36	153
Surgical and medical instrument manufacturing	0	657	1,229	3,320
Surgical appliance and supplies manufacturing	0	2,988	5,759	11,655
Dental equipment and supplies manufacturing	0	17	28	74
Ophthalmic goods manufacturing	0	63	128	330
Dental laboratories	0	204	194	347
Jewelry and silverware manufacturing	0	161	208	436
Sporting and athletic goods manufacturing	0	113	145	499
Doll, toy, and game manufacturing	0	198	275	894
Office supplies (except paper) manufacturing	0	115	150	400
Sign manufacturing	0	548	477	1,101
Gasket, packing, and sealing device manufacturing	0	470	568	1,328
Musical instrument manufacturing	0	216	216	323
Fasteners, buttons, needles, and pins manufacturing	0	14	16	42

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Broom, brush, and mop manufacturing	0	171	284	610
Burial casket manufacturing	0	100	116	204
All other miscellaneous manufacturing	0	104	120	383
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,648	6,450	13,447
Wholesale - Professional and commercial equipment and supplies	0	18,371	32,125	54,622
Wholesale - Household appliances and electrical and electronic goods	0	4,039	9,654	20,271
Wholesale - Machinery, equipment, and supplies	0	5,807	10,443	18,122
Wholesale - Other durable goods merchant wholesalers	0	13,083	21,097	40,013
Wholesale - Drugs and druggists' sundries	0	5,152	17,826	30,120
Wholesale - Grocery and related product wholesalers	0	11,272	15,947	31,539
Wholesale - Petroleum and petroleum products	0	3,387	36,730	42,714
Wholesale - Other nondurable goods merchant wholesalers	0	21,413	43,691	80,334
Wholesale - Wholesale electronic markets and agents and brokers	0	50,735	26,444	30,261
Retail - Motor vehicle and parts dealers	0	10,453	15,950	23,711
Retail - Furniture and home furnishings stores	0	5,359	6,977	11,494
Retail - Electronics and appliance stores	0	5,494	5,660	9,940
Retail - Building material and garden equipment and supplies stores	0	7,135	12,536	18,674
Retail - Food and beverage stores	0	13,073	18,061	31,275
Retail - Health and personal care stores	0	11,980	14,216	22,093
Retail - Gasoline stores	0	6,595	10,984	21,143
Retail - Clothing and clothing accessories stores	0	15,793	18,332	28,211
Retail - Sporting goods, hobby, musical instrument and book stores	0	3,730	5,069	8,825

## APPENDIX

Retail - General merchandise stores	1	17,470	24,772	42,017
Retail - Miscellaneous store retailers	0	8,508	10,008	17,261
Retail - Nonstore retailers	0	13,456	38,402	68,651
Air transportation	0	6,591	14,503	23,089
Rail transportation	0	4,562	9,146	17,931
Water transportation	0	1,737	3,028	11,333
Truck transportation	1	54,218	64,365	129,006
Transit and ground passenger transportation	0	7,988	9,152	14,231
Pipeline transportation	0	2,076	4,256	5,423
Scenic and sightseeing transportation and support activities for transportation	0	16,324	18,593	41,209
Couriers and messengers	0	10,712	14,498	25,390
Warehousing and storage	0	15,814	17,923	36,498
Newspaper publishers	0	4,668	6,882	9,683
Periodical publishers	0	1,395	1,908	4,072
Book publishers	0	2,998	8,130	15,819
Directory, mailing list, and other publishers	0	8,481	24,410	41,687
Greeting card publishing	0	202	696	1,000
Software publishers	0	5,092	11,223	14,128
Motion picture and video industries	0	3,204	6,394	15,335
Sound recording industries	0	1,661	6,143	8,672
Radio and television broadcasting	0	25,367	18,639	51,495
Cable and other subscription programming	0	521	1,022	3,858
Wired telecommunications carriers	0	7,633	13,739	33,452
Wireless telecommunications carriers (except satellite)	0	8,670	24,964	68,565
Satellite, telecommunications resellers, and all other telecommunications	0	3,834	4,122	11,756
Data processing, hosting, and related services	0	18,962	34,270	83,075
News syndicates, libraries, archives and all other information services	0	2,127	3,121	6,584
Internet publishing and broadcasting and web search portals	0	20,849	52,722	135,155

## APPENDIX

Nondepository credit intermediation and related activities	0	32,012	42,375	71,047
Securities and commodity contracts intermediation and brokerage	0	26,723	26,563	61,296
Monetary authorities and depository credit intermediation	1	42,743	97,798	189,288
Other financial investment activities	0	14,017	16,248	44,300
Direct life insurance carriers	0	7,793	20,714	26,930
Insurance carriers, except direct life	0	18,262	93,460	150,831
Insurance agencies, brokerages, and related activities	3	154,211	304,247	635,746
Funds, trusts, and other financial vehicles	0	7,294	5,658	35,299
Other real estate	2	213,820	316,011	568,409
Tenant-occupied housing	0	18,051	67,430	76,466
Owner-occupied dwellings	0	0	235,209	297,183
Automotive equipment rental and leasing	0	12,587	42,538	59,988
General and consumer goods rental except video tapes and discs	0	5,198	6,776	11,003
Video tape and disc rental	0	1,042	1,648	2,697
Commercial and industrial machinery and equipment rental and leasing	0	16,578	39,576	65,255
Lessors of nonfinancial intangible assets	0	352	7,494	9,695
Legal services	1	52,210	95,057	140,520
Accounting, tax preparation, bookkeeping, and payroll services	0	36,509	50,038	68,051
Architectural, engineering, and related services	0	39,822	49,913	89,521
Specialized design services	0	10,081	13,010	15,205
Custom computer programming services	0	21,689	24,933	36,091
Computer systems design services	0	23,378	24,518	32,726
Other computer related services, including facilities management	0	12,728	20,735	35,694
Management consulting services	1	75,766	80,829	122,557
Environmental and other technical consulting services	0	13,069	12,006	17,330



## APPENDIX

Scientific research and development services	12	1,189,612	2,531,766	4,053,777
Advertising, public relations, and related services	0	15,255	23,517	40,708
Photographic services	0	4,190	2,845	4,147
Veterinary services	0	3,019	4,591	7,044
Marketing research and all other miscellaneous professional, scientific, and technical services	1	35,394	34,523	47,195
Management of companies and enterprises	1	96,712	111,355	160,898
Office administrative services	0	20,001	5,414	15,724
Facilities support services	1	62,221	77,119	163,778
Employment services	2	94,258	141,081	227,349
Business support services	1	64,932	54,787	96,234
Travel arrangement and reservation services	0	4,525	5,853	13,444
Investigation and security services	0	11,090	11,345	16,416
Services to buildings	1	18,421	19,123	29,745
Landscape and horticultural services	3	128,611	134,798	214,886
Other support services	1	24,842	30,883	60,424
Waste management and remediation services	0	8,026	18,463	29,289
Elementary and secondary schools	0	10,843	9,042	11,357
Junior colleges, colleges, universities, and professional schools	0	19,589	24,905	35,103
Other educational services	0	7,215	6,483	13,608
Offices of physicians	1	83,741	97,474	136,994
Offices of dentists	0	17,674	21,747	31,973
Offices of other health practitioners	0	22,637	21,111	27,938
Outpatient care centers	0	15,592	16,274	30,834
Medical and diagnostic laboratories	0	6,142	9,173	14,238
Home health care services	0	19,248	14,577	19,243
Other ambulatory health care services	0	5,843	6,308	10,258
Hospitals	2	137,437	156,312	295,410
Nursing and community care facilities	1	23,272	26,601	44,922
Residential mental retardation, mental health, substance abuse and other facilities	0	8,157	8,657	13,117

## APPENDIX

Individual and family services	1	18,379	16,907	24,724
Child day care services	0	8,031	9,402	12,924
Community food, housing, and other relief services, including rehabilitation services	0	6,208	6,977	16,050
Performing arts companies	0	1,501	3,397	5,875
Commercial Sports Except Racing	0	6,751	8,981	12,528
Racing and Track Operation	0	440	1,108	1,695
Independent artists, writers, and performers	0	3,627	7,515	9,175
Promoters of performing arts and sports and agents for public figures	0	1,371	5,008	8,957
Museums, historical sites, zoos, and parks	0	1,112	1,630	2,686
Amusement parks and arcades	0	323	897	1,233
Gambling industries (except casino hotels)	0	6,117	14,432	21,391
Other amusement and recreation industries	0	2,491	3,864	6,957
Fitness and recreational sports centers	0	1,728	2,906	4,642
Bowling centers	0	414	690	1,322
Hotels and motels, including casino hotels	0	6,807	12,041	18,459
Other accommodations	0	2,014	2,540	3,372
Full-service restaurants	1	31,855	48,478	88,489
Limited-service restaurants	1	21,273	34,878	78,782
All other food and drinking places	1	26,006	34,339	53,385
Automotive repair and maintenance, except car washes	0	25,958	29,842	45,248
Car washes	0	12,087	18,473	28,258
Electronic and precision equipment repair and maintenance	0	13,426	19,135	31,292
Commercial and industrial machinery and equipment repair and maintenance	0	9,382	10,762	16,954
Personal and household goods repair and maintenance	0	10,248	7,885	10,416
Personal care services	0	11,200	8,434	11,296
Death care services	0	1,212	1,454	2,409
Dry-cleaning and laundry services	0	2,921	3,109	4,423
Other personal services	0	10,358	8,086	11,343
Religious organizations	1	35,437	14,595	63,778
Grantmaking, giving, and social advocacy organizations	0	6,116	16,097	25,073

## APPENDIX

Business and professional associations	0	7,582	10,405	18,955
Labor and civic organizations	0	5,544	12,263	24,008
Private households	0	2,290	2,290	2,290
Postal service	0	15,144	15,157	16,750
Federal electric utilities	0	0	0	0
Other federal government enterprises	2	217,503	(1,440,792)	116,338
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	4,815	1,407	6,098
Local government electric utilities	0	530	1,677	2,895
Other local government enterprises	0	11,182	26,031	47,117
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	52,622	157,731	329,810

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 17. Iowa

**Table 401: Detailed NASA Impacts by Types of Impact, Iowa.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>158</i>	<i>9,372,674</i>	<i>14,558,148</i>	<i>29,593,903</i>
Oilseed farming	0	15,483	55,869	235,443
Grain farming	0	4,995	14,495	106,994
Vegetable and melon farming	0	147	228	1,154
Fruit farming	0	58	101	441
Tree nut farming	0	8	8	22
Greenhouse, nursery, and floriculture production	0	590	765	3,247
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	329	401	1,761
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	0	932	3,637	34,773
Dairy cattle and milk production	0	497	1,175	15,923
Poultry and egg production	0	736	1,060	23,765
Animal production, except cattle and poultry and eggs	0	6,196	20,739	81,953
Forestry, forest products, and timber tract production	0	148	168	210
Commercial logging	0	1,140	1,206	1,980
Commercial fishing	0	74	143	157
Commercial hunting and trapping	0	96	134	461
Support activities for agriculture and forestry	0	6,494	5,413	6,449
Oil and gas extraction	0	420	448	25,329
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	5,932	8,171	17,360
Sand and gravel mining	0	2,064	2,457	4,291

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	78	85	165
Drilling oil and gas wells	0	(0)	0	2
Support activities for oil and gas operations	0	1	2	35
Metal mining services	0	4	4	267
Other nonmetallic minerals services	0	2	4	38
Electric power generation - Hydroelectric	0	287	913	1,472
Electric power generation - Fossil fuel	0	12,698	48,368	123,822
Electric power generation - Nuclear	0	6,112	13,742	30,098
Electric power generation - Solar	0	10	24	35
Electric power generation - Wind	0	1,365	9,926	15,913
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	174	651	1,634
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	22,866	87,154	234,241
Natural gas distribution	0	3,342	11,127	38,346
Water, sewage and other systems	0	1,200	2,768	5,069
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	4	214,671	265,174	674,120
Maintenance and repair construction of residential structures	0	11,387	15,248	39,570
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	55	32	83
Dog and cat food manufacturing	0	1,672	7,851	25,719
Other animal food manufacturing	0	3,175	5,692	35,239
Flour milling	0	467	1,068	7,492
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	6,420	19,464	111,159
Soybean and other oilseed processing	0	422	2,801	22,041
Fats and oils refining and blending	0	21	48	421
Breakfast cereal manufacturing	0	9,059	26,502	62,836
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	39	59	374
Chocolate and confectionery manufacturing from cacao beans	0	3	7	30
Confectionery manufacturing from purchased chocolate	0	460	684	2,656
Frozen fruits, juices and vegetables manufacturing	0	15	28	114
Frozen specialties manufacturing	0	1,611	2,647	9,497
Canned fruits and vegetables manufacturing	0	271	542	1,731
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	391	613	5,666

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Dry, condensed, and evaporated dairy product manufacturing	0	1,471	4,158	20,863
Fluid milk manufacturing	0	1,337	2,375	14,347
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	1,123	1,940	7,359
Frozen cakes and other pastries manufacturing	0	702	1,014	2,013
Poultry processing	0	4,545	6,372	25,946
Animal, except poultry, slaughtering	0	8,256	12,280	91,492
Meat processed from carcasses	0	5,121	5,590	40,889
Rendering and meat byproduct processing	0	96	89	538
Seafood product preparation and packaging	0	15	17	94
Bread and bakery product, except frozen, manufacturing	0	2,074	2,800	7,920
Cookie and cracker manufacturing	0	1,535	2,329	8,403
Dry pasta, mixes, and dough manufacturing	0	150	402	1,535
Tortilla manufacturing	0	215	272	1,050
Roasted nuts and peanut butter manufacturing	0	192	211	1,138
Other snack food manufacturing	0	247	481	1,638
Coffee and tea manufacturing	0	87	168	795
Flavoring syrup and concentrate manufacturing	0	29	195	429
Mayonnaise, dressing, and sauce manufacturing	0	59	124	591
Spice and extract manufacturing	0	677	1,142	5,226
All other food manufacturing	0	2,026	2,940	11,198
Bottled and canned soft drinks & water	0	2,684	6,312	27,688
Manufactured ice	0	95	56	316
Breweries	0	471	1,733	7,091
Wineries	0	32	71	521
Distilleries	0	96	746	1,784
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	14	17	50
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	13	23	61

## APPENDIX

Textile and fabric finishing mills	0	9	14	51
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	60	152	473
Curtain and linen mills	0	40	80	266
Textile bag and canvas mills	0	126	194	443
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	105	157	415
Hosiery and sock mills	0	121	107	266
Other apparel knitting mills	0	8	10	32
Cut and sew apparel contractors	0	27	30	67
Mens and boys cut and sew apparel manufacturing	0	36	36	126
Womens and girls cut and sew apparel manufacturing	0	2	4	22
Other cut and sew apparel manufacturing	0	34	34	123
Apparel accessories and other apparel manufacturing	0	87	83	235
Leather and hide tanning and finishing	0	53	46	298
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	3	3	17
Sawmills	0	1,205	1,808	6,797
Wood preservation	0	112	352	1,254
Veneer and plywood manufacturing	0	52	76	322
Engineered wood member and truss manufacturing	0	519	737	1,908
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	6,946	9,970	22,389
Cut stock, resawing lumber, and planing	0	74	113	468
Other millwork, including flooring	0	683	1,013	2,473
Wood container and pallet manufacturing	0	1,132	1,354	3,600
Manufactured home (mobile home) manufacturing	0	0	0	1
Prefabricated wood building manufacturing	0	643	762	2,085
All other miscellaneous wood product manufacturing	0	238	287	1,133



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Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	81	431	978
Paperboard container manufacturing	0	3,170	7,914	21,806
Paper bag and coated and treated paper manufacturing	0	1,977	6,702	14,047
Stationery product manufacturing	0	344	784	2,310
Sanitary paper product manufacturing	0	86	636	1,205
All other converted paper product manufacturing	0	323	787	2,029
Printing	0	17,954	29,187	58,278
Support activities for printing	0	484	773	1,147
Petroleum refineries	0	615	6,324	34,358
Asphalt paving mixture and block manufacturing	0	1,738	2,518	7,004
Asphalt shingle and coating materials manufacturing	0	545	2,229	4,479
Petroleum lubricating oil and grease manufacturing	0	478	2,513	4,625
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	1,413	2,753	5,416
Synthetic dye and pigment manufacturing	0	203	596	1,475
Other basic inorganic chemical manufacturing	0	512	907	2,106
Other basic organic chemical manufacturing	0	2,689	5,406	28,472
Plastics material and resin manufacturing	0	1,018	1,941	8,245
Synthetic rubber manufacturing	0	111	169	630
Artificial and synthetic fibers and filaments manufacturing	0	31	33	73
Nitrogenous fertilizer manufacturing	0	1,827	3,949	7,747
Phosphatic fertilizer manufacturing	0	27	63	164
Fertilizer mixing	0	140	136	217
Pesticide and other agricultural chemical manufacturing	0	1,757	6,285	17,657
Medicinal and botanical manufacturing	0	451	896	2,147

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Pharmaceutical preparation manufacturing	0	469	1,190	2,879
In-vitro diagnostic substance manufacturing	0	6	10	25
Biological product (except diagnostic) manufacturing	0	1,084	3,607	7,352
Paint and coating manufacturing	0	1,702	2,422	5,661
Adhesive manufacturing	0	60	85	193
Soap and other detergent manufacturing	0	1,884	2,208	3,801
Polish and other sanitation good manufacturing	0	911	1,195	3,032
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1,708	5,531	10,772
Printing ink manufacturing	0	842	846	1,365
Explosives manufacturing	0	67	75	198
Custom compounding of purchased resins	0	2,833	2,993	4,762
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	1,854	2,892	8,386
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,252	2,018	5,804
Unlaminated plastics profile shape manufacturing	0	164	352	1,084
Plastics pipe and pipe fitting manufacturing	0	240	541	1,757
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	563	1,018	2,979
Polystyrene foam product manufacturing	0	200	332	1,261
Urethane and other foam product (except polystyrene) manufacturing	0	234	377	1,682
Plastics bottle manufacturing	0	470	779	3,259
Other plastics product manufacturing	0	5,044	7,404	24,369
Tire manufacturing	0	3,303	4,582	17,510
Rubber and plastics hoses and belting manufacturing	0	998	1,583	4,219
Other rubber product manufacturing	0	1,485	2,180	7,360

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Pottery, ceramics, and plumbing fixture manufacturing	0	12	20	74
Brick, tile, and other structural clay product manufacturing	0	378	929	2,342
Flat glass manufacturing	0	242	697	1,333
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	653	1,449	3,062
Cement manufacturing	0	657	2,299	4,994
Ready-mix concrete manufacturing	0	4,293	9,530	26,596
Concrete block and brick manufacturing	0	330	834	1,815
Concrete pipe manufacturing	0	173	369	868
Other concrete product manufacturing	0	1,349	2,469	5,907
Lime manufacturing	0	186	667	1,338
Gypsum product manufacturing	0	794	3,118	6,615
Abrasive product manufacturing	0	1,090	5,206	7,426
Cut stone and stone product manufacturing	0	569	750	1,836
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	46	160	302
Miscellaneous nonmetallic mineral products manufacturing	0	16	60	114
Iron and steel mills and ferroalloy manufacturing	0	1,989	3,268	15,761
Iron, steel pipe and tube manufacturing from purchased steel	0	182	268	1,146
Rolled steel shape manufacturing	0	133	269	1,249
Steel wire drawing	0	72	103	342
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	13,898	24,656	89,649
Other aluminum rolling, drawing and extruding	0	157	218	967
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

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Copper rolling, drawing, extruding and alloying	0	762	1,048	7,229
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	5	16	72
Ferrous metal foundries	0	724	1,229	2,539
Nonferrous metal foundries	0	1,448	2,138	4,818
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	312	411	1,182
Iron and steel forging	0	60	76	345
Nonferrous forging	0	3	4	20
Cutlery, utensil, pot, and pan manufacturing	0	394	954	2,146
Handtool manufacturing	0	552	810	1,665
Prefabricated metal buildings and components manufacturing	0	552	723	2,051
Fabricated structural metal manufacturing	0	1,992	2,707	9,047
Plate work manufacturing	0	1,344	1,389	4,395
Metal window and door manufacturing	0	1,379	1,927	5,084
Sheet metal work manufacturing	0	2,012	2,437	6,352
Ornamental and architectural metal work manufacturing	0	655	812	2,368
Power boiler and heat exchanger manufacturing	0	9	11	31
Metal tank (heavy gauge) manufacturing	0	134	156	475
Metal cans manufacturing	0	124	238	1,246
Metal barrels, drums and pails manufacturing	0	124	147	638
Hardware manufacturing	0	348	517	1,663
Spring and wire product manufacturing	0	217	277	992
Machine shops	4	230,901	258,019	529,658
Turned product and screw, nut, and bolt manufacturing	0	1,379	1,783	5,098
Metal heat treating	0	256	361	969
Metal coating and nonprecious engraving	0	667	1,038	2,860
Electroplating, anodizing, and coloring metal	0	253	276	669

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	1,307	1,908	5,046
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	618	1,014	2,926
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	129	152	354
Small arms, ordnance, and accessories manufacturing	0	30	62	167
Fabricated pipe and pipe fitting manufacturing	0	42	47	155
Other fabricated metal manufacturing	0	508	627	1,782
Farm machinery and equipment manufacturing	0	571	998	2,796
Lawn and garden equipment manufacturing	0	49	117	359
Construction machinery manufacturing	0	211	570	1,231
Mining machinery and equipment manufacturing	0	2	3	10
Oil and gas field machinery and equipment manufacturing	0	7	9	28
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	4	6	15
Sawmill, woodworking, and paper machinery	0	15	18	57
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	12	18	45
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	179	450	1,251
Air purification and ventilation equipment manufacturing	0	29	52	127

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	230	433	1,074
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	888	2,319	6,269
Industrial mold manufacturing	0	194	243	473
Special tool, die, jig, and fixture manufacturing	0	103	154	253
Cutting tool and machine tool accessory manufacturing	0	83	97	223
Machine tool manufacturing	0	37	45	125
Rolling mill and other metalworking machinery manufacturing	0	5	8	16
Turbine and turbine generator set units manufacturing	0	94	153	616
Speed changer, industrial high-speed drive, and gear manufacturing	0	1,773	3,243	6,877
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	751	1,980	4,932
Pump and pumping equipment manufacturing	0	120	286	577
Air and gas compressor manufacturing	0	1	1	7
Elevator and moving stairway manufacturing	0	2	3	11
Conveyor and conveying equipment manufacturing	0	129	136	364
Overhead cranes, hoists, and monorail systems manufacturing	0	5	13	37
Industrial truck, trailer, and stacker manufacturing	0	105	207	582
Power-driven handtool manufacturing	0	3	7	26
Welding and soldering equipment manufacturing	0	240	377	823
Packaging machinery manufacturing	0	29	57	121
Industrial process furnace and oven manufacturing	0	15	21	39
Fluid power cylinder and actuator manufacturing	0	594	1,004	2,487

## APPENDIX

Fluid power pump and motor manufacturing	0	448	878	2,097
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	87	133	372
Electronic computer manufacturing	0	12	23	135
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	2	3	11
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	23	31	113
Other communications equipment manufacturing	0	12	17	55
Audio and video equipment manufacturing	0	9	14	50
Printed circuit assembly (electronic assembly) manufacturing	0	98	136	843
Bare printed circuit board manufacturing	0	13	16	65
Semiconductor and related device manufacturing	0	76	111	329
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	57	75	240
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	112	128	529
Electromedical and electrotherapeutic apparatus manufacturing	0	29	47	106
Search, detection, and navigation instruments manufacturing	0	205	272	572
Automatic environmental control manufacturing	0	27	35	117
Industrial process variable instruments manufacturing	0	127	167	456
Totalizing fluid meter and counting device manufacturing	0	145	246	617

## APPENDIX

Electricity and signal testing instruments manufacturing	0	310	401	1,176
Analytical laboratory instrument manufacturing	2	100,402	156,818	633,204
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	4	6	19
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	5	6	19
Electric lamp bulb and part manufacturing	0	44	69	155
Lighting fixture manufacturing	0	568	813	2,236
Small electrical appliance manufacturing	0	85	158	434
Household cooking appliance manufacturing	0	674	1,400	3,883
Household refrigerator and home freezer manufacturing	0	818	2,009	5,423
Household laundry equipment manufacturing	0	1,739	3,294	12,786
Other major household appliance manufacturing	0	281	638	1,616
Power, distribution, and specialty transformer manufacturing	0	2	2	9
Motor and generator manufacturing	0	273	404	1,318
Switchgear and switchboard apparatus manufacturing	0	213	334	848
Relay and industrial control manufacturing	0	237	306	1,010
Storage battery manufacturing	0	892	1,351	4,355
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	42	65	425
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	37	68	252
Carbon and graphite product manufacturing	0	324	447	1,465
All other miscellaneous electrical equipment and component manufacturing	0	3,819	4,244	12,632



## APPENDIX

Automobile manufacturing	0	8	15	144
Light truck and utility vehicle manufacturing	0	201	366	5,536
Heavy duty truck manufacturing	0	15	26	206
Motor vehicle body manufacturing	0	578	669	2,596
Truck trailer manufacturing	0	11	12	56
Motor home manufacturing	0	4,132	5,734	22,981
Travel trailer and camper manufacturing	0	2,206	2,340	9,802
Motor vehicle gasoline engine and engine parts manufacturing	0	462	560	2,782
Motor vehicle electrical and electronic equipment manufacturing	0	1,319	1,510	8,046
Motor vehicle transmission and power train parts manufacturing	0	463	592	3,687
Motor vehicle seating and interior trim manufacturing	0	70	80	647
Motor vehicle metal stamping	0	1,237	1,419	6,467
Other motor vehicle parts manufacturing	0	1,295	1,568	8,446
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	20	26	324
Aircraft manufacturing	0	2	4	11
Aircraft engine and engine parts manufacturing	0	103	237	540
Other aircraft parts and auxiliary equipment manufacturing	0	42,746	66,872	156,647
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	23	34	152
Ship building and repairing	0	0	0	0
Boat building	0	780	1,041	3,514
Motorcycle, bicycle, and parts manufacturing	0	16	36	137
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	785	1,434	5,465

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	1,121	1,982	4,047
Upholstered household furniture manufacturing	0	88	141	265
Nonupholstered wood household furniture manufacturing	0	64	81	260
Other household nonupholstered furniture manufacturing	0	118	226	396
Institutional furniture manufacturing	0	2	3	10
Wood office furniture manufacturing	0	3	6	13
Custom architectural woodwork and millwork	0	18	18	51
Office furniture, except wood, manufacturing	0	788	1,842	3,946
Showcase, partition, shelving, and locker manufacturing	0	58	101	268
Mattress manufacturing	0	92	283	759
Blind and shade manufacturing	0	2	2	9
Surgical and medical instrument manufacturing	0	39	21	157
Surgical appliance and supplies manufacturing	0	153	94	545
Dental equipment and supplies manufacturing	0	2	2	6
Ophthalmic goods manufacturing	0	30	22	114
Dental laboratories	0	174	156	262
Jewelry and silverware manufacturing	0	147	188	429
Sporting and athletic goods manufacturing	0	632	611	1,581
Doll, toy, and game manufacturing	0	289	242	747
Office supplies (except paper) manufacturing	0	99	100	220
Sign manufacturing	0	3,300	2,921	4,228
Gasket, packing, and sealing device manufacturing	0	292	283	682
Musical instrument manufacturing	0	254	255	367
Fasteners, buttons, needles, and pins manufacturing	0	89	90	136
Broom, brush, and mop manufacturing	0	808	552	1,889
Burial casket manufacturing	0	366	366	549

## APPENDIX

All other miscellaneous manufacturing	0	1,780	1,667	2,387
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	6,943	16,435	37,158
Wholesale - Professional and commercial equipment and supplies	0	17,731	30,326	55,807
Wholesale - Household appliances and electrical and electronic goods	0	16,741	38,001	79,899
Wholesale - Machinery, equipment, and supplies	0	28,148	51,211	88,831
Wholesale - Other durable goods merchant wholesalers	0	26,035	40,896	79,680
Wholesale - Drugs and druggists' sundries	0	12,067	34,611	66,869
Wholesale - Grocery and related product wholesalers	0	14,032	19,420	37,295
Wholesale - Petroleum and petroleum products	0	4,046	53,105	62,875
Wholesale - Other nondurable goods merchant wholesalers	1	53,294	103,032	185,469
Wholesale - Wholesale electronic markets and agents and brokers	0	15,624	8,579	9,735
Retail - Motor vehicle and parts dealers	0	26,008	38,206	57,259
Retail - Furniture and home furnishings stores	0	12,222	15,184	26,099
Retail - Electronics and appliance stores	0	15,656	15,430	27,674
Retail - Building material and garden equipment and supplies stores	1	31,293	53,662	81,035
Retail - Food and beverage stores	2	45,086	62,169	111,369
Retail - Health and personal care stores	1	25,789	30,287	48,574
Retail - Gasoline stores	1	11,719	22,143	49,504
Retail - Clothing and clothing accessories stores	1	14,391	20,862	46,214
Retail - Sporting goods, hobby, musical instrument and book stores	1	11,298	14,102	25,147
Retail - General merchandise stores	2	48,534	61,718	106,515
Retail - Miscellaneous store retailers	1	15,853	18,826	37,036

## APPENDIX

Retail - Nonstore retailers	1	18,218	49,476	135,162
Air transportation	0	1,611	6,848	10,091
Rail transportation	0	6,753	23,136	35,053
Water transportation	0	905	1,571	7,279
Truck transportation	1	67,864	79,767	165,036
Transit and ground passenger transportation	0	7,743	9,140	14,537
Pipeline transportation	0	5,570	11,228	15,311
Scenic and sightseeing transportation and support activities for transportation	1	33,057	38,027	86,405
Couriers and messengers	0	13,698	17,789	32,713
Warehousing and storage	1	42,399	47,212	94,971
Newspaper publishers	0	13,673	23,522	33,193
Periodical publishers	0	17,096	27,145	38,290
Book publishers	0	3,618	12,989	21,561
Directory, mailing list, and other publishers	0	5,861	21,128	31,232
Greeting card publishing	0	0	0	0
Software publishers	0	11,350	31,202	37,816
Motion picture and video industries	0	3,757	10,373	26,561
Sound recording industries	0	456	2,545	3,979
Radio and television broadcasting	0	16,746	10,495	77,458
Cable and other subscription programming	0	48	435	1,729
Wired telecommunications carriers	0	22,169	55,641	119,440
Wireless telecommunications carriers (except satellite)	0	7,492	36,239	93,434
Satellite, telecommunications resellers, and all other telecommunications	0	7,314	9,178	18,098
Data processing, hosting, and related services	0	30,398	77,679	159,259
News syndicates, libraries, archives and all other information services	0	931	1,368	2,595
Internet publishing and broadcasting and web search portals	0	9,936	27,302	76,725
Nondepository credit intermediation and related activities	1	52,401	71,140	115,725
Securities and commodity contracts intermediation and brokerage	1	35,287	33,877	106,960

## APPENDIX

Monetary authorities and depository credit intermediation	2	166,676	405,540	723,256
Other financial investment activities	1	26,621	29,465	119,834
Direct life insurance carriers	0	20,210	67,473	81,030
Insurance carriers, except direct life	0	34,769	240,536	350,702
Insurance agencies, brokerages, and related activities	1	33,398	82,567	157,240
Funds, trusts, and other financial vehicles	0	9,503	10,344	76,643
Other real estate	7	128,159	440,800	1,214,001
Tenant-occupied housing	1	10,255	160,723	185,479
Owner-occupied dwellings	0	0	493,376	623,375
Automotive equipment rental and leasing	0	4,638	16,464	24,931
General and consumer goods rental except video tapes and discs	0	9,271	12,187	19,699
Video tape and disc rental	0	2,223	3,681	6,201
Commercial and industrial machinery and equipment rental and leasing	0	11,196	27,183	44,402
Lessors of nonfinancial intangible assets	0	798	22,396	28,912
Legal services	2	156,392	258,194	408,142
Accounting, tax preparation, bookkeeping, and payroll services	1	50,648	63,587	93,449
Architectural, engineering, and related services	1	114,126	130,432	235,940
Specialized design services	0	6,017	6,474	8,424
Custom computer programming services	1	54,019	63,954	95,253
Computer systems design services	0	21,346	23,591	33,036
Other computer related services, including facilities management	0	9,390	18,287	30,816
Management consulting services	2	155,215	153,581	254,517
Environmental and other technical consulting services	0	20,035	17,170	28,483
Scientific research and development services	48	3,388,523	4,884,817	10,972,954
Advertising, public relations, and related services	1	39,767	54,479	104,079
Photographic services	0	10,495	2,908	7,405
Veterinary services	0	7,290	9,566	15,905

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	2	100,224	93,078	143,476
Management of companies and enterprises	3	326,084	368,657	574,282
Office administrative services	1	50,542	17,925	43,064
Facilities support services	0	1,045	1,343	4,359
Employment services	4	181,943	290,840	452,556
Business support services	1	39,221	34,169	61,607
Travel arrangement and reservation services	0	6,856	9,504	23,972
Investigation and security services	0	13,697	14,281	21,487
Services to buildings	2	40,830	43,568	71,134
Landscape and horticultural services	1	24,160	26,300	44,707
Other support services	0	9,362	12,161	24,623
Waste management and remediation services	0	12,693	23,867	45,203
Elementary and secondary schools	1	15,375	13,358	18,106
Junior colleges, colleges, universities, and professional schools	1	23,950	32,364	54,460
Other educational services	2	62,289	54,672	96,806
Offices of physicians	1	155,519	180,729	259,311
Offices of dentists	0	35,247	43,339	64,356
Offices of other health practitioners	1	41,361	37,817	53,023
Outpatient care centers	0	18,791	19,647	37,666
Medical and diagnostic laboratories	0	5,328	7,639	12,259
Home health care services	1	37,520	28,560	36,892
Other ambulatory health care services	0	10,466	11,393	19,609
Hospitals	3	184,179	210,935	428,461
Nursing and community care facilities	1	44,271	48,770	88,286
Residential mental retardation, mental health, substance abuse and other facilities	1	18,601	19,478	30,709
Individual and family services	1	41,506	34,803	53,269
Child day care services	1	18,799	20,270	31,056
Community food, housing, and other relief services, including rehabilitation services	0	13,380	14,024	32,600
Performing arts companies	0	2,437	4,674	9,872

## APPENDIX

Commercial Sports Except Racing	0	4,551	7,729	17,483
Racing and Track Operation	0	678	1,478	3,543
Independent artists, writers, and performers	1	4,806	8,826	12,577
Promoters of performing arts and sports and agents for public figures	0	3,503	10,627	24,311
Museums, historical sites, zoos, and parks	0	1,917	2,532	4,704
Amusement parks and arcades	0	1,033	2,737	3,712
Gambling industries (except casino hotels)	0	8,532	22,480	36,961
Other amusement and recreation industries	0	5,798	8,886	16,566
Fitness and recreational sports centers	0	4,083	7,793	14,013
Bowling centers	0	809	1,451	3,062
Hotels and motels, including casino hotels	0	5,431	10,023	17,132
Other accommodations	0	1,370	1,801	2,632
Full-service restaurants	3	59,368	86,783	168,544
Limited-service restaurants	2	43,407	68,672	163,366
All other food and drinking places	2	51,369	69,241	111,273
Automotive repair and maintenance, except car washes	1	47,151	57,333	87,085
Car washes	1	23,939	35,299	55,008
Electronic and precision equipment repair and maintenance	0	10,184	13,929	25,065
Commercial and industrial machinery and equipment repair and maintenance	5	319,897	365,716	591,113
Personal and household goods repair and maintenance	0	15,212	15,873	20,156
Personal care services	1	23,838	18,867	25,518
Death care services	0	2,460	3,274	5,346
Dry-cleaning and laundry services	0	4,908	5,606	8,067
Other personal services	1	25,410	19,348	27,428
Religious organizations	2	70,035	34,552	138,928
Grantmaking, giving, and social advocacy organizations	0	11,502	35,009	58,711
Business and professional associations	0	13,325	20,805	36,791
Labor and civic organizations	0	8,135	20,589	42,831
Private households	0	3,693	3,693	3,693
Postal service	0	29,931	29,974	33,401
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	889	(8,337)	382
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	4,474	(876)	7,806
Local government electric utilities	0	4,997	15,107	30,134
Other local government enterprises	0	17,988	40,968	82,922
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	6	704,430	1,152,812	1,605,387

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 402: Detailed M2M Program Impacts by Types of Impact, Iowa.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	21	1,287,884	1,775,790	3,574,247
Oilseed farming	0	1,424	7,458	35,445
Grain farming	0	387	1,238	8,311
Vegetable and melon farming	0	17	27	130
Fruit farming	0	9	15	61
Tree nut farming	0	2	2	5



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Greenhouse, nursery, and floriculture production	0	58	77	320
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	30	38	162
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	90	339	2,818
Dairy cattle and milk production	0	62	150	1,780
Poultry and egg production	0	65	96	2,113
Animal production, except cattle and poultry and eggs	0	306	1,124	4,543
Forestry, forest products, and timber tract production	0	17	19	23
Commercial logging	0	269	284	439
Commercial fishing	0	10	14	16
Commercial hunting and trapping	0	10	13	39
Support activities for agriculture and forestry	0	380	312	372
Oil and gas extraction	0	35	50	2,719
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	3,490	2,237	4,901
Sand and gravel mining	0	818	471	685
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	7	4	8
Drilling oil and gas wells	0	(0)	0	0
Support activities for oil and gas operations	0	0	0	2
Metal mining services	0	1	1	85

## APPENDIX

Other nonmetallic minerals services	0	0	0	4
Electric power generation - Hydroelectric	0	45	129	193
Electric power generation - Fossil fuel	0	1,436	5,207	12,786
Electric power generation - Nuclear	0	675	1,579	3,369
Electric power generation - Solar	0	1	2	3
Electric power generation - Wind	0	127	886	1,333
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	37	106	265
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	2,271	8,810	22,968
Natural gas distribution	0	375	1,291	3,915
Water, sewage and other systems	0	174	342	562
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	75,315	93,459	230,859

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Maintenance and repair construction of residential structures	0	1,266	1,706	4,285
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	6	3	8
Dog and cat food manufacturing	0	159	776	2,437
Other animal food manufacturing	0	252	472	2,783
Flour milling	0	42	96	686
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	769	2,533	14,549
Soybean and other oilseed processing	0	54	364	2,814
Fats and oils refining and blending	0	3	7	54
Breakfast cereal manufacturing	0	817	2,339	5,507
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	5	8	45
Chocolate and confectionery manufacturing from cacao beans	0	1	2	6
Confectionery manufacturing from purchased chocolate	0	57	85	306
Frozen fruits, juices and vegetables manufacturing	0	2	4	14
Frozen specialties manufacturing	0	210	343	1,157
Canned fruits and vegetables manufacturing	0	41	82	257
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	49	76	721
Dry, condensed, and evaporated dairy product manufacturing	0	213	618	2,763
Fluid milk manufacturing	0	153	277	1,604
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	126	226	757
Frozen cakes and other pastries manufacturing	0	84	119	231
Poultry processing	0	409	606	2,333
Animal, except poultry, slaughtering	0	697	1,054	7,684
Meat processed from carcasses	0	533	590	4,180

## APPENDIX

Rendering and meat byproduct processing	0	12	11	67
Seafood product preparation and packaging	0	1	2	8
Bread and bakery product, except frozen, manufacturing	0	239	323	896
Cookie and cracker manufacturing	0	187	302	991
Dry pasta, mixes, and dough manufacturing	0	19	50	196
Tortilla manufacturing	0	23	29	109
Roasted nuts and peanut butter manufacturing	0	25	31	143
Other snack food manufacturing	0	28	54	178
Coffee and tea manufacturing	0	11	21	96
Flavoring syrup and concentrate manufacturing	0	3	19	43
Mayonnaise, dressing, and sauce manufacturing	0	7	15	69
Spice and extract manufacturing	0	107	183	762
All other food manufacturing	0	281	409	1,468
Bottled and canned soft drinks & water	0	266	649	2,723
Manufactured ice	0	10	6	30
Breweries	0	52	197	778
Wineries	0	7	16	116
Distilleries	0	11	91	195
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	2	3	7
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	3	5	13
Textile and fabric finishing mills	0	2	3	10
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	10	27	70
Curtain and linen mills	0	5	11	35
Textile bag and canvas mills	0	16	25	56
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	15	24	59
Hosiery and sock mills	0	16	15	32
Other apparel knitting mills	0	2	2	6
Cut and sew apparel contractors	0	2	3	6

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	24	24	70
Womens and girls cut and sew apparel manufacturing	0	1	1	5
Other cut and sew apparel manufacturing	0	9	9	27
Apparel accessories and other apparel manufacturing	0	36	33	81
Leather and hide tanning and finishing	0	6	5	33
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	1	3
Sawmills	0	298	470	1,657
Wood preservation	0	26	90	298
Veneer and plywood manufacturing	0	11	16	70
Engineered wood member and truss manufacturing	0	112	165	415
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	921	1,368	2,983
Cut stock, resawing lumber, and planing	0	18	30	112
Other millwork, including flooring	0	127	198	449
Wood container and pallet manufacturing	0	153	188	487
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	297	358	894
All other miscellaneous wood product manufacturing	0	31	39	139
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	11	54	131
Paperboard container manufacturing	0	860	2,055	5,651
Paper bag and coated and treated paper manufacturing	0	259	794	1,729
Stationery product manufacturing	0	45	95	252
Sanitary paper product manufacturing	0	9	59	118

## APPENDIX

All other converted paper product manufacturing	0	34	78	204
Printing	0	2,003	3,250	6,207
Support activities for printing	0	61	96	141
Petroleum refineries	0	107	987	5,456
Asphalt paving mixture and block manufacturing	0	548	731	1,942
Asphalt shingle and coating materials manufacturing	0	183	661	1,384
Petroleum lubricating oil and grease manufacturing	0	69	340	622
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	279	577	1,090
Synthetic dye and pigment manufacturing	0	52	160	428
Other basic inorganic chemical manufacturing	0	50	95	214
Other basic organic chemical manufacturing	0	317	645	3,523
Plastics material and resin manufacturing	0	216	420	1,852
Synthetic rubber manufacturing	0	22	34	133
Artificial and synthetic fibers and filaments manufacturing	0	4	4	10
Nitrogenous fertilizer manufacturing	0	348	803	1,416
Phosphatic fertilizer manufacturing	0	3	6	17
Fertilizer mixing	0	19	20	31
Pesticide and other agricultural chemical manufacturing	0	147	539	1,501
Medicinal and botanical manufacturing	0	82	178	359
Pharmaceutical preparation manufacturing	0	84	225	491
In-vitro diagnostic substance manufacturing	0	2	4	9
Biological product (except diagnostic) manufacturing	0	184	644	1,208
Paint and coating manufacturing	0	991	1,520	3,401
Adhesive manufacturing	0	16	25	52
Soap and other detergent manufacturing	0	169	245	349

## APPENDIX

Polish and other sanitation good manufacturing	0	88	134	280
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	234	866	1,529
Printing ink manufacturing	0	185	189	298
Explosives manufacturing	0	21	24	66
Custom compounding of purchased resins	0	1,395	1,767	2,952
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	525	877	2,552
Plastics packaging materials and unlaminated film and sheet manufacturing	0	501	801	2,253
Unlaminated plastics profile shape manufacturing	0	32	68	208
Plastics pipe and pipe fitting manufacturing	0	63	148	462
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	372	673	1,947
Polystyrene foam product manufacturing	0	28	46	174
Urethane and other foam product (except polystyrene) manufacturing	0	41	65	289
Plastics bottle manufacturing	0	81	132	542
Other plastics product manufacturing	0	1,060	1,550	4,832
Tire manufacturing	0	482	682	2,856
Rubber and plastics hoses and belting manufacturing	0	351	543	1,407
Other rubber product manufacturing	0	108	157	546
Pottery, ceramics, and plumbing fixture manufacturing	0	2	2	10
Brick, tile, and other structural clay product manufacturing	0	69	162	423
Flat glass manufacturing	0	71	192	381
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	99	213	450

## APPENDIX

Cement manufacturing	0	148	487	1,069
Ready-mix concrete manufacturing	0	952	2,026	5,738
Concrete block and brick manufacturing	0	50	120	264
Concrete pipe manufacturing	0	38	79	187
Other concrete product manufacturing	0	263	462	1,119
Lime manufacturing	0	24	89	180
Gypsum product manufacturing	0	184	696	1,515
Abrasive product manufacturing	0	1,034	4,649	6,785
Cut stone and stone product manufacturing	0	53	70	170
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	6	18	35
Miscellaneous nonmetallic mineral products manufacturing	0	3	10	18
Iron and steel mills and ferroalloy manufacturing	0	724	1,004	5,016
Iron, steel pipe and tube manufacturing from purchased steel	0	92	119	512
Rolled steel shape manufacturing	0	50	93	478
Steel wire drawing	0	40	34	145
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	6,365	9,816	39,722
Other aluminum rolling, drawing and extruding	0	96	113	547
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	471	603	4,016
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	1	3	16
Ferrous metal foundries	0	364	484	1,131
Nonferrous metal foundries	0	1,161	1,517	3,540
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	123	164	460



## APPENDIX

Iron and steel forging	0	38	48	208
Nonferrous forging	0	2	2	12
Cutlery, utensil, pot, and pan manufacturing	0	163	427	907
Handtool manufacturing	0	295	434	897
Prefabricated metal buildings and components manufacturing	0	114	151	405
Fabricated structural metal manufacturing	0	350	479	1,572
Plate work manufacturing	0	980	1,015	3,097
Metal window and door manufacturing	0	307	432	1,111
Sheet metal work manufacturing	0	863	1,051	2,642
Ornamental and architectural metal work manufacturing	0	138	172	477
Power boiler and heat exchanger manufacturing	0	5	7	21
Metal tank (heavy gauge) manufacturing	0	64	75	224
Metal cans manufacturing	0	21	42	213
Metal barrels, drums and pails manufacturing	0	34	41	164
Hardware manufacturing	0	72	108	337
Spring and wire product manufacturing	0	53	67	234
Machine shops	4	247,112	277,873	556,419
Turned product and screw, nut, and bolt manufacturing	0	1,169	1,512	4,129
Metal heat treating	0	212	298	801
Metal coating and nonprecious engraving	0	429	669	1,847
Electroplating, anodizing, and coloring metal	0	181	198	469
Valve and fittings, other than plumbing, manufacturing	0	805	1,170	3,062
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	757	1,239	3,433
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	18	22	50
Small arms, ordnance, and accessories manufacturing	0	4	9	23

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	12	13	44
Other fabricated metal manufacturing	0	118	145	395
Farm machinery and equipment manufacturing	0	38	71	172
Lawn and garden equipment manufacturing	0	6	14	39
Construction machinery manufacturing	0	126	367	739
Mining machinery and equipment manufacturing	0	0	1	2
Oil and gas field machinery and equipment manufacturing	0	1	1	4
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	1	2	5
Sawmill, woodworking, and paper machinery	0	1	1	2
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	3	5	11
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	45	130	343
Air purification and ventilation equipment manufacturing	0	9	18	41
Heating equipment (except warm air furnaces) manufacturing	0	71	140	302
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	267	763	1,960
Industrial mold manufacturing	0	88	113	210
Special tool, die, jig, and fixture manufacturing	0	67	102	160
Cutting tool and machine tool accessory manufacturing	0	68	80	181
Machine tool manufacturing	0	37	45	119

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	1	2	5
Turbine and turbine generator set units manufacturing	0	9	16	52
Speed changer, industrial high-speed drive, and gear manufacturing	0	1,994	3,832	7,147
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	142	405	845
Pump and pumping equipment manufacturing	0	71	195	341
Air and gas compressor manufacturing	0	0	0	1
Elevator and moving stairway manufacturing	0	0	1	2
Conveyor and conveying equipment manufacturing	0	35	38	100
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	5
Industrial truck, trailer, and stacker manufacturing	0	20	41	115
Power-driven handtool manufacturing	0	1	2	7
Welding and soldering equipment manufacturing	0	347	568	920
Packaging machinery manufacturing	0	16	34	66
Industrial process furnace and oven manufacturing	0	13	19	34
Fluid power cylinder and actuator manufacturing	0	231	406	1,033
Fluid power pump and motor manufacturing	0	315	676	1,379
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	56	90	228
Electronic computer manufacturing	0	3	6	31
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	1	2

## APPENDIX

Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	18	23	81
Other communications equipment manufacturing	0	3	4	12
Audio and video equipment manufacturing	0	2	3	11
Printed circuit assembly (electronic assembly) manufacturing	0	81	112	674
Bare printed circuit board manufacturing	0	5	6	27
Semiconductor and related device manufacturing	0	39	55	157
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	20	26	79
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	63	72	284
Electromedical and electrotherapeutic apparatus manufacturing	0	6	9	19
Search, detection, and navigation instruments manufacturing	0	120	162	328
Automatic environmental control manufacturing	0	29	37	115
Industrial process variable instruments manufacturing	0	77	100	269
Totalizing fluid meter and counting device manufacturing	0	33	57	141
Electricity and signal testing instruments manufacturing	0	255	330	910
Analytical laboratory instrument manufacturing	1	69,391	111,984	405,272
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	6	9	28
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	1	1	2
Electric lamp bulb and part manufacturing	0	7	11	24
Lighting fixture manufacturing	0	146	207	548
Small electrical appliance manufacturing	0	21	37	94
Household cooking appliance manufacturing	0	75	163	453
Household refrigerator and home freezer manufacturing	0	97	251	705
Household laundry equipment manufacturing	0	200	394	1,522
Other major household appliance manufacturing	0	51	129	304
Power, distribution, and specialty transformer manufacturing	0	1	1	4
Motor and generator manufacturing	0	170	243	819
Switchgear and switchboard apparatus manufacturing	0	68	107	271
Relay and industrial control manufacturing	0	186	240	752
Storage battery manufacturing	0	104	149	486
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	19	30	172
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	25	45	152
Carbon and graphite product manufacturing	0	28	39	133
All other miscellaneous electrical equipment and component manufacturing	0	1	2	5
Automobile manufacturing	0	1	2	16
Light truck and utility vehicle manufacturing	0	13	26	367
Heavy duty truck manufacturing	0	1	2	14
Motor vehicle body manufacturing	0	63	73	293
Truck trailer manufacturing	0	2	2	8
Motor home manufacturing	0	264	384	1,439
Travel trailer and camper manufacturing	0	202	215	904
Motor vehicle gasoline engine and engine parts manufacturing	0	69	84	441

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	186	211	1,026
Motor vehicle transmission and power train parts manufacturing	0	89	116	623
Motor vehicle seating and interior trim manufacturing	0	6	8	61
Motor vehicle metal stamping	0	72	83	371
Other motor vehicle parts manufacturing	0	228	250	1,534
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	4	6	68
Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	8	18	46
Other aircraft parts and auxiliary equipment manufacturing	0	3	4	9
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	5	7	31
Ship building and repairing	0	0	0	0
Boat building	0	69	93	306
Motorcycle, bicycle, and parts manufacturing	0	3	6	21
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	88	168	629
Wood kitchen cabinet and countertop manufacturing	0	199	323	676
Upholstered household furniture manufacturing	0	16	25	46
Nonupholstered wood household furniture manufacturing	0	8	10	30
Other household nonupholstered furniture manufacturing	0	16	30	50
Institutional furniture manufacturing	0	0	0	1
Wood office furniture manufacturing	0	0	1	2

## APPENDIX

Custom architectural woodwork and millwork	0	3	3	8
Office furniture, except wood, manufacturing	0	111	245	558
Showcase, partition, shelving, and locker manufacturing	0	10	17	46
Mattress manufacturing	0	10	28	82
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	5	2	17
Surgical appliance and supplies manufacturing	0	23	14	77
Dental equipment and supplies manufacturing	0	0	0	1
Ophthalmic goods manufacturing	0	4	3	17
Dental laboratories	0	26	23	38
Jewelry and silverware manufacturing	0	19	24	52
Sporting and athletic goods manufacturing	0	75	71	178
Doll, toy, and game manufacturing	0	42	33	91
Office supplies (except paper) manufacturing	0	17	18	35
Sign manufacturing	0	273	247	334
Gasket, packing, and sealing device manufacturing	0	47	44	104
Musical instrument manufacturing	0	143	143	162
Fasteners, buttons, needles, and pins manufacturing	0	13	13	18
Broom, brush, and mop manufacturing	0	141	110	306
Burial casket manufacturing	0	27	27	40
All other miscellaneous manufacturing	0	219	201	276
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,101	2,615	5,898
Wholesale - Professional and commercial equipment and supplies	0	3,315	5,680	10,198
Wholesale - Household appliances and electrical and electronic goods	0	5,844	13,232	27,325
Wholesale - Machinery, equipment, and supplies	0	7,820	14,299	24,659
Wholesale - Other durable goods merchant wholesalers	0	5,785	9,095	17,555

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	1,268	3,578	6,752
Wholesale - Grocery and related product wholesalers	0	1,449	1,988	3,817
Wholesale - Petroleum and petroleum products	0	660	9,621	11,220
Wholesale - Other nondurable goods merchant wholesalers	0	7,043	14,072	24,824
Wholesale - Wholesale electronic markets and agents and brokers	0	2,558	1,337	1,515
Retail - Motor vehicle and parts dealers	0	2,769	4,092	6,081
Retail - Furniture and home furnishings stores	0	1,453	1,804	3,050
Retail - Electronics and appliance stores	0	1,837	1,817	3,195
Retail - Building material and garden equipment and supplies stores	0	8,603	14,821	22,022
Retail - Food and beverage stores	0	5,170	7,053	12,336
Retail - Health and personal care stores	0	2,671	3,156	5,044
Retail - Gasoline stores	0	1,811	3,175	6,685
Retail - Clothing and clothing accessories stores	0	1,590	2,287	4,918
Retail - Sporting goods, hobby, musical instrument and book stores	0	1,311	1,641	2,873
Retail - General merchandise stores	0	5,296	6,789	11,628
Retail - Miscellaneous store retailers	0	1,931	2,273	4,318
Retail - Nonstore retailers	0	2,282	6,273	16,323
Air transportation	0	185	804	1,167
Rail transportation	0	1,075	3,269	5,265
Water transportation	0	70	119	540
Truck transportation	0	29,004	33,107	66,362
Transit and ground passenger transportation	0	1,039	1,237	1,846
Pipeline transportation	0	462	1,002	1,396
Scenic and sightseeing transportation and support activities for transportation	0	2,194	2,557	5,815
Couriers and messengers	0	2,226	2,988	5,369
Warehousing and storage	0	10,152	11,266	22,505



## APPENDIX

Newspaper publishers	0	1,297	2,162	3,006
Periodical publishers	0	2,009	3,127	4,067
Book publishers	0	358	1,224	2,028
Directory, mailing list, and other publishers	0	499	1,827	2,688
Greeting card publishing	0	0	0	0
Software publishers	0	1,235	3,365	3,985
Motion picture and video industries	0	577	1,611	3,414
Sound recording industries	0	76	399	577
Radio and television broadcasting	0	2,436	1,673	8,305
Cable and other subscription programming	0	7	53	176
Wired telecommunications carriers	0	2,699	6,296	13,116
Wireless telecommunications carriers (except satellite)	0	1,131	4,484	11,204
Satellite, telecommunications resellers, and all other telecommunications	0	1,136	1,253	2,202
Data processing, hosting, and related services	0	2,932	7,042	13,786
News syndicates, libraries, archives and all other information services	0	94	137	246
Internet publishing and broadcasting and web search portals	0	1,706	4,465	10,825
Nondepository credit intermediation and related activities	0	6,709	9,217	14,110
Securities and commodity contracts intermediation and brokerage	0	4,447	4,195	12,385
Monetary authorities and depository credit intermediation	0	13,635	34,302	59,399
Other financial investment activities	0	3,898	4,195	13,605
Direct life insurance carriers	0	1,883	6,485	7,605
Insurance carriers, except direct life	0	3,412	24,259	34,051
Insurance agencies, brokerages, and related activities	0	3,635	9,029	16,667
Funds, trusts, and other financial vehicles	0	1,229	1,314	8,226
Other real estate	0	7,711	26,239	62,690
Tenant-occupied housing	0	1,283	18,961	21,566

## APPENDIX

Owner-occupied dwellings	0	0	57,994	73,275
Automotive equipment rental and leasing	0	699	2,035	2,956
General and consumer goods rental except video tapes and discs	0	1,240	1,527	2,306
Video tape and disc rental	0	247	394	647
Commercial and industrial machinery and equipment rental and leasing	0	2,396	4,985	7,909
Lessors of nonfinancial intangible assets	0	84	2,316	2,970
Legal services	0	7,013	12,024	18,556
Accounting, tax preparation, bookkeeping, and payroll services	0	8,344	10,526	15,069
Architectural, engineering, and related services	0	2,963	3,403	6,059
Specialized design services	0	709	764	974
Custom computer programming services	0	22,415	26,356	38,329
Computer systems design services	0	3,493	3,848	5,295
Other computer related services, including facilities management	0	1,173	2,196	3,532
Management consulting services	0	6,232	6,176	9,969
Environmental and other technical consulting services	0	1,326	1,147	1,876
Scientific research and development services	1	45,190	66,010	137,145
Advertising, public relations, and related services	0	3,902	5,315	9,683
Photographic services	0	877	254	614
Veterinary services	0	729	970	1,569
Marketing research and all other miscellaneous professional, scientific, and technical services	0	19,457	18,004	27,315
Management of companies and enterprises	0	43,276	49,403	74,538
Office administrative services	0	4,868	1,757	3,826
Facilities support services	0	107	137	419
Employment services	0	10,889	17,845	26,755
Business support services	0	2,962	2,631	4,595
Travel arrangement and reservation services	0	483	675	1,638
Investigation and security services	0	1,469	1,535	2,239
Services to buildings	0	3,900	4,173	6,486

## APPENDIX

Landscape and horticultural services	0	2,332	2,543	4,167
Other support services	0	905	1,179	2,367
Waste management and remediation services	0	1,148	2,173	4,057
Elementary and secondary schools	0	2,176	1,882	2,509
Junior colleges, colleges, universities, and professional schools	0	3,768	5,045	8,064
Other educational services	1	37,444	33,148	57,310
Offices of physicians	0	16,392	19,200	27,332
Offices of dentists	0	3,891	4,836	7,081
Offices of other health practitioners	0	4,365	4,023	5,627
Outpatient care centers	0	2,189	2,298	4,340
Medical and diagnostic laboratories	0	578	851	1,323
Home health care services	0	3,929	3,025	3,934
Other ambulatory health care services	0	1,148	1,257	2,129
Hospitals	0	21,744	24,800	49,159
Nursing and community care facilities	0	4,884	5,389	9,501
Residential mental retardation, mental health, substance abuse and other facilities	0	2,323	2,434	3,759
Individual and family services	0	5,102	4,354	6,624
Child day care services	0	2,177	2,382	3,561
Community food, housing, and other relief services, including rehabilitation services	0	1,755	1,863	4,184
Performing arts companies	0	313	582	1,116
Commercial Sports Except Racing	0	470	796	1,764
Racing and Track Operation	0	82	169	390
Independent artists, writers, and performers	0	591	1,058	1,441
Promoters of performing arts and sports and agents for public figures	0	443	1,231	2,635
Museums, historical sites, zoos, and parks	0	234	305	549
Amusement parks and arcades	0	127	294	403
Gambling industries (except casino hotels)	0	999	2,482	4,030
Other amusement and recreation industries	0	610	897	1,667

## APPENDIX

Fitness and recreational sports centers	0	492	879	1,558
Bowling centers	0	88	153	318
Hotels and motels, including casino hotels	0	747	1,319	2,221
Other accommodations	0	220	285	408
Full-service restaurants	0	5,999	8,822	16,770
Limited-service restaurants	0	4,828	7,593	17,426
All other food and drinking places	0	4,897	6,496	10,153
Automotive repair and maintenance, except car washes	0	6,254	7,298	11,013
Car washes	0	2,702	3,968	6,137
Electronic and precision equipment repair and maintenance	0	1,046	1,437	2,466
Commercial and industrial machinery and equipment repair and maintenance	4	272,724	306,389	492,652
Personal and household goods repair and maintenance	0	1,539	1,439	1,829
Personal care services	0	2,859	2,071	2,832
Death care services	0	306	386	626
Dry-cleaning and laundry services	0	466	524	753
Other personal services	0	2,570	1,727	2,513
Religious organizations	0	9,176	3,524	16,703
Grantmaking, giving, and social advocacy organizations	0	1,735	4,531	7,598
Business and professional associations	0	1,454	2,056	3,507
Labor and civic organizations	0	1,065	2,384	5,062
Private households	0	464	464	464
Postal service	0	3,748	3,754	4,174
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	107	(1,166)	46
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	506	(124)	606
Local government electric utilities	0	546	1,508	2,929
Other local government enterprises	0	1,658	3,502	7,034

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 18. Kansas

**Table 403: Detailed NASA Impacts by Types of Impact, Kansas.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	80	5,020,110	7,841,396	15,643,875
Oilseed farming	0	6,354	12,191	39,979
Grain farming	0	4,100	6,859	43,615
Vegetable and melon farming	0	211	249	976
Fruit farming	0	32	40	142
Tree nut farming	0	65	66	111
Greenhouse, nursery, and floriculture production	0	272	301	915
Tobacco farming	0	0	0	0
Cotton farming	0	223	245	755
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	856	902	2,777
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2,446	4,953	40,947

## APPENDIX

Dairy cattle and milk production	0	253	355	4,393
Poultry and egg production	0	71	78	1,401
Animal production, except cattle and poultry and eggs	0	1,581	3,237	10,131
Forestry, forest products, and timber tract production	0	106	122	160
Commercial logging	0	87	107	216
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	40	94	341
Support activities for agriculture and forestry	0	4,335	3,696	4,326
Oil and gas extraction	0	11,566	11,776	129,314
Coal mining	0	66	91	368
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,112	851	2,817
Sand and gravel mining	0	628	625	1,389
Other clay, ceramic, refractory minerals mining	0	55	50	124
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	114	119	230
Other nonmetallic minerals	0	30	35	120
Drilling oil and gas wells	0	3	3	28
Support activities for oil and gas operations	0	286	285	1,758
Metal mining services	0	122	141	1,699
Other nonmetallic minerals services	0	17	19	211
Electric power generation - Hydroelectric	0	17	51	79
Electric power generation - Fossil fuel	0	3,898	14,497	39,542
Electric power generation - Nuclear	0	5,555	11,902	25,475
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	1,133	8,254	15,329

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	9,563	34,604	92,093
Natural gas distribution	0	4,183	12,144	32,178
Water, sewage and other systems	0	103	279	721
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	173	98	229
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	16,710	21,935	55,206
Maintenance and repair construction of residential structures	0	5,967	8,769	22,139
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	18	12	30
Dog and cat food manufacturing	0	1,346	5,647	22,897
Other animal food manufacturing	0	989	1,613	10,031
Flour milling	0	435	897	5,315
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	391	1,046	5,773
Soybean and other oilseed processing	0	67	369	3,482
Fats and oils refining and blending	0	306	636	5,887
Breakfast cereal manufacturing	0	316	852	2,671
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	36	51	202
Chocolate and confectionery manufacturing from cacao beans	0	62	143	676
Confectionery manufacturing from purchased chocolate	0	627	888	3,885
Frozen fruits, juices and vegetables manufacturing	0	87	136	527
Frozen specialties manufacturing	0	803	1,240	5,126
Canned fruits and vegetables manufacturing	0	76	124	628
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	71	128	437
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	247	630	4,743
Fluid milk manufacturing	0	286	430	3,122
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	354	563	1,083
Poultry processing	0	36	44	198
Animal, except poultry, slaughtering	0	4,655	6,545	47,326
Meat processed from carcasses	0	2,669	2,863	22,821
Rendering and meat byproduct processing	0	60	57	318
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	2,220	2,959	6,510
Cookie and cracker manufacturing	0	1,174	1,663	4,374
Dry pasta, mixes, and dough manufacturing	0	197	473	1,440
Tortilla manufacturing	0	381	427	1,147



## APPENDIX

Roasted nuts and peanut butter manufacturing	0	104	115	733
Other snack food manufacturing	0	430	969	5,126
Coffee and tea manufacturing	0	81	89	366
Flavoring syrup and concentrate manufacturing	0	1,106	8,770	17,199
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	405	621	2,151
All other food manufacturing	0	997	1,349	5,509
Bottled and canned soft drinks & water	0	818	1,767	8,201
Manufactured ice	0	67	34	208
Breweries	0	73	218	1,040
Wineries	0	7	13	83
Distilleries	0	17	135	430
Tobacco product manufacturing	0	99	3,156	7,010
Fiber, yarn, and thread mills	0	1	1	19
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	4	4	16
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	4
Textile and fabric finishing mills	0	6	6	43
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	42	30	240
Curtain and linen mills	0	6	5	28
Textile bag and canvas mills	0	119	107	410
Rope, cordage, twine, tire cord and tire fabric mills	0	177	125	714
Other textile product mills	0	149	134	519
Hosiery and sock mills	0	2	5	13
Other apparel knitting mills	0	3	6	15
Cut and sew apparel contractors	0	7	11	45
Mens and boys cut and sew apparel manufacturing	0	55	66	206
Womens and girls cut and sew apparel manufacturing	0	64	88	285
Other cut and sew apparel manufacturing	0	5	7	27
Apparel accessories and other apparel manufacturing	0	9	13	41
Leather and hide tanning and finishing	0	5	8	48

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	1	1	12
Sawmills	0	23	34	204
Wood preservation	0	10	59	167
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	73	142	363
Reconstituted wood product manufacturing	0	15	49	206
Wood windows and door manufacturing	0	927	1,850	3,744
Cut stock, resawing lumber, and planing	0	11	28	68
Other millwork, including flooring	0	191	405	907
Wood container and pallet manufacturing	0	347	514	1,261
Manufactured home (mobile home) manufacturing	0	1	2	4
Prefabricated wood building manufacturing	0	104	143	370
All other miscellaneous wood product manufacturing	0	272	473	1,104
Pulp mills	0	0	0	0
Paper mills	0	73	177	686
Paperboard mills	0	106	265	1,081
Paperboard container manufacturing	0	1,465	2,230	8,166
Paper bag and coated and treated paper manufacturing	0	193	350	1,251
Stationery product manufacturing	0	154	226	932
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	97	144	473
Printing	0	18,223	37,877	68,150
Support activities for printing	0	1,441	2,969	3,830
Petroleum refineries	0	4,232	43,514	192,393
Asphalt paving mixture and block manufacturing	0	88	153	622
Asphalt shingle and coating materials manufacturing	0	61	218	537
Petroleum lubricating oil and grease manufacturing	0	16,816	67,306	189,497

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	770	3,771	26,865
Industrial gas manufacturing	0	237	414	1,614
Synthetic dye and pigment manufacturing	0	12	19	82
Other basic inorganic chemical manufacturing	0	895	1,407	5,343
Other basic organic chemical manufacturing	0	675	1,072	11,448
Plastics material and resin manufacturing	0	115	163	1,801
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	17	22	151
Nitrogenous fertilizer manufacturing	0	166	272	856
Phosphatic fertilizer manufacturing	0	7	14	87
Fertilizer mixing	0	22	29	130
Pesticide and other agricultural chemical manufacturing	0	54	122	939
Medicinal and botanical manufacturing	0	16	20	91
Pharmaceutical preparation manufacturing	0	668	1,691	7,660
In-vitro diagnostic substance manufacturing	0	68	87	350
Biological product (except diagnostic) manufacturing	0	205	349	1,026
Paint and coating manufacturing	0	114	162	823
Adhesive manufacturing	0	35	44	234
Soap and other detergent manufacturing	0	1,361	2,877	11,246
Polish and other sanitation good manufacturing	0	401	574	2,973
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	0	0	0
Printing ink manufacturing	0	612	639	2,436
Explosives manufacturing	0	3	4	13
Custom compounding of purchased resins	0	399	583	3,045
Photographic film and chemical manufacturing	0	136	208	1,144
Other miscellaneous chemical product manufacturing	0	375	471	2,379

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	277	525	2,109
Unlaminated plastics profile shape manufacturing	0	24	64	213
Plastics pipe and pipe fitting manufacturing	0	122	350	1,150
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	245	515	1,408
Polystyrene foam product manufacturing	0	395	749	2,294
Urethane and other foam product (except polystyrene) manufacturing	0	65	131	610
Plastics bottle manufacturing	0	133	252	1,027
Other plastics product manufacturing	0	2,519	4,193	13,269
Tire manufacturing	0	1,251	1,866	6,405
Rubber and plastics hoses and belting manufacturing	0	665	1,191	3,092
Other rubber product manufacturing	0	423	710	2,182
Pottery, ceramics, and plumbing fixture manufacturing	0	19	20	31
Brick, tile, and other structural clay product manufacturing	0	283	414	1,038
Flat glass manufacturing	0	94	158	461
Other pressed and blown glass and glassware manufacturing	0	750	1,011	2,491
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	199	273	750
Cement manufacturing	0	195	406	1,349
Ready-mix concrete manufacturing	0	1,060	1,603	6,246
Concrete block and brick manufacturing	0	289	471	1,331
Concrete pipe manufacturing	0	62	93	255
Other concrete product manufacturing	0	512	687	1,903
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	291	645	2,032
Abrasive product manufacturing	0	24	36	84
Cut stone and stone product manufacturing	0	379	417	844

## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	316	650	1,479
Miscellaneous nonmetallic mineral products manufacturing	0	10	19	56
Iron and steel mills and ferroalloy manufacturing	0	48	65	686
Iron, steel pipe and tube manufacturing from purchased steel	0	11	13	91
Rolled steel shape manufacturing	0	10	13	105
Steel wire drawing	0	8	9	69
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	196	239	1,525
Other aluminum rolling, drawing and extruding	0	16	19	121
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	111	128	1,297
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	280	301	898
Nonferrous metal foundries	0	4	5	27
Custom roll forming	0	40	75	329
Crown and closure manufacturing and metal stamping	0	67	115	311
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	37	157	278
Handtool manufacturing	0	133	269	551
Prefabricated metal buildings and components manufacturing	0	87	146	398
Fabricated structural metal manufacturing	0	484	866	2,516
Plate work manufacturing	0	208	219	641
Metal window and door manufacturing	0	428	797	1,954

## APPENDIX

Sheet metal work manufacturing	0	491	721	1,759
Ornamental and architectural metal work manufacturing	0	164	253	634
Power boiler and heat exchanger manufacturing	0	18	30	84
Metal tank (heavy gauge) manufacturing	0	161	219	646
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	112	157	654
Hardware manufacturing	0	77	159	423
Spring and wire product manufacturing	0	11	18	53
Machine shops	0	1,395	1,749	3,497
Turned product and screw, nut, and bolt manufacturing	0	170	278	691
Metal heat treating	0	110	208	462
Metal coating and nonprecious engraving	0	103	235	534
Electroplating, anodizing, and coloring metal	0	418	497	1,095
Valve and fittings, other than plumbing, manufacturing	0	130	261	705
Plumbing fixture fitting and trim manufacturing	0	26	116	358
Ball and roller bearing manufacturing	0	22	52	146
Small arms ammunition manufacturing	0	64	219	484
Ammunition, except for small arms, manufacturing	0	8	11	27
Small arms, ordnance, and accessories manufacturing	0	21	72	148
Fabricated pipe and pipe fitting manufacturing	0	242	307	795
Other fabricated metal manufacturing	0	317	487	1,233
Farm machinery and equipment manufacturing	0	235	312	1,386
Lawn and garden equipment manufacturing	0	268	421	2,260
Construction machinery manufacturing	0	34	58	190
Mining machinery and equipment manufacturing	0	1	1	5

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	18	21	107
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	5	6	18
Sawmill, woodworking, and paper machinery	0	7	7	22
Printing machinery and equipment manufacturing	0	14	16	45
All other industrial machinery manufacturing	0	13	15	43
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	1	1	3
Other commercial service industry machinery manufacturing	0	71	112	342
Air purification and ventilation equipment manufacturing	0	12	15	47
Heating equipment (except warm air furnaces) manufacturing	0	135	179	618
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	293	468	1,772
Industrial mold manufacturing	0	20	22	46
Special tool, die, jig, and fixture manufacturing	0	13	15	30
Cutting tool and machine tool accessory manufacturing	0	55	58	138
Machine tool manufacturing	0	9	9	27
Rolling mill and other metalworking machinery manufacturing	0	1	1	3
Turbine and turbine generator set units manufacturing	0	0	0	5
Speed changer, industrial high-speed drive, and gear manufacturing	0	35	46	157
Mechanical power transmission equipment manufacturing	0	253	320	675
Other engine equipment manufacturing	0	47	76	427
Pump and pumping equipment manufacturing	0	26	40	149

## APPENDIX

Air and gas compressor manufacturing	0	1	1	4
Elevator and moving stairway manufacturing	0	0	0	2
Conveyor and conveying equipment manufacturing	0	57	59	173
Overhead cranes, hoists, and monorail systems manufacturing	0	2	3	13
Industrial truck, trailer, and stacker manufacturing	0	30	41	153
Power-driven handtool manufacturing	0	0	0	5
Welding and soldering equipment manufacturing	0	0	0	1
Packaging machinery manufacturing	0	1	2	6
Industrial process furnace and oven manufacturing	0	10	11	34
Fluid power cylinder and actuator manufacturing	0	27	35	123
Fluid power pump and motor manufacturing	0	45	61	207
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	21	25	70
Electronic computer manufacturing	0	0	1	3
Computer storage device manufacturing	0	3	13	61
Computer terminals and other computer peripheral equipment manufacturing	0	0	1	5
Telephone apparatus manufacturing	0	0	1	2
Broadcast and wireless communications equipment manufacturing	0	14	25	57
Other communications equipment manufacturing	0	1	2	9
Audio and video equipment manufacturing	0	8	21	67
Printed circuit assembly (electronic assembly) manufacturing	0	18	37	134
Bare printed circuit board manufacturing	0	0	0	0



## APPENDIX

Semiconductor and related device manufacturing	0	4	10	50
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	29	49	121
Electronic connector manufacturing	0	274	520	1,216
Other electronic component manufacturing	0	36	46	185
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	1
Search, detection, and navigation instruments manufacturing	0	3	6	13
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	18	33	68
Totalizing fluid meter and counting device manufacturing	0	0	1	4
Electricity and signal testing instruments manufacturing	0	248	453	1,345
Analytical laboratory instrument manufacturing	0	11,185	27,765	64,817
Irradiation apparatus manufacturing	0	0	0	1
Watch, clock, and other measuring and controlling device manufacturing	0	2	6	15
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	2
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	161	272	509
Small electrical appliance manufacturing	0	23	38	66
Household cooking appliance manufacturing	0	43	92	175
Household refrigerator and home freezer manufacturing	0	44	108	185
Household laundry equipment manufacturing	0	64	131	334

## APPENDIX

Other major household appliance manufacturing	0	20	40	67
Power, distribution, and specialty transformer manufacturing	0	14	25	62
Motor and generator manufacturing	0	55	98	250
Switchgear and switchboard apparatus manufacturing	0	45	87	204
Relay and industrial control manufacturing	0	71	102	261
Storage battery manufacturing	0	539	1,050	2,922
Primary battery manufacturing	0	253	848	1,662
Fiber optic cable manufacturing	0	23	36	121
Other communication and energy wire manufacturing	0	15	27	93
Wiring device manufacturing	0	64	149	343
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	4	4	5
Automobile manufacturing	0	1,120	3,003	17,377
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	1
Motor vehicle body manufacturing	0	102	123	482
Truck trailer manufacturing	0	4	5	22
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	509	543	2,673
Motor vehicle gasoline engine and engine parts manufacturing	0	77	98	504
Motor vehicle electrical and electronic equipment manufacturing	0	664	802	4,643
Motor vehicle transmission and power train parts manufacturing	0	27	36	186
Motor vehicle seating and interior trim manufacturing	0	30	35	257
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	592	773	4,285
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0

## APPENDIX

Aircraft manufacturing	0	193	405	1,210
Aircraft engine and engine parts manufacturing	0	71	185	428
Other aircraft parts and auxiliary equipment manufacturing	0	24,495	41,467	100,838
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	6	10	59
Ship building and repairing	0	0	0	0
Boat building	0	1,001	1,401	3,683
Motorcycle, bicycle, and parts manufacturing	0	13	25	84
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	206	405	1,247
Wood kitchen cabinet and countertop manufacturing	0	542	842	1,962
Upholstered household furniture manufacturing	0	10	14	63
Nonupholstered wood household furniture manufacturing	0	20	24	85
Other household nonupholstered furniture manufacturing	0	0	1	4
Institutional furniture manufacturing	0	3	3	12
Wood office furniture manufacturing	0	1	1	4
Custom architectural woodwork and millwork	0	8	8	25
Office furniture, except wood, manufacturing	0	27	52	131
Showcase, partition, shelving, and locker manufacturing	0	48	73	167
Mattress manufacturing	0	132	324	899
Blind and shade manufacturing	0	4	5	15
Surgical and medical instrument manufacturing	0	57	105	305
Surgical appliance and supplies manufacturing	0	87	160	518

## APPENDIX

Dental equipment and supplies manufacturing	0	0	1	3
Ophthalmic goods manufacturing	0	32	61	170
Dental laboratories	0	151	143	235
Jewelry and silverware manufacturing	0	79	135	369
Sporting and athletic goods manufacturing	0	180	241	697
Doll, toy, and game manufacturing	0	232	347	1,190
Office supplies (except paper) manufacturing	0	5	7	83
Sign manufacturing	0	825	654	1,945
Gasket, packing, and sealing device manufacturing	0	83	101	237
Musical instrument manufacturing	0	29	30	94
Fasteners, buttons, needles, and pins manufacturing	0	83	101	215
Broom, brush, and mop manufacturing	0	233	324	899
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	159	194	649
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,809	7,509	16,893
Wholesale - Professional and commercial equipment and supplies	0	10,344	18,896	31,931
Wholesale - Household appliances and electrical and electronic goods	0	3,894	10,117	20,195
Wholesale - Machinery, equipment, and supplies	0	9,030	17,317	30,773
Wholesale - Other durable goods merchant wholesalers	0	11,163	18,691	34,816
Wholesale - Drugs and druggists' sundries	0	7,910	26,285	47,941
Wholesale - Grocery and related product wholesalers	0	6,660	9,705	18,160
Wholesale - Petroleum and petroleum products	0	3,716	31,647	38,534
Wholesale - Other nondurable goods merchant wholesalers	0	22,018	44,911	85,186
Wholesale - Wholesale electronic markets and agents and brokers	0	11,868	6,855	7,789
Retail - Motor vehicle and parts dealers	0	12,440	22,687	32,353

## APPENDIX

Retail - Furniture and home furnishings stores	0	6,717	9,749	15,747
Retail - Electronics and appliance stores	0	8,342	9,774	15,466
Retail - Building material and garden equipment and supplies stores	0	7,586	16,135	22,749
Retail - Food and beverage stores	1	21,299	33,061	54,904
Retail - Health and personal care stores	0	14,466	18,640	28,594
Retail - Gasoline stores	0	5,332	13,072	25,004
Retail - Clothing and clothing accessories stores	0	6,652	13,353	27,365
Retail - Sporting goods, hobby, musical instrument and book stores	0	5,618	8,045	13,194
Retail - General merchandise stores	1	22,009	35,107	55,990
Retail - Miscellaneous store retailers	1	9,190	13,255	22,651
Retail - Nonstore retailers	1	9,638	33,882	76,551
Air transportation	0	1,465	3,179	5,855
Rail transportation	0	4,283	13,637	21,413
Water transportation	0	34	42	649
Truck transportation	1	41,152	48,545	99,316
Transit and ground passenger transportation	0	6,731	8,282	12,547
Pipeline transportation	0	23,633	22,137	23,547
Scenic and sightseeing transportation and support activities for transportation	0	29,304	34,014	70,049
Couriers and messengers	0	10,293	14,098	23,968
Warehousing and storage	0	17,182	19,516	40,963
Newspaper publishers	0	2,262	4,390	7,132
Periodical publishers	0	3,518	5,846	10,519
Book publishers	0	592	2,441	4,272
Directory, mailing list, and other publishers	0	3,710	13,534	19,530
Greeting card publishing	0	0	0	0
Software publishers	0	5,689	16,532	20,560
Motion picture and video industries	0	3,297	4,656	13,772
Sound recording industries	0	625	1,395	2,338
Radio and television broadcasting	0	8,104	3,978	34,809

## APPENDIX

Cable and other subscription programming	0	57	332	1,913
Wired telecommunications carriers	0	27,410	38,418	66,195
Wireless telecommunications carriers (except satellite)	0	15,548	31,648	74,514
Satellite, telecommunications resellers, and all other telecommunications	0	9,024	7,922	9,123
Data processing, hosting, and related services	0	9,951	21,551	50,764
News syndicates, libraries, archives and all other information services	0	555	861	1,890
Internet publishing and broadcasting and web search portals	0	10,525	29,447	89,734
Nondepository credit intermediation and related activities	0	19,904	24,650	43,204
Securities and commodity contracts intermediation and brokerage	0	21,505	21,046	64,322
Monetary authorities and depository credit intermediation	1	76,311	135,630	306,563
Other financial investment activities	1	25,712	28,740	91,801
Direct life insurance carriers	0	3,916	8,901	11,887
Insurance carriers, except direct life	0	25,030	102,713	195,382
Insurance agencies, brokerages, and related activities	1	34,298	58,628	126,570
Funds, trusts, and other financial vehicles	0	7,360	6,101	44,967
Other real estate	4	92,697	277,205	759,802
Tenant-occupied housing	0	5,603	76,706	87,885
Owner-occupied dwellings	0	0	280,844	354,844
Automotive equipment rental and leasing	0	8,471	21,177	24,844
General and consumer goods rental except video tapes and discs	0	8,850	10,192	12,328
Video tape and disc rental	0	1,343	2,142	3,234
Commercial and industrial machinery and equipment rental and leasing	0	35,154	54,861	64,432
Lessors of nonfinancial intangible assets	0	339	31,542	34,474

## APPENDIX

Legal services	1	70,616	120,777	196,148
Accounting, tax preparation, bookkeeping, and payroll services	1	33,570	45,822	66,343
Architectural, engineering, and related services	1	55,325	66,672	115,403
Specialized design services	0	5,099	5,402	6,875
Custom computer programming services	0	20,084	23,668	35,281
Computer systems design services	0	19,368	20,012	26,880
Other computer related services, including facilities management	0	4,796	14,157	25,212
Management consulting services	2	166,370	164,942	267,867
Environmental and other technical consulting services	0	20,583	18,094	27,474
Scientific research and development services	25	1,762,972	2,594,314	5,687,577
Advertising, public relations, and related services	0	20,793	30,157	57,054
Photographic services	0	4,496	3,030	4,934
Veterinary services	0	3,237	4,686	7,807
Marketing research and all other miscellaneous professional, scientific, and technical services	2	117,640	104,218	157,775
Management of companies and enterprises	2	181,906	250,029	369,893
Office administrative services	0	37,540	23,977	39,401
Facilities support services	0	2,427	3,682	9,032
Employment services	3	92,255	170,743	263,404
Business support services	1	25,537	23,986	38,927
Travel arrangement and reservation services	0	3,589	5,486	12,634
Investigation and security services	0	8,693	8,998	13,215
Services to buildings	1	23,878	25,299	40,454
Landscape and horticultural services	0	15,337	16,628	27,140
Other support services	0	4,787	6,555	13,531
Waste management and remediation services	0	6,489	12,767	22,575
Elementary and secondary schools	0	4,000	3,683	4,753
Junior colleges, colleges, universities, and professional schools	0	8,971	13,129	20,662
Other educational services	0	9,183	8,695	15,697
Offices of physicians	1	75,561	86,406	127,163
Offices of dentists	0	18,662	22,643	33,925

## APPENDIX

Offices of other health practitioners	0	24,509	23,070	30,328
Outpatient care centers	0	14,088	14,699	29,659
Medical and diagnostic laboratories	0	6,569	9,546	15,510
Home health care services	0	18,831	13,649	18,021
Other ambulatory health care services	0	5,766	6,139	9,756
Hospitals	2	119,135	138,447	269,277
Nursing and community care facilities	1	22,863	26,110	46,939
Residential mental retardation, mental health, substance abuse and other facilities	0	6,652	7,087	11,223
Individual and family services	1	23,078	21,728	33,523
Child day care services	0	9,655	11,360	16,181
Community food, housing, and other relief services, including rehabilitation services	0	5,032	5,735	13,584
Performing arts companies	0	920	1,555	4,343
Commercial Sports Except Racing	0	1,123	1,396	6,099
Racing and Track Operation	0	243	493	1,306
Independent artists, writers, and performers	0	374	748	4,373
Promoters of performing arts and sports and agents for public figures	0	1,306	3,051	9,167
Museums, historical sites, zoos, and parks	0	656	772	1,811
Amusement parks and arcades	0	397	758	1,129
Gambling industries (except casino hotels)	0	3,305	10,367	16,439
Other amusement and recreation industries	0	3,983	4,835	8,295
Fitness and recreational sports centers	0	3,344	4,509	7,257
Bowling centers	0	512	696	1,405
Hotels and motels, including casino hotels	0	1,439	2,913	5,229
Other accommodations	0	493	676	978
Full-service restaurants	2	36,983	56,391	102,604
Limited-service restaurants	1	24,182	40,340	90,236
All other food and drinking places	1	28,820	37,408	57,537
Automotive repair and maintenance, except car washes	0	23,761	31,654	45,485
Car washes	0	11,238	19,525	28,569



## APPENDIX

Electronic and precision equipment repair and maintenance	0	5,859	8,438	13,994
Commercial and industrial machinery and equipment repair and maintenance	0	10,651	12,994	19,969
Personal and household goods repair and maintenance	0	9,230	9,457	11,307
Personal care services	0	13,492	10,412	13,845
Death care services	0	1,331	1,764	2,928
Dry-cleaning and laundry services	0	3,194	3,674	5,369
Other personal services	0	11,907	11,170	14,840
Religious organizations	1	29,406	13,255	57,242
Grantmaking, giving, and social advocacy organizations	0	5,054	14,557	23,471
Business and professional associations	0	7,242	11,057	21,187
Labor and civic organizations	0	5,250	12,547	22,871
Private households	0	2,944	2,944	2,944
Postal service	0	14,429	14,441	16,140
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	638	(4,876)	571
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	281	(14)	358
Local government electric utilities	0	2,393	7,614	12,277
Other local government enterprises	0	15,261	37,160	72,277
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

## APPENDIX

* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	5	616,991	877,110	1,399,887

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 404: Detailed M2M Program Impacts by Types of Impact, Kansas.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1</i>	<i>94,192</i>	<i>157,861</i>	<i>310,437</i>
Oilseed farming	0	94	269	1,013
Grain farming	0	63	117	680
Vegetable and melon farming	0	4	5	18
Fruit farming	0	1	1	3
Tree nut farming	0	2	3	4
Greenhouse, nursery, and floriculture production	0	4	5	15
Tobacco farming	0	0	0	0
Cotton farming	0	3	4	11
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	12	14	41
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	43	83	611
Dairy cattle and milk production	0	5	8	84
Poultry and egg production	0	1	1	21
Animal production, except cattle and poultry and eggs	0	19	43	138
Forestry, forest products, and timber tract production	0	2	2	2
Commercial logging	0	2	2	4
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	1	2	5
Support activities for agriculture and forestry	0	72	61	71
Oil and gas extraction	0	159	215	2,264
Coal mining	0	1	1	3
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	34	13	43
Sand and gravel mining	0	25	12	22
Other clay, ceramic, refractory minerals mining	0	1	1	2
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	2	1	2
Other nonmetallic minerals	0	1	1	2
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	3	4	22
Metal mining services	0	1	2	18
Other nonmetallic minerals services	0	0	0	3
Electric power generation - Hydroelectric	0	0	1	2
Electric power generation - Fossil fuel	0	75	264	692
Electric power generation - Nuclear	0	104	231	481
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	18	125	218
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	161	592	1,530
Natural gas distribution	0	84	251	584
Water, sewage and other systems	0	2	6	13
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	278	366	896
Maintenance and repair construction of residential structures	0	110	162	396
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	0
Dog and cat food manufacturing	0	21	93	361
Other animal food manufacturing	0	18	30	179
Flour milling	0	7	14	85
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	7	20	109
Soybean and other oilseed processing	0	1	6	56
Fats and oils refining and blending	0	3	6	54
Breakfast cereal manufacturing	0	5	12	39
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1	1	4
Chocolate and confectionery manufacturing from cacao beans	0	2	5	23
Confectionery manufacturing from purchased chocolate	0	13	18	75
Frozen fruits, juices and vegetables manufacturing	0	2	3	11
Frozen specialties manufacturing	0	18	27	105
Canned fruits and vegetables manufacturing	0	2	3	16

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	2	3	11
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	6	16	106
Fluid milk manufacturing	0	5	8	59
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	7	11	21
Poultry processing	0	1	1	3
Animal, except poultry, slaughtering	0	68	98	692
Meat processed from carcasses	0	50	54	417
Rendering and meat byproduct processing	0	1	1	5
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	42	56	122
Cookie and cracker manufacturing	0	24	36	86
Dry pasta, mixes, and dough manufacturing	0	4	10	31
Tortilla manufacturing	0	7	8	20
Roasted nuts and peanut butter manufacturing	0	2	3	16
Other snack food manufacturing	0	8	19	96
Coffee and tea manufacturing	0	2	2	7
Flavoring syrup and concentrate manufacturing	0	31	231	464
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	11	18	55
All other food manufacturing	0	23	32	123
Bottled and canned soft drinks & water	0	14	32	140
Manufactured ice	0	1	1	3
Breweries	0	1	4	19
Wineries	0	0	1	3
Distilleries	0	0	3	8
Tobacco product manufacturing	0	2	71	137
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	2
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	1	1	5
Curtain and linen mills	0	0	0	1
Textile bag and canvas mills	0	2	2	8
Rope, cordage, twine, tire cord and tire fabric mills	0	2	2	9
Other textile product mills	0	3	3	11
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	1
Mens and boys cut and sew apparel manufacturing	0	1	2	5
Womens and girls cut and sew apparel manufacturing	0	2	3	9
Other cut and sew apparel manufacturing	0	0	0	1
Apparel accessories and other apparel manufacturing	0	0	0	1
Leather and hide tanning and finishing	0	0	0	1
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	0	1	3
Wood preservation	0	0	1	3
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	1	2	6
Reconstituted wood product manufacturing	0	0	1	3
Wood windows and door manufacturing	0	14	28	56
Cut stock, resawing lumber, and planing	0	0	1	1
Other millwork, including flooring	0	3	7	14
Wood container and pallet manufacturing	0	7	10	24
Manufactured home (mobile home) manufacturing	0	0	0	0

## APPENDIX

Prefabricated wood building manufacturing	0	2	3	7
All other miscellaneous wood product manufacturing	0	5	9	19
Pulp mills	0	0	0	0
Paper mills	0	1	2	9
Paperboard mills	0	1	3	14
Paperboard container manufacturing	0	25	37	135
Paper bag and coated and treated paper manufacturing	0	3	5	19
Stationery product manufacturing	0	4	5	19
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	2	2	8
Printing	0	192	400	685
Support activities for printing	0	27	54	69
Petroleum refineries	0	117	1,069	4,809
Asphalt paving mixture and block manufacturing	0	2	2	9
Asphalt shingle and coating materials manufacturing	0	1	3	8
Petroleum lubricating oil and grease manufacturing	0	11	45	115
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	8	38	274
Industrial gas manufacturing	0	4	7	28
Synthetic dye and pigment manufacturing	0	0	0	1
Other basic inorganic chemical manufacturing	0	8	14	52
Other basic organic chemical manufacturing	0	9	15	161
Plastics material and resin manufacturing	0	2	3	29
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	1	4
Nitrogenous fertilizer manufacturing	0	3	6	17
Phosphatic fertilizer manufacturing	0	0	0	1
Fertilizer mixing	0	0	1	2

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	1	2	15
Medicinal and botanical manufacturing	0	0	1	3
Pharmaceutical preparation manufacturing	0	20	54	222
In-vitro diagnostic substance manufacturing	0	3	4	17
Biological product (except diagnostic) manufacturing	0	8	15	41
Paint and coating manufacturing	0	2	3	16
Adhesive manufacturing	0	1	1	4
Soap and other detergent manufacturing	0	23	60	192
Polish and other sanitation good manufacturing	0	8	14	60
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	0	0	0
Printing ink manufacturing	0	10	11	41
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	1	1	7
Photographic film and chemical manufacturing	0	2	4	19
Other miscellaneous chemical product manufacturing	0	6	8	41
Plastics packaging materials and unlaminated film and sheet manufacturing	0	6	11	43
Unlaminated plastics profile shape manufacturing	0	0	1	4
Plastics pipe and pipe fitting manufacturing	0	3	7	24
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	4	8	23
Polystyrene foam product manufacturing	0	7	12	37
Urethane and other foam product (except polystyrene) manufacturing	0	1	3	12
Plastics bottle manufacturing	0	2	3	12
Other plastics product manufacturing	0	45	74	222
Tire manufacturing	0	15	23	84



## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	11	19	48
Other rubber product manufacturing	0	8	13	40
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	1
Brick, tile, and other structural clay product manufacturing	0	4	6	16
Flat glass manufacturing	0	1	2	7
Other pressed and blown glass and glassware manufacturing	0	16	21	53
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	4	5	13
Cement manufacturing	0	3	6	20
Ready-mix concrete manufacturing	0	16	24	94
Concrete block and brick manufacturing	0	5	7	21
Concrete pipe manufacturing	0	1	1	4
Other concrete product manufacturing	0	8	11	30
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	6	12	38
Abrasive product manufacturing	0	0	1	2
Cut stone and stone product manufacturing	0	6	6	13
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	6	12	27
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	1
Iron and steel mills and ferroalloy manufacturing	0	1	1	10
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	1
Rolled steel shape manufacturing	0	0	0	1
Steel wire drawing	0	0	0	2
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	1	1	6

## APPENDIX

Other aluminum rolling, drawing and extruding	0	0	0	1
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	2	2	17
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	3	3	10
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	1	2	6
Crown and closure manufacturing and metal stamping	0	1	2	6
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	1	4	6
Handtool manufacturing	0	3	7	14
Prefabricated metal buildings and components manufacturing	0	1	3	7
Fabricated structural metal manufacturing	0	7	12	34
Plate work manufacturing	0	3	4	10
Metal window and door manufacturing	0	7	13	32
Sheet metal work manufacturing	0	6	9	22
Ornamental and architectural metal work manufacturing	0	3	4	10
Power boiler and heat exchanger manufacturing	0	0	1	2
Metal tank (heavy gauge) manufacturing	0	2	3	8
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	1	1	3
Hardware manufacturing	0	1	3	7
Spring and wire product manufacturing	0	0	0	1
Machine shops	0	29	36	71
Turned product and screw, nut, and bolt manufacturing	0	2	4	9
Metal heat treating	0	2	4	10

## APPENDIX

Metal coating and nonprecious engraving	0	2	4	9
Electroplating, anodizing, and coloring metal	0	9	11	24
Valve and fittings, other than plumbing, manufacturing	0	3	5	14
Plumbing fixture fitting and trim manufacturing	0	1	2	7
Ball and roller bearing manufacturing	0	1	1	4
Small arms ammunition manufacturing	0	1	2	5
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	1	3
Fabricated pipe and pipe fitting manufacturing	0	3	3	8
Other fabricated metal manufacturing	0	6	9	21
Farm machinery and equipment manufacturing	0	5	8	28
Lawn and garden equipment manufacturing	0	6	9	43
Construction machinery manufacturing	0	2	3	10
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	2
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	1
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	1
All other industrial machinery manufacturing	0	0	0	1
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	1	2	6
Air purification and ventilation equipment manufacturing	0	0	0	1
Heating equipment (except warm air furnaces) manufacturing	0	3	4	14
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	5	8	29
Industrial mold manufacturing	0	0	0	1
Special tool, die, jig, and fixture manufacturing	0	0	0	1
Cutting tool and machine tool accessory manufacturing	0	1	1	3
Machine tool manufacturing	0	0	0	1
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	1	1	4
Mechanical power transmission equipment manufacturing	0	5	6	13
Other engine equipment manufacturing	0	1	2	8
Pump and pumping equipment manufacturing	0	1	1	3
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	1	1	3
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	1	3
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0

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Industrial process furnace and oven manufacturing	0	0	0	1
Fluid power cylinder and actuator manufacturing	0	0	0	1
Fluid power pump and motor manufacturing	0	1	1	4
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	1	1
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	2
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	1	1
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	1	2
Printed circuit assembly (electronic assembly) manufacturing	0	0	1	2
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	1
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1	1	3
Electronic connector manufacturing	0	6	12	29
Other electronic component manufacturing	0	1	1	4
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0

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Industrial process variable instruments manufacturing	0	0	0	1
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	1
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	4	6	11
Small electrical appliance manufacturing	0	1	1	2
Household cooking appliance manufacturing	0	1	2	3
Household refrigerator and home freezer manufacturing	0	1	2	4
Household laundry equipment manufacturing	0	1	3	7
Other major household appliance manufacturing	0	0	1	1
Power, distribution, and specialty transformer manufacturing	0	0	1	1
Motor and generator manufacturing	0	1	2	5
Switchgear and switchboard apparatus manufacturing	0	1	1	3
Relay and industrial control manufacturing	0	1	1	3
Storage battery manufacturing	0	13	24	68
Primary battery manufacturing	0	6	16	35
Fiber optic cable manufacturing	0	1	1	3
Other communication and energy wire manufacturing	0	0	0	1
Wiring device manufacturing	0	1	3	6

## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	22	52	323
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	2	2	9
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	8	8	41
Motor vehicle gasoline engine and engine parts manufacturing	0	2	2	11
Motor vehicle electrical and electronic equipment manufacturing	0	11	13	70
Motor vehicle transmission and power train parts manufacturing	0	1	1	4
Motor vehicle seating and interior trim manufacturing	0	0	0	3
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	10	12	76
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	1	2	7
Aircraft engine and engine parts manufacturing	0	1	3	8
Other aircraft parts and auxiliary equipment manufacturing	0	2	3	7
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	2
Ship building and repairing	0	0	0	0
Boat building	0	15	21	53
Motorcycle, bicycle, and parts manufacturing	0	0	1	2

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	4	8	25
Wood kitchen cabinet and countertop manufacturing	0	10	14	33
Upholstered household furniture manufacturing	0	0	0	2
Nonupholstered wood household furniture manufacturing	0	0	0	2
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	1	1	3
Showcase, partition, shelving, and locker manufacturing	0	1	1	3
Mattress manufacturing	0	2	5	16
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	1	2	6
Surgical appliance and supplies manufacturing	0	2	4	13
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	1	1	4
Dental laboratories	0	4	3	6
Jewelry and silverware manufacturing	0	2	3	7
Sporting and athletic goods manufacturing	0	3	4	12
Doll, toy, and game manufacturing	0	6	8	24
Office supplies (except paper) manufacturing	0	0	0	2
Sign manufacturing	0	11	9	26
Gasket, packing, and sealing device manufacturing	0	1	2	4
Musical instrument manufacturing	0	1	1	3
Fasteners, buttons, needles, and pins manufacturing	0	2	2	5



## APPENDIX

Broom, brush, and mop manufacturing	0	5	9	20
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	3	4	12
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	57	152	341
Wholesale - Professional and commercial equipment and supplies	0	192	351	580
Wholesale - Household appliances and electrical and electronic goods	0	58	151	299
Wholesale - Machinery, equipment, and supplies	0	132	254	450
Wholesale - Other durable goods merchant wholesalers	0	184	308	569
Wholesale - Drugs and druggists' sundries	0	141	463	824
Wholesale - Grocery and related product wholesalers	0	111	161	301
Wholesale - Petroleum and petroleum products	0	92	869	1,042
Wholesale - Other nondurable goods merchant wholesalers	0	364	766	1,424
Wholesale - Wholesale electronic markets and agents and brokers	0	199	109	124
Retail - Motor vehicle and parts dealers	0	215	394	558
Retail - Furniture and home furnishings stores	0	118	171	272
Retail - Electronics and appliance stores	0	145	171	265
Retail - Building material and garden equipment and supplies stores	0	130	277	386
Retail - Food and beverage stores	0	403	619	1,004
Retail - Health and personal care stores	0	246	319	487
Retail - Gasoline stores	0	181	411	739
Retail - Clothing and clothing accessories stores	0	120	239	475
Retail - Sporting goods, hobby, musical instrument and book stores	0	97	139	223

## APPENDIX

Retail - General merchandise stores	0	369	594	940
Retail - Miscellaneous store retailers	0	166	237	391
Retail - Nonstore retailers	0	188	668	1,437
Air transportation	0	27	59	107
Rail transportation	0	104	295	492
Water transportation	0	1	1	14
Truck transportation	0	5,187	5,923	11,716
Transit and ground passenger transportation	0	155	192	273
Pipeline transportation	0	335	337	366
Scenic and sightseeing transportation and support activities for transportation	0	699	822	1,696
Couriers and messengers	0	293	415	689
Warehousing and storage	0	373	423	881
Newspaper publishers	0	36	68	109
Periodical publishers	0	73	118	196
Book publishers	0	10	40	70
Directory, mailing list, and other publishers	0	53	197	283
Greeting card publishing	0	0	0	0
Software publishers	0	110	312	379
Motion picture and video industries	0	78	111	272
Sound recording industries	0	15	31	48
Radio and television broadcasting	0	199	107	629
Cable and other subscription programming	0	1	7	32
Wired telecommunications carriers	0	497	646	1,081
Wireless telecommunications carriers (except satellite)	0	374	623	1,423
Satellite, telecommunications resellers, and all other telecommunications	0	206	155	158
Data processing, hosting, and related services	0	182	370	831
News syndicates, libraries, archives and all other information services	0	12	19	39
Internet publishing and broadcasting and web search portals	0	293	781	2,053

## APPENDIX

Nondepository credit intermediation and related activities	0	390	490	808
Securities and commodity contracts intermediation and brokerage	0	399	384	1,097
Monetary authorities and depository credit intermediation	0	1,215	2,229	4,893
Other financial investment activities	0	621	674	1,718
Direct life insurance carriers	0	59	139	182
Insurance carriers, except direct life	0	435	1,836	3,359
Insurance agencies, brokerages, and related activities	0	584	1,003	2,101
Funds, trusts, and other financial vehicles	0	156	127	792
Other real estate	0	1,860	5,527	13,130
Tenant-occupied housing	0	116	1,498	1,691
Owner-occupied dwellings	0	0	5,423	6,852
Automotive equipment rental and leasing	0	202	416	467
General and consumer goods rental except video tapes and discs	0	199	215	243
Video tape and disc rental	0	24	38	56
Commercial and industrial machinery and equipment rental and leasing	0	389	525	600
Lessors of nonfinancial intangible assets	0	6	525	571
Legal services	0	1,180	2,101	3,327
Accounting, tax preparation, bookkeeping, and payroll services	0	581	796	1,124
Architectural, engineering, and related services	0	978	1,184	2,019
Specialized design services	0	87	92	115
Custom computer programming services	0	201	236	343
Computer systems design services	0	322	332	438
Other computer related services, including facilities management	0	93	264	449
Management consulting services	0	2,195	2,180	3,443
Environmental and other technical consulting services	0	399	354	530

## APPENDIX

Scientific research and development services	0	34,714	51,778	104,914
Advertising, public relations, and related services	0	347	500	902
Photographic services	0	73	51	79
Veterinary services	0	57	84	137
Marketing research and all other miscellaneous professional, scientific, and technical services	0	1,238	1,094	1,632
Management of companies and enterprises	0	3,168	4,396	6,300
Office administrative services	0	818	533	791
Facilities support services	0	46	69	160
Employment services	0	1,651	3,136	4,655
Business support services	0	390	373	587
Travel arrangement and reservation services	0	65	100	222
Investigation and security services	0	156	162	231
Services to buildings	0	445	473	720
Landscape and horticultural services	0	259	282	443
Other support services	0	77	106	216
Waste management and remediation services	0	113	223	389
Elementary and secondary schools	0	92	84	107
Junior colleges, colleges, universities, and professional schools	0	227	329	492
Other educational services	0	188	179	311
Offices of physicians	0	1,310	1,510	2,205
Offices of dentists	0	339	416	615
Offices of other health practitioners	0	426	404	530
Outpatient care centers	0	270	283	562
Medical and diagnostic laboratories	0	117	175	275
Home health care services	0	325	238	317
Other ambulatory health care services	0	104	111	174
Hospitals	0	2,310	2,673	5,074
Nursing and community care facilities	0	418	479	838
Residential mental retardation, mental health, substance abuse and other facilities	0	137	146	226

## APPENDIX

Individual and family services	0	465	445	683
Child day care services	0	183	218	303
Community food, housing, and other relief services, including rehabilitation services	0	108	125	286
Performing arts companies	0	19	32	80
Commercial Sports Except Racing	0	19	24	103
Racing and Track Operation	0	5	9	24
Independent artists, writers, and performers	0	8	15	86
Promoters of performing arts and sports and agents for public figures	0	27	58	163
Museums, historical sites, zoos, and parks	0	13	15	35
Amusement parks and arcades	0	8	13	20
Gambling industries (except casino hotels)	0	64	189	296
Other amusement and recreation industries	0	69	80	137
Fitness and recreational sports centers	0	66	83	132
Bowling centers	0	9	12	24
Hotels and motels, including casino hotels	0	33	63	112
Other accommodations	0	13	18	25
Full-service restaurants	0	642	985	1,754
Limited-service restaurants	0	444	736	1,589
All other food and drinking places	0	542	692	1,035
Automotive repair and maintenance, except car washes	0	567	724	1,033
Car washes	0	203	351	510
Electronic and precision equipment repair and maintenance	0	113	164	258
Commercial and industrial machinery and equipment repair and maintenance	0	182	218	333
Personal and household goods repair and maintenance	0	172	158	188
Personal care services	0	266	188	253
Death care services	0	27	34	57
Dry-cleaning and laundry services	0	60	68	99
Other personal services	0	231	191	260
Religious organizations	0	632	222	1,130
Grantmaking, giving, and social advocacy organizations	0	125	309	498

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Business and professional associations	0	137	190	351
Labor and civic organizations	0	113	238	444
Private households	0	60	60	60
Postal service	0	295	296	330
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	13	(117)	12
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	5	(0)	5
Local government electric utilities	0	44	129	203
Other local government enterprises	0	291	656	1,264
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	9,275	24,545	51,320

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 19. Kentucky

**Table 405: Detailed NASA Impacts by Types of Impact, Kentucky.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>261</i>	<i>15,011,794</i>	<i>19,899,006</i>	<i>41,060,355</i>
Oilseed farming	0	15,314	33,401	62,638
Grain farming	0	6,322	11,942	47,782
Vegetable and melon farming	0	697	1,005	2,742
Fruit farming	0	132	209	486
Tree nut farming	0	48	50	75
Greenhouse, nursery, and floriculture production	0	938	1,183	2,802
Tobacco farming	0	10,169	9,159	20,018
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	4,015	4,395	11,507
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	2,272	6,093	25,175
Dairy cattle and milk production	0	454	882	6,115
Poultry and egg production	0	1,934	2,556	34,434
Animal production, except cattle and poultry and eggs	1	9,960	26,037	44,112
Forestry, forest products, and timber tract production	0	353	378	492
Commercial logging	0	24,015	24,092	36,922
Commercial fishing	0	(38)	301	331
Commercial hunting and trapping	0	18	109	301
Support activities for agriculture and forestry	0	11,001	9,559	11,596
Oil and gas extraction	0	2,878	8,968	86,173
Coal mining	0	5,494	12,951	28,130
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	(104)	(6)	537
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	8,206	24,208	51,005
Sand and gravel mining	0	661	2,051	5,239

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Other clay, ceramic, refractory minerals mining	0	(48)	(34)	25
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	(13)	(10)	5
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	1	10
Support activities for oil and gas operations	0	15	42	372
Metal mining services	0	36	112	1,051
Other nonmetallic minerals services	0	166	339	1,216
Electric power generation - Hydroelectric	0	115	434	671
Electric power generation - Fossil fuel	0	11,138	50,911	128,894
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	15	7	20
Electric power transmission and distribution	0	29,078	126,817	307,893
Natural gas distribution	0	5,689	21,534	59,061
Water, sewage and other systems	0	1,052	3,053	6,373
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0



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Construction of other new nonresidential structures	78	4,509,482	2,906,237	6,473,753
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	66,424	88,614	228,608
Maintenance and repair construction of residential structures	0	16,868	24,815	64,510
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	39	28	68
Dog and cat food manufacturing	0	632	2,077	9,833
Other animal food manufacturing	0	1,853	2,929	23,364
Flour milling	0	254	453	4,624
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	343	774	4,757
Soybean and other oilseed processing	0	150	659	7,095
Fats and oils refining and blending	0	124	223	2,559
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	553	756	2,659
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	69	105	1,108
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	3,250	4,469	19,469
Canned fruits and vegetables manufacturing	0	833	1,352	5,474
Canned specialties	0	155	324	1,632
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	497	689	8,530

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	521	1,079	9,416
Fluid milk manufacturing	0	1,756	2,561	19,653
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	113	164	954
Frozen cakes and other pastries manufacturing	0	1,086	1,552	3,222
Poultry processing	0	9,351	11,544	56,574
Animal, except poultry, slaughtering	0	1,760	2,369	22,873
Meat processed from carcasses	0	3,647	3,955	32,770
Rendering and meat byproduct processing	0	584	471	3,329
Seafood product preparation and packaging	0	(120)	(92)	1,433
Bread and bakery product, except frozen, manufacturing	0	5,511	7,039	17,110
Cookie and cracker manufacturing	0	4,052	5,234	18,804
Dry pasta, mixes, and dough manufacturing	0	434	874	3,685
Tortilla manufacturing	0	54	64	251
Roasted nuts and peanut butter manufacturing	0	1,430	3,137	10,246
Other snack food manufacturing	0	508	854	3,921
Coffee and tea manufacturing	0	364	611	4,038
Flavoring syrup and concentrate manufacturing	0	2,053	11,453	23,306
Mayonnaise, dressing, and sauce manufacturing	0	312	528	2,801
Spice and extract manufacturing	0	506	712	3,629
All other food manufacturing	0	1,925	2,470	11,977
Bottled and canned soft drinks & water	0	2,545	4,586	26,133
Manufactured ice	0	235	65	647
Breweries	0	492	1,380	5,233
Wineries	0	34	64	459
Distilleries	0	25,371	113,047	221,633
Tobacco product manufacturing	0	2,412	58,294	104,528
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	51	92	253
Narrow fabric mills and schiffli machine embroidery	0	105	125	342
Nonwoven fabric mills	0	571	1,394	3,942
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	6	10	62
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	26	61	252
Curtain and linen mills	0	420	754	1,985
Textile bag and canvas mills	0	433	631	1,846
Rope, cordage, twine, tire cord and tire fabric mills	0	51	111	276
Other textile product mills	0	166	234	659
Hosiery and sock mills	0	11	16	56
Other apparel knitting mills	0	6	11	35
Cut and sew apparel contractors	0	48	54	162
Mens and boys cut and sew apparel manufacturing	0	355	372	1,331
Womens and girls cut and sew apparel manufacturing	0	4	9	49
Other cut and sew apparel manufacturing	0	27	33	138
Apparel accessories and other apparel manufacturing	0	14	19	87
Leather and hide tanning and finishing	0	8	11	114
Footwear manufacturing	0	2	2	24
Other leather and allied product manufacturing	0	16	17	72
Sawmills	1	27,724	33,715	146,354
Wood preservation	0	2,953	6,001	26,063
Veneer and plywood manufacturing	0	7,812	10,044	36,970
Engineered wood member and truss manufacturing	0	2,039	2,402	8,393
Reconstituted wood product manufacturing	0	538	959	4,050
Wood windows and door manufacturing	0	3,264	3,800	11,514
Cut stock, resawing lumber, and planing	0	6,849	9,593	29,986
Other millwork, including flooring	0	7,802	9,514	30,294
Wood container and pallet manufacturing	0	3,630	3,892	9,545
Manufactured home (mobile home) manufacturing	0	7	8	25
Prefabricated wood building manufacturing	0	12,177	13,148	39,923
All other miscellaneous wood product manufacturing	0	1,239	1,329	3,600

## APPENDIX

Pulp mills	0	49	98	378
Paper mills	0	5,147	16,554	44,649
Paperboard mills	0	154	510	1,617
Paperboard container manufacturing	0	6,906	12,354	46,646
Paper bag and coated and treated paper manufacturing	0	4,957	11,141	31,498
Stationery product manufacturing	0	336	559	1,727
Sanitary paper product manufacturing	0	2,211	9,557	24,172
All other converted paper product manufacturing	0	1,067	1,868	4,932
Printing	0	26,135	38,237	79,201
Support activities for printing	0	558	806	1,144
Petroleum refineries	0	7,154	83,254	313,266
Asphalt paving mixture and block manufacturing	0	4,082	7,703	31,690
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	199	1,027	1,894
All other petroleum and coal products manufacturing	0	1,296	5,299	12,145
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	376	722	4,464
Synthetic dye and pigment manufacturing	0	227	364	1,308
Other basic inorganic chemical manufacturing	0	751	1,224	5,144
Other basic organic chemical manufacturing	0	2,254	3,595	29,538
Plastics material and resin manufacturing	0	4,377	6,078	46,456
Synthetic rubber manufacturing	0	591	769	3,116
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	224	387	1,820
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	197	261	1,256
Pesticide and other agricultural chemical manufacturing	0	99	234	2,062
Medicinal and botanical manufacturing	0	189	245	595

## APPENDIX

Pharmaceutical preparation manufacturing	0	1,146	3,004	12,208
In-vitro diagnostic substance manufacturing	0	133	172	614
Biological product (except diagnostic) manufacturing	0	469	811	1,703
Paint and coating manufacturing	0	2,926	4,332	20,378
Adhesive manufacturing	0	1,610	2,134	9,371
Soap and other detergent manufacturing	0	1,931	4,293	17,101
Polish and other sanitation good manufacturing	0	327	478	2,362
Surface active agent manufacturing	0	334	731	2,561
Toilet preparation manufacturing	0	456	943	3,956
Printing ink manufacturing	0	706	738	2,666
Explosives manufacturing	0	207	227	846
Custom compounding of purchased resins	0	359	508	2,030
Photographic film and chemical manufacturing	0	175	295	1,724
Other miscellaneous chemical product manufacturing	0	1,189	1,514	6,399
Plastics packaging materials and unlaminated film and sheet manufacturing	0	3,763	6,674	21,973
Unlaminated plastics profile shape manufacturing	0	590	1,447	3,599
Plastics pipe and pipe fitting manufacturing	0	1,164	3,003	9,596
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	32	60	148
Polystyrene foam product manufacturing	0	3,572	6,536	23,885
Urethane and other foam product (except polystyrene) manufacturing	0	1,008	1,752	6,753
Plastics bottle manufacturing	0	514	927	3,300
Other plastics product manufacturing	0	12,915	20,433	60,153
Tire manufacturing	0	937	1,357	5,108
Rubber and plastics hoses and belting manufacturing	0	1,982	3,433	8,457
Other rubber product manufacturing	0	2,636	4,194	14,124

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	1,123	1,284	2,667
Brick, tile, and other structural clay product manufacturing	0	10,808	16,533	38,503
Flat glass manufacturing	0	5,412	9,614	18,927
Other pressed and blown glass and glassware manufacturing	0	386	516	930
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	1,196	1,816	4,301
Cement manufacturing	0	4,538	8,774	25,943
Ready-mix concrete manufacturing	0	29,322	43,679	168,213
Concrete block and brick manufacturing	0	13,324	20,949	59,518
Concrete pipe manufacturing	0	9,563	13,892	39,501
Other concrete product manufacturing	0	23,805	30,676	81,310
Lime manufacturing	0	559	1,184	3,262
Gypsum product manufacturing	0	1,953	4,300	12,858
Abrasive product manufacturing	0	750	1,942	4,194
Cut stone and stone product manufacturing	0	2,601	2,887	6,017
Ground or treated mineral and earth manufacturing	0	1,305	3,226	8,421
Mineral wool manufacturing	0	1,570	3,219	11,088
Miscellaneous nonmetallic mineral products manufacturing	0	6,343	13,092	42,522
Iron and steel mills and ferroalloy manufacturing	0	3,548	8,904	32,786
Iron, steel pipe and tube manufacturing from purchased steel	0	693	1,499	5,133
Rolled steel shape manufacturing	0	609	2,300	5,815
Steel wire drawing	0	528	1,136	3,576
Alumina refining and primary aluminum production	0	1,024	3,258	12,293
Secondary smelting and alloying of aluminum	0	444	1,041	5,109
Aluminum sheet, plate, and foil manufacturing	0	10,547	30,670	75,464
Other aluminum rolling, drawing and extruding	0	395	750	2,428
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

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Copper rolling, drawing, extruding and alloying	0	7,090	13,367	61,228
Nonferrous metal, except copper and aluminum, shaping	0	513	853	2,608
Secondary processing of other nonferrous metals	0	28	203	585
Ferrous metal foundries	0	222	843	1,570
Nonferrous metal foundries	0	1,379	2,928	4,959
Custom roll forming	0	912	1,486	6,200
Crown and closure manufacturing and metal stamping	0	2,437	3,727	11,520
Iron and steel forging	0	5,128	7,323	23,326
Nonferrous forging	0	1,957	2,558	8,711
Cutlery, utensil, pot, and pan manufacturing	0	(19)	9	136
Handtool manufacturing	0	206	364	744
Prefabricated metal buildings and components manufacturing	0	11,937	18,263	58,034
Fabricated structural metal manufacturing	0	4,838	7,849	27,383
Plate work manufacturing	0	727	763	2,406
Metal window and door manufacturing	0	1,826	3,059	9,758
Sheet metal work manufacturing	0	6,548	8,848	22,415
Ornamental and architectural metal work manufacturing	0	2,284	3,559	13,367
Power boiler and heat exchanger manufacturing	0	184	265	561
Metal tank (heavy gauge) manufacturing	0	3,074	3,868	9,940
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	209	271	1,034
Hardware manufacturing	0	1,283	2,258	6,185
Spring and wire product manufacturing	0	2,034	2,889	7,586
Machine shops	0	2,861	3,455	7,554
Turned product and screw, nut, and bolt manufacturing	0	1,624	2,370	6,206
Metal heat treating	0	1,032	1,680	3,262
Metal coating and nonprecious engraving	0	3,356	6,317	11,627
Electroplating, anodizing, and coloring metal	0	1,093	1,256	3,188

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	389	677	1,822
Plumbing fixture fitting and trim manufacturing	0	325	1,189	4,188
Ball and roller bearing manufacturing	0	417	843	2,222
Small arms ammunition manufacturing	0	985	2,499	3,785
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	1,119	3,009	5,114
Fabricated pipe and pipe fitting manufacturing	0	623	770	2,980
Other fabricated metal manufacturing	0	1,234	1,742	4,586
Farm machinery and equipment manufacturing	1	61,446	78,619	433,852
Lawn and garden equipment manufacturing	0	6	9	60
Construction machinery manufacturing	0	97	153	537
Mining machinery and equipment manufacturing	0	94	104	335
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	11	12	39
Sawmill, woodworking, and paper machinery	0	30	32	122
Printing machinery and equipment manufacturing	0	41	43	107
All other industrial machinery manufacturing	0	42	48	139
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	8	10	34
Other commercial service industry machinery manufacturing	0	1,199	1,900	7,046
Air purification and ventilation equipment manufacturing	0	19,677	25,798	74,030



## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	217	275	939
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	2,188	3,372	11,107
Industrial mold manufacturing	0	199	213	477
Special tool, die, jig, and fixture manufacturing	0	342	386	765
Cutting tool and machine tool accessory manufacturing	0	83	87	222
Machine tool manufacturing	0	204	216	502
Rolling mill and other metalworking machinery manufacturing	0	2	2	5
Turbine and turbine generator set units manufacturing	0	7	8	40
Speed changer, industrial high-speed drive, and gear manufacturing	0	279	354	1,409
Mechanical power transmission equipment manufacturing	0	48	59	207
Other engine equipment manufacturing	0	377	588	4,445
Pump and pumping equipment manufacturing	0	787	1,164	4,072
Air and gas compressor manufacturing	0	15	21	94
Elevator and moving stairway manufacturing	0	76	100	347
Conveyor and conveying equipment manufacturing	0	393	405	1,162
Overhead cranes, hoists, and monorail systems manufacturing	0	235	362	1,227
Industrial truck, trailer, and stacker manufacturing	0	189	249	877
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	180	212	657
Packaging machinery manufacturing	0	57	73	190
Industrial process furnace and oven manufacturing	0	19	21	55
Fluid power cylinder and actuator manufacturing	0	1,714	2,081	5,680

## APPENDIX

Fluid power pump and motor manufacturing	0	982	1,297	5,436
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	278	322	855
Electronic computer manufacturing	0	18,140	52,763	213,266
Computer storage device manufacturing	0	649	2,470	7,141
Computer terminals and other computer peripheral equipment manufacturing	1	176,239	393,648	754,257
Telephone apparatus manufacturing	0	1	3	15
Broadcast and wireless communications equipment manufacturing	0	0	1	2
Other communications equipment manufacturing	0	375	727	1,806
Audio and video equipment manufacturing	0	47	106	429
Printed circuit assembly (electronic assembly) manufacturing	0	102	187	556
Bare printed circuit board manufacturing	0	4	5	16
Semiconductor and related device manufacturing	0	54	118	357
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	163	262	559
Electronic connector manufacturing	0	241	422	922
Other electronic component manufacturing	0	389	470	1,708
Electromedical and electrotherapeutic apparatus manufacturing	0	1	4	11
Search, detection, and navigation instruments manufacturing	0	1	2	3
Automatic environmental control manufacturing	0	369	544	1,150
Industrial process variable instruments manufacturing	0	36	61	144
Totalizing fluid meter and counting device manufacturing	0	169	472	1,131

## APPENDIX

Electricity and signal testing instruments manufacturing	0	7	12	38
Analytical laboratory instrument manufacturing	0	0	0	3
Irradiation apparatus manufacturing	0	0	1	2
Watch, clock, and other measuring and controlling device manufacturing	0	4	9	26
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	6	11	20
Electric lamp bulb and part manufacturing	0	4,052	5,043	10,587
Lighting fixture manufacturing	0	834	998	3,266
Small electrical appliance manufacturing	0	166	218	608
Household cooking appliance manufacturing	0	1,884	2,713	7,840
Household refrigerator and home freezer manufacturing	0	2,234	3,518	10,325
Household laundry equipment manufacturing	0	4,378	5,994	23,288
Other major household appliance manufacturing	0	2,067	2,954	8,304
Power, distribution, and specialty transformer manufacturing	0	22	27	71
Motor and generator manufacturing	0	479	592	2,471
Switchgear and switchboard apparatus manufacturing	0	1,106	1,431	4,746
Relay and industrial control manufacturing	0	318	362	1,063
Storage battery manufacturing	0	635	797	2,931
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	27	34	179
Other communication and energy wire manufacturing	0	604	819	3,783
Wiring device manufacturing	0	2,106	2,849	8,908
Carbon and graphite product manufacturing	0	52	62	220
All other miscellaneous electrical equipment and component manufacturing	0	15	16	48

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Automobile manufacturing	0	2,872	6,634	44,387
Light truck and utility vehicle manufacturing	0	3,465	6,497	70,131
Heavy duty truck manufacturing	0	1	1	6
Motor vehicle body manufacturing	0	164	191	742
Truck trailer manufacturing	0	7	8	33
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	470	487	1,534
Motor vehicle gasoline engine and engine parts manufacturing	0	2,562	3,139	19,223
Motor vehicle electrical and electronic equipment manufacturing	0	3,385	3,833	20,801
Motor vehicle transmission and power train parts manufacturing	0	6,322	8,052	44,127
Motor vehicle seating and interior trim manufacturing	0	1,682	1,882	13,556
Motor vehicle metal stamping	0	11,252	12,981	55,119
Other motor vehicle parts manufacturing	0	9,503	11,696	64,418
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	5,993	7,518	35,886
Aircraft manufacturing	0	0	0	3
Aircraft engine and engine parts manufacturing	0	73	158	433
Other aircraft parts and auxiliary equipment manufacturing	0	28	41	114
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	2	4	35
Ship building and repairing	0	212	258	616
Boat building	0	97	212	2,803
Motorcycle, bicycle, and parts manufacturing	0	(0)	42	229
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	94	194	1,175

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	2,713	3,729	9,048
Upholstered household furniture manufacturing	0	18	24	110
Nonupholstered wood household furniture manufacturing	0	93	107	400
Other household nonupholstered furniture manufacturing	0	22	34	148
Institutional furniture manufacturing	0	20,615	22,464	60,157
Wood office furniture manufacturing	0	304	423	1,216
Custom architectural woodwork and millwork	0	35	33	120
Office furniture, except wood, manufacturing	0	78	128	421
Showcase, partition, shelving, and locker manufacturing	0	639	873	2,588
Mattress manufacturing	0	535	1,076	3,823
Blind and shade manufacturing	0	3	3	16
Surgical and medical instrument manufacturing	0	18	26	102
Surgical appliance and supplies manufacturing	0	501	710	2,464
Dental equipment and supplies manufacturing	0	44	56	155
Ophthalmic goods manufacturing	0	120	170	497
Dental laboratories	0	256	237	434
Jewelry and silverware manufacturing	0	241	363	996
Sporting and athletic goods manufacturing	0	418	487	1,771
Doll, toy, and game manufacturing	0	124	137	819
Office supplies (except paper) manufacturing	0	189	216	633
Sign manufacturing	0	1,489	1,097	2,908
Gasket, packing, and sealing device manufacturing	0	547	600	1,557
Musical instrument manufacturing	0	57	59	239
Fasteners, buttons, needles, and pins manufacturing	0	486	533	994
Broom, brush, and mop manufacturing	0	277	306	1,030
Burial casket manufacturing	0	159	175	434

## APPENDIX

All other miscellaneous manufacturing	0	657	743	2,316
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4,954	12,680	27,352
Wholesale - Professional and commercial equipment and supplies	0	44,692	81,769	142,264
Wholesale - Household appliances and electrical and electronic goods	0	20,886	52,165	112,968
Wholesale - Machinery, equipment, and supplies	1	46,619	88,304	155,446
Wholesale - Other durable goods merchant wholesalers	1	100,710	170,117	332,931
Wholesale - Drugs and druggists' sundries	0	26,484	83,807	163,535
Wholesale - Grocery and related product wholesalers	0	33,179	47,684	93,257
Wholesale - Petroleum and petroleum products	0	11,036	170,302	197,577
Wholesale - Other nondurable goods merchant wholesalers	1	60,668	133,189	254,779
Wholesale - Wholesale electronic markets and agents and brokers	1	49,190	26,956	31,451
Retail - Motor vehicle and parts dealers	1	43,994	66,003	99,935
Retail - Furniture and home furnishings stores	1	19,199	24,373	43,020
Retail - Electronics and appliance stores	0	22,138	22,118	38,996
Retail - Building material and garden equipment and supplies stores	3	124,141	218,956	331,442
Retail - Food and beverage stores	2	56,302	79,126	141,881
Retail - Health and personal care stores	1	55,346	65,512	99,832
Retail - Gasoline stores	1	21,096	39,289	84,624
Retail - Clothing and clothing accessories stores	1	21,046	33,768	79,927
Retail - Sporting goods, hobby, musical instrument and book stores	1	15,784	20,182	36,798
Retail - General merchandise stores	3	81,346	111,059	188,182
Retail - Miscellaneous store retailers	2	30,786	35,929	68,529

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Retail - Nonstore retailers	1	31,699	95,766	202,124
Air transportation	0	9,584	16,375	28,555
Rail transportation	0	14,963	30,350	61,580
Water transportation	0	6,928	10,263	32,801
Truck transportation	2	153,776	178,205	392,490
Transit and ground passenger transportation	1	10,658	12,747	20,764
Pipeline transportation	0	11,736	23,664	31,541
Scenic and sightseeing transportation and support activities for transportation	1	57,438	63,570	130,106
Couriers and messengers	1	39,406	49,734	73,456
Warehousing and storage	1	66,131	72,008	149,550
Newspaper publishers	0	10,424	18,327	25,342
Periodical publishers	0	4,163	6,723	11,415
Book publishers	0	3,215	11,918	20,316
Directory, mailing list, and other publishers	0	1,636	6,000	9,149
Greeting card publishing	0	0	0	0
Software publishers	0	21,098	55,412	74,713
Motion picture and video industries	0	6,652	10,593	36,490
Sound recording industries	0	956	4,266	7,766
Radio and television broadcasting	0	37,384	29,652	108,617
Cable and other subscription programming	0	514	1,668	5,491
Wired telecommunications carriers	0	30,406	78,480	167,486
Wireless telecommunications carriers (except satellite)	0	11,953	58,210	169,228
Satellite, telecommunications resellers, and all other telecommunications	0	4,910	6,343	15,826
Data processing, hosting, and related services	0	23,966	50,006	123,965
News syndicates, libraries, archives and all other information services	0	874	1,229	2,711
Internet publishing and broadcasting and web search portals	0	8,540	21,898	81,265
Nondepository credit intermediation and related activities	1	46,860	60,979	122,462
Securities and commodity contracts intermediation and brokerage	1	84,388	85,299	175,941

## APPENDIX

Monetary authorities and depository credit intermediation	2	165,649	352,979	714,630
Other financial investment activities	1	34,203	41,641	148,396
Direct life insurance carriers	0	10,987	19,399	28,813
Insurance carriers, except direct life	1	86,496	232,286	484,711
Insurance agencies, brokerages, and related activities	1	71,381	100,428	256,812
Funds, trusts, and other financial vehicles	0	13,044	16,908	119,137
Other real estate	7	156,857	435,112	1,253,527
Tenant-occupied housing	1	18,038	224,120	259,045
Owner-occupied dwellings	0	0	817,262	1,032,601
Automotive equipment rental and leasing	0	7,563	35,533	52,301
General and consumer goods rental except video tapes and discs	0	13,778	18,911	33,545
Video tape and disc rental	0	3,307	5,746	9,666
Commercial and industrial machinery and equipment rental and leasing	0	32,135	102,212	158,580
Lessors of nonfinancial intangible assets	0	(17)	11,254	17,614
Legal services	2	158,592	266,871	429,445
Accounting, tax preparation, bookkeeping, and payroll services	1	95,550	115,399	168,163
Architectural, engineering, and related services	2	125,351	138,662	262,967
Specialized design services	1	55,906	58,186	74,235
Custom computer programming services	0	17,536	20,151	31,440
Computer systems design services	0	31,598	32,756	46,853
Other computer related services, including facilities management	0	10,530	15,796	33,718
Management consulting services	2	150,087	146,776	252,917
Environmental and other technical consulting services	0	25,663	20,613	33,519
Scientific research and development services	25	1,713,862	2,212,208	5,404,826
Advertising, public relations, and related services	1	42,021	52,690	105,067
Photographic services	0	11,704	4,144	8,979
Veterinary services	0	11,156	13,940	22,900



## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	1	71,875	62,880	96,515
Management of companies and enterprises	2	235,190	293,316	446,364
Office administrative services	1	60,193	17,323	54,407
Facilities support services	0	4,706	6,146	15,300
Employment services	6	210,515	321,347	536,507
Business support services	1	51,954	43,310	80,869
Travel arrangement and reservation services	0	5,299	7,006	17,631
Investigation and security services	1	25,754	26,286	40,707
Services to buildings	2	64,928	67,105	110,032
Landscape and horticultural services	1	37,163	38,986	66,576
Other support services	0	16,634	21,032	42,552
Waste management and remediation services	0	24,467	45,670	81,726
Elementary and secondary schools	0	12,405	9,987	13,003
Junior colleges, colleges, universities, and professional schools	1	37,802	45,788	78,116
Other educational services	1	17,850	15,185	34,332
Offices of physicians	3	294,871	344,405	507,984
Offices of dentists	1	50,246	62,062	97,955
Offices of other health practitioners	1	71,918	65,750	91,643
Outpatient care centers	1	59,234	61,896	110,310
Medical and diagnostic laboratories	0	15,220	22,498	38,357
Home health care services	1	62,763	44,569	57,893
Other ambulatory health care services	0	18,106	19,726	32,947
Hospitals	6	432,656	502,419	994,420
Nursing and community care facilities	2	69,932	80,489	141,320
Residential mental retardation, mental health, substance abuse and other facilities	1	26,750	28,595	42,569
Individual and family services	2	68,750	60,975	92,881
Child day care services	1	25,973	29,951	43,116
Community food, housing, and other relief services, including rehabilitation services	1	18,716	20,279	44,728
Performing arts companies	0	3,732	5,153	11,956

## APPENDIX

Commercial Sports Except Racing	0	9,354	10,135	27,495
Racing and Track Operation	0	2,617	4,512	6,478
Independent artists, writers, and performers	1	7,471	8,209	12,344
Promoters of performing arts and sports and agents for public figures	0	4,616	7,654	24,784
Museums, historical sites, zoos, and parks	0	4,726	5,236	10,399
Amusement parks and arcades	0	1,261	3,474	5,184
Gambling industries (except casino hotels)	0	9,326	21,769	35,335
Other amusement and recreation industries	1	8,354	10,779	22,278
Fitness and recreational sports centers	1	6,016	9,849	19,000
Bowling centers	0	1,150	1,785	3,590
Hotels and motels, including casino hotels	0	8,123	15,359	24,179
Other accommodations	0	2,894	3,498	4,946
Full-service restaurants	5	109,013	157,209	289,659
Limited-service restaurants	4	85,085	129,912	298,344
All other food and drinking places	2	70,058	90,136	134,323
Automotive repair and maintenance, except car washes	1	69,153	83,480	128,928
Car washes	1	32,094	48,369	75,607
Electronic and precision equipment repair and maintenance	0	15,116	20,321	37,385
Commercial and industrial machinery and equipment repair and maintenance	1	36,553	43,606	70,581
Personal and household goods repair and maintenance	1	23,201	20,145	27,479
Personal care services	1	32,467	26,975	35,568
Death care services	0	3,423	4,251	7,037
Dry-cleaning and laundry services	0	8,360	8,956	12,914
Other personal services	1	28,038	26,038	34,912
Religious organizations	2	91,971	46,386	176,784
Grantmaking, giving, and social advocacy organizations	0	15,956	46,217	84,647
Business and professional associations	0	17,227	25,783	50,365
Labor and civic organizations	1	10,860	25,153	51,911
Private households	1	8,962	8,962	8,962
Postal service	0	39,640	39,674	44,173
Federal electric utilities	0	9,520	17,665	71,766

## APPENDIX

Other federal government enterprises	0	1,897	(1,000)	3,515
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	7,339	8,795	14,543
Local government passenger transit	0	17,818	(8,902)	12,524
Local government electric utilities	0	7,825	21,097	42,997
Other local government enterprises	1	66,451	140,272	258,145
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	17	1,789,478	3,183,245	5,569,659

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 406: Detailed M2M Program Impacts by Types of Impact, Kentucky.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	156	9,224,189	9,587,230	19,952,426
Oilseed farming	0	7,525	23,677	49,884
Grain farming	0	2,709	5,658	20,545
Vegetable and melon farming	0	408	617	1,589
Fruit farming	0	100	159	350
Tree nut farming	0	57	59	88

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Greenhouse, nursery, and floriculture production	0	469	612	1,415
Tobacco farming	0	8,174	8,730	19,877
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	2,057	2,337	5,959
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1,101	2,830	10,147
Dairy cattle and milk production	0	301	604	3,661
Poultry and egg production	0	913	1,230	16,248
Animal production, except cattle and poultry and eggs	0	2,862	8,261	14,329
Forestry, forest products, and timber tract production	0	244	260	325
Commercial logging	0	20,402	20,404	29,489
Commercial fishing	0	(28)	163	182
Commercial hunting and trapping	0	10	58	142
Support activities for agriculture and forestry	0	4,333	3,726	4,509
Oil and gas extraction	0	1,346	5,580	51,131
Coal mining	0	2,049	4,224	10,162
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	(21)	(1)	97
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	12,665	17,311	37,571
Sand and gravel mining	0	1,360	2,014	4,271
Other clay, ceramic, refractory minerals mining	0	(43)	(23)	18
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	(11)	(6)	2
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	5
Support activities for oil and gas operations	0	6	16	139
Metal mining services	0	12	48	439

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Other nonmetallic minerals services	0	87	227	779
Electric power generation - Hydroelectric	0	87	301	434
Electric power generation - Fossil fuel	0	6,371	27,916	67,488
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	16	6	15
Electric power transmission and distribution	0	14,484	64,824	152,109
Natural gas distribution	0	3,388	13,258	32,040
Water, sewage and other systems	0	774	1,931	3,617
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	81	5,168,803	2,760,865	6,473,753
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	15,914	21,327	53,380

## APPENDIX

Maintenance and repair construction of residential structures	0	9,682	14,332	36,053
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	20	14	34
Dog and cat food manufacturing	0	313	1,067	4,848
Other animal food manufacturing	0	909	1,501	11,397
Flour milling	0	121	219	2,272
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	219	537	3,324
Soybean and other oilseed processing	0	109	486	5,164
Fats and oils refining and blending	0	90	167	1,756
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	380	513	1,652
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	44	68	665
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	2,231	3,044	12,475
Canned fruits and vegetables manufacturing	0	667	1,084	4,321
Canned specialties	0	93	192	968
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	328	454	5,745
Dry, condensed, and evaporated dairy product manufacturing	0	397	846	6,570
Fluid milk manufacturing	0	1,045	1,562	11,471
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	70	105	540
Frozen cakes and other pastries manufacturing	0	667	942	1,910
Poultry processing	0	4,449	5,802	26,902
Animal, except poultry, slaughtering	0	811	1,110	10,480
Meat processed from carcasses	0	2,073	2,281	18,297

## APPENDIX

Rendering and meat byproduct processing	0	397	316	2,221
Seafood product preparation and packaging	0	(59)	(47)	654
Bread and bakery product, except frozen, manufacturing	0	3,278	4,194	9,991
Cookie and cracker manufacturing	0	2,584	3,551	11,578
Dry pasta, mixes, and dough manufacturing	0	288	567	2,455
Tortilla manufacturing	0	30	36	136
Roasted nuts and peanut butter manufacturing	0	990	2,422	6,889
Other snack food manufacturing	0	304	515	2,274
Coffee and tea manufacturing	0	236	405	2,529
Flavoring syrup and concentrate manufacturing	0	1,423	7,491	15,644
Mayonnaise, dressing, and sauce manufacturing	0	209	345	1,745
Spice and extract manufacturing	0	435	624	2,888
All other food manufacturing	0	1,408	1,815	8,289
Bottled and canned soft drinks & water	0	1,343	2,516	13,702
Manufactured ice	0	130	40	327
Breweries	0	281	813	2,968
Wineries	0	42	79	554
Distilleries	0	15,771	73,510	129,466
Tobacco product manufacturing	0	1,273	40,646	63,544
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	26	52	141
Narrow fabric mills and schiffli machine embroidery	0	74	89	224
Nonwoven fabric mills	0	332	862	2,211
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	7	11	67
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	36	88	305
Curtain and linen mills	0	288	540	1,327
Textile bag and canvas mills	0	253	374	1,054
Rope, cordage, twine, tire cord and tire fabric mills	0	17	39	91
Other textile product mills	0	112	162	427
Hosiery and sock mills	0	7	10	30
Other apparel knitting mills	0	5	9	25
Cut and sew apparel contractors	0	32	35	101

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	319	338	1,045
Womens and girls cut and sew apparel manufacturing	0	5	10	50
Other cut and sew apparel manufacturing	0	26	31	117
Apparel accessories and other apparel manufacturing	0	14	18	72
Leather and hide tanning and finishing	0	4	7	63
Footwear manufacturing	0	1	2	15
Other leather and allied product manufacturing	0	14	15	57
Sawmills	0	23,333	29,676	121,285
Wood preservation	0	2,251	4,971	20,151
Veneer and plywood manufacturing	0	5,689	7,332	27,290
Engineered wood member and truss manufacturing	0	1,484	1,801	6,143
Reconstituted wood product manufacturing	0	390	723	3,273
Wood windows and door manufacturing	0	2,157	2,597	7,643
Cut stock, resawing lumber, and planing	0	6,418	9,623	27,517
Other millwork, including flooring	0	5,920	7,565	22,468
Wood container and pallet manufacturing	0	2,631	2,910	6,959
Manufactured home (mobile home) manufacturing	0	9	11	32
Prefabricated wood building manufacturing	0	14,869	16,271	44,921
All other miscellaneous wood product manufacturing	0	847	940	2,319
Pulp mills	0	20	39	153
Paper mills	0	2,363	6,641	19,591
Paperboard mills	0	70	215	720
Paperboard container manufacturing	0	4,985	8,594	32,325
Paper bag and coated and treated paper manufacturing	0	2,758	5,649	16,521
Stationery product manufacturing	0	217	336	939
Sanitary paper product manufacturing	0	1,087	4,242	11,305



## APPENDIX

All other converted paper product manufacturing	0	581	963	2,561
Printing	0	13,054	19,043	37,957
Support activities for printing	0	307	434	611
Petroleum refineries	0	6,516	66,737	255,606
Asphalt paving mixture and block manufacturing	0	3,269	5,724	22,423
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	127	623	1,131
All other petroleum and coal products manufacturing	0	528	2,045	4,710
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	161	326	1,936
Synthetic dye and pigment manufacturing	0	137	226	876
Other basic inorganic chemical manufacturing	0	397	694	2,824
Other basic organic chemical manufacturing	0	1,101	1,774	15,094
Plastics material and resin manufacturing	0	2,316	3,281	26,130
Synthetic rubber manufacturing	0	320	419	1,771
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	233	428	1,779
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	156	216	1,034
Pesticide and other agricultural chemical manufacturing	0	47	114	996
Medicinal and botanical manufacturing	0	174	245	505
Pharmaceutical preparation manufacturing	0	1,075	2,981	10,915
In-vitro diagnostic substance manufacturing	0	197	257	908
Biological product (except diagnostic) manufacturing	0	522	948	1,831
Paint and coating manufacturing	0	2,501	3,981	18,013
Adhesive manufacturing	0	1,421	2,083	8,450
Soap and other detergent manufacturing	0	963	2,643	8,711

## APPENDIX

Polish and other sanitation good manufacturing	0	186	316	1,288
Surface active agent manufacturing	0	121	308	977
Toilet preparation manufacturing	0	328	774	2,945
Printing ink manufacturing	0	445	471	1,669
Explosives manufacturing	0	151	168	648
Custom compounding of purchased resins	0	205	321	1,292
Photographic film and chemical manufacturing	0	51	93	497
Other miscellaneous chemical product manufacturing	0	653	884	3,767
Plastics packaging materials and unlaminated film and sheet manufacturing	0	2,618	4,608	14,827
Unlaminated plastics profile shape manufacturing	0	99	240	589
Plastics pipe and pipe fitting manufacturing	0	1,072	2,920	8,856
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	22	42	103
Polystyrene foam product manufacturing	0	2,614	4,726	17,082
Urethane and other foam product (except polystyrene) manufacturing	0	801	1,376	5,259
Plastics bottle manufacturing	0	380	679	2,368
Other plastics product manufacturing	0	9,023	14,218	39,667
Tire manufacturing	0	275	404	1,634
Rubber and plastics hoses and belting manufacturing	0	466	787	1,906
Other rubber product manufacturing	0	543	856	2,963
Pottery, ceramics, and plumbing fixture manufacturing	0	981	1,067	2,293
Brick, tile, and other structural clay product manufacturing	0	8,388	12,223	29,566
Flat glass manufacturing	0	4,521	7,494	15,363
Other pressed and blown glass and glassware manufacturing	0	168	222	402
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	582	858	2,030

## APPENDIX

Cement manufacturing	0	3,563	6,488	19,392
Ready-mix concrete manufacturing	0	23,025	32,917	128,715
Concrete block and brick manufacturing	0	10,340	15,323	44,299
Concrete pipe manufacturing	0	7,531	10,520	30,262
Other concrete product manufacturing	0	19,594	24,226	65,220
Lime manufacturing	0	270	582	1,628
Gypsum product manufacturing	0	1,714	3,652	11,165
Abrasive product manufacturing	0	998	2,438	5,383
Cut stone and stone product manufacturing	0	1,667	1,853	3,884
Ground or treated mineral and earth manufacturing	0	1,003	2,395	6,440
Mineral wool manufacturing	0	1,610	3,043	10,589
Miscellaneous nonmetallic mineral products manufacturing	0	6,525	12,481	39,758
Iron and steel mills and ferroalloy manufacturing	0	2,324	4,992	19,081
Iron, steel pipe and tube manufacturing from purchased steel	0	516	985	3,386
Rolled steel shape manufacturing	0	341	1,183	3,300
Steel wire drawing	0	723	968	3,804
Alumina refining and primary aluminum production	0	891	2,575	9,298
Secondary smelting and alloying of aluminum	0	316	603	3,094
Aluminum sheet, plate, and foil manufacturing	0	7,018	17,836	48,704
Other aluminum rolling, drawing and extruding	0	377	613	2,144
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	4,594	8,082	35,771
Nonferrous metal, except copper and aluminum, shaping	0	135	207	687
Secondary processing of other nonferrous metals	0	6	28	103
Ferrous metal foundries	0	107	324	677
Nonferrous metal foundries	0	745	1,423	2,494
Custom roll forming	0	875	1,411	5,370
Crown and closure manufacturing and metal stamping	0	551	849	2,565

## APPENDIX

Iron and steel forging	0	1,044	1,497	4,601
Nonferrous forging	0	421	556	1,786
Cutlery, utensil, pot, and pan manufacturing	0	(17)	9	128
Handtool manufacturing	0	223	395	810
Prefabricated metal buildings and components manufacturing	0	11,374	17,628	53,007
Fabricated structural metal manufacturing	0	3,968	6,472	22,195
Plate work manufacturing	0	429	451	1,371
Metal window and door manufacturing	0	1,471	2,485	7,729
Sheet metal work manufacturing	0	2,993	4,064	9,931
Ornamental and architectural metal work manufacturing	0	1,873	2,934	10,488
Power boiler and heat exchanger manufacturing	0	245	361	802
Metal tank (heavy gauge) manufacturing	0	3,376	4,280	10,713
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	82	106	378
Hardware manufacturing	0	965	1,707	4,542
Spring and wire product manufacturing	0	2,272	3,193	8,225
Machine shops	0	2,003	2,431	5,191
Turned product and screw, nut, and bolt manufacturing	0	1,515	2,209	5,538
Metal heat treating	0	1,161	1,887	3,667
Metal coating and nonprecious engraving	0	3,144	5,928	10,932
Electroplating, anodizing, and coloring metal	0	1,193	1,374	3,414
Valve and fittings, other than plumbing, manufacturing	0	480	830	2,221
Plumbing fixture fitting and trim manufacturing	0	281	1,061	3,528
Ball and roller bearing manufacturing	0	170	342	873
Small arms ammunition manufacturing	0	332	836	1,280
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	751	1,985	3,147

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	531	658	2,540
Other fabricated metal manufacturing	0	998	1,404	3,545
Farm machinery and equipment manufacturing	0	60	84	395
Lawn and garden equipment manufacturing	0	3	5	31
Construction machinery manufacturing	0	525	895	2,919
Mining machinery and equipment manufacturing	0	45	51	156
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	24	29	88
Sawmill, woodworking, and paper machinery	0	16	18	61
Printing machinery and equipment manufacturing	0	27	29	64
All other industrial machinery manufacturing	0	30	35	97
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	6	8	26
Other commercial service industry machinery manufacturing	0	865	1,550	5,491
Air purification and ventilation equipment manufacturing	0	1,401	1,877	5,126
Heating equipment (except warm air furnaces) manufacturing	0	253	339	1,002
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,372	2,286	7,207
Industrial mold manufacturing	0	139	152	325
Special tool, die, jig, and fixture manufacturing	0	385	443	836
Cutting tool and machine tool accessory manufacturing	0	42	45	112
Machine tool manufacturing	0	248	265	579

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	1	1	3
Turbine and turbine generator set units manufacturing	0	3	3	13
Speed changer, industrial high-speed drive, and gear manufacturing	0	85	112	401
Mechanical power transmission equipment manufacturing	0	19	23	81
Other engine equipment manufacturing	0	238	364	2,576
Pump and pumping equipment manufacturing	0	845	1,422	4,329
Air and gas compressor manufacturing	0	13	21	80
Elevator and moving stairway manufacturing	0	61	92	266
Conveyor and conveying equipment manufacturing	0	175	182	517
Overhead cranes, hoists, and monorail systems manufacturing	0	165	280	878
Industrial truck, trailer, and stacker manufacturing	0	95	129	450
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	256	314	730
Packaging machinery manufacturing	0	52	69	172
Industrial process furnace and oven manufacturing	0	27	30	75
Fluid power cylinder and actuator manufacturing	0	735	923	2,593
Fluid power pump and motor manufacturing	0	542	778	2,810
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	251	302	735
Electronic computer manufacturing	0	8	22	107
Computer storage device manufacturing	0	258	977	2,794
Computer terminals and other computer peripheral equipment manufacturing	0	67	153	323

## APPENDIX

Telephone apparatus manufacturing	0	1	2	8
Broadcast and wireless communications equipment manufacturing	0	0	1	2
Other communications equipment manufacturing	0	285	544	1,425
Audio and video equipment manufacturing	0	54	120	457
Printed circuit assembly (electronic assembly) manufacturing	0	31	57	165
Bare printed circuit board manufacturing	0	0	1	2
Semiconductor and related device manufacturing	0	19	42	123
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	26	41	84
Electronic connector manufacturing	0	26	45	100
Other electronic component manufacturing	0	74	89	314
Electromedical and electrotherapeutic apparatus manufacturing	0	1	4	10
Search, detection, and navigation instruments manufacturing	0	1	1	3
Automatic environmental control manufacturing	0	657	953	1,857
Industrial process variable instruments manufacturing	0	35	58	136
Totalizing fluid meter and counting device manufacturing	0	77	218	520
Electricity and signal testing instruments manufacturing	0	1	1	3
Analytical laboratory instrument manufacturing	0	0	0	2
Irradiation apparatus manufacturing	0	0	1	2
Watch, clock, and other measuring and controlling device manufacturing	0	5	11	30
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	3	5	8
Electric lamp bulb and part manufacturing	0	3,337	4,211	8,700
Lighting fixture manufacturing	0	877	1,045	3,277
Small electrical appliance manufacturing	0	227	290	733
Household cooking appliance manufacturing	0	1,085	1,634	4,741
Household refrigerator and home freezer manufacturing	0	1,346	2,238	6,841
Household laundry equipment manufacturing	0	2,598	3,706	14,334
Other major household appliance manufacturing	0	2,984	5,351	12,494
Power, distribution, and specialty transformer manufacturing	0	20	24	61
Motor and generator manufacturing	0	276	329	1,423
Switchgear and switchboard apparatus manufacturing	0	1,034	1,327	4,409
Relay and industrial control manufacturing	0	286	326	912
Storage battery manufacturing	0	251	299	1,113
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	33	42	194
Other communication and energy wire manufacturing	0	469	614	2,717
Wiring device manufacturing	0	2,383	3,207	9,225
Carbon and graphite product manufacturing	0	17	19	71
All other miscellaneous electrical equipment and component manufacturing	0	4	4	12
Automobile manufacturing	0	1,760	3,528	25,511
Light truck and utility vehicle manufacturing	0	1,155	2,410	24,030
Heavy duty truck manufacturing	0	0	0	2
Motor vehicle body manufacturing	0	87	102	411
Truck trailer manufacturing	0	3	3	12
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	226	235	742
Motor vehicle gasoline engine and engine parts manufacturing	0	1,240	1,525	9,865



## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	1,091	1,221	6,110
Motor vehicle transmission and power train parts manufacturing	0	2,733	3,562	17,127
Motor vehicle seating and interior trim manufacturing	0	638	749	5,172
Motor vehicle metal stamping	0	3,253	3,812	15,823
Other motor vehicle parts manufacturing	0	3,097	3,479	21,626
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	2,740	3,727	16,685
Aircraft manufacturing	0	0	0	2
Aircraft engine and engine parts manufacturing	0	203	426	1,241
Other aircraft parts and auxiliary equipment manufacturing	0	19	28	78
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	2	3	25
Ship building and repairing	0	129	161	371
Boat building	0	44	98	1,263
Motorcycle, bicycle, and parts manufacturing	0	(0)	36	178
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	55	118	707
Wood kitchen cabinet and countertop manufacturing	0	1,819	2,306	5,731
Upholstered household furniture manufacturing	0	16	22	99
Nonupholstered wood household furniture manufacturing	0	59	66	240
Other household nonupholstered furniture manufacturing	0	16	24	98
Institutional furniture manufacturing	0	17,734	19,455	52,462
Wood office furniture manufacturing	0	225	331	937

## APPENDIX

Custom architectural woodwork and millwork	0	28	27	92
Office furniture, except wood, manufacturing	0	81	133	453
Showcase, partition, shelving, and locker manufacturing	0	421	531	1,624
Mattress manufacturing	0	308	549	2,129
Blind and shade manufacturing	0	1	1	8
Surgical and medical instrument manufacturing	0	12	16	59
Surgical appliance and supplies manufacturing	0	403	579	1,879
Dental equipment and supplies manufacturing	0	35	44	115
Ophthalmic goods manufacturing	0	81	118	346
Dental laboratories	0	196	181	327
Jewelry and silverware manufacturing	0	157	233	614
Sporting and athletic goods manufacturing	0	251	285	1,006
Doll, toy, and game manufacturing	0	93	97	515
Office supplies (except paper) manufacturing	0	152	176	470
Sign manufacturing	0	566	426	1,056
Gasket, packing, and sealing device manufacturing	0	269	290	736
Musical instrument manufacturing	0	74	76	238
Fasteners, buttons, needles, and pins manufacturing	0	370	404	679
Broom, brush, and mop manufacturing	0	214	270	741
Burial casket manufacturing	0	61	67	162
All other miscellaneous manufacturing	0	378	425	1,279
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,427	6,207	13,391
Wholesale - Professional and commercial equipment and supplies	0	22,475	41,181	70,085
Wholesale - Household appliances and electrical and electronic goods	0	12,947	32,374	69,003
Wholesale - Machinery, equipment, and supplies	0	28,582	54,391	95,234
Wholesale - Other durable goods merchant wholesalers	1	75,704	127,939	248,170

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	14,608	45,463	86,668
Wholesale - Grocery and related product wholesalers	0	17,966	25,604	50,073
Wholesale - Petroleum and petroleum products	0	8,012	139,636	159,353
Wholesale - Other nondurable goods merchant wholesalers	1	35,971	81,558	152,899
Wholesale - Wholesale electronic markets and agents and brokers	0	34,269	17,825	20,775
Retail - Motor vehicle and parts dealers	0	21,836	32,948	49,473
Retail - Furniture and home furnishings stores	0	10,899	13,832	24,007
Retail - Electronics and appliance stores	0	12,424	12,460	21,541
Retail - Building material and garden equipment and supplies stores	3	102,459	181,426	270,226
Retail - Food and beverage stores	1	33,012	45,899	80,354
Retail - Health and personal care stores	1	29,477	35,105	53,308
Retail - Gasoline stores	0	13,619	23,521	47,689
Retail - Clothing and clothing accessories stores	1	11,981	19,071	43,813
Retail - Sporting goods, hobby, musical instrument and book stores	0	8,762	11,234	20,103
Retail - General merchandise stores	1	43,209	59,452	99,985
Retail - Miscellaneous store retailers	1	17,937	20,741	38,193
Retail - Nonstore retailers	1	19,247	58,869	118,266
Air transportation	0	4,983	8,730	14,990
Rail transportation	0	11,097	19,921	43,081
Water transportation	0	3,872	5,579	17,481
Truck transportation	2	123,786	139,085	296,367
Transit and ground passenger transportation	0	7,264	8,771	13,394
Pipeline transportation	0	5,274	11,435	15,559
Scenic and sightseeing transportation and support activities for transportation	0	25,111	28,140	57,606
Couriers and messengers	0	23,919	31,171	44,998
Warehousing and storage	1	42,510	46,179	95,119

## APPENDIX

Newspaper publishers	0	4,726	8,082	11,011
Periodical publishers	0	2,347	3,728	5,833
Book publishers	0	1,569	5,611	9,484
Directory, mailing list, and other publishers	0	624	2,340	3,565
Greeting card publishing	0	0	0	0
Software publishers	0	2,778	7,712	10,415
Motion picture and video industries	0	4,895	7,872	22,542
Sound recording industries	0	696	2,937	4,921
Radio and television broadcasting	0	25,094	21,716	54,367
Cable and other subscription programming	0	369	957	2,622
Wired telecommunications carriers	0	17,124	40,964	84,934
Wireless telecommunications carriers (except satellite)	0	9,124	36,392	102,578
Satellite, telecommunications resellers, and all other telecommunications	0	3,395	3,697	8,158
Data processing, hosting, and related services	0	12,107	23,745	56,234
News syndicates, libraries, archives and all other information services	0	521	732	1,523
Internet publishing and broadcasting and web search portals	0	6,076	14,925	48,217
Nondepository credit intermediation and related activities	0	28,156	37,133	70,212
Securities and commodity contracts intermediation and brokerage	0	48,857	48,536	93,706
Monetary authorities and depository credit intermediation	1	71,810	158,944	311,900
Other financial investment activities	1	25,952	30,719	87,307
Direct life insurance carriers	0	5,224	9,529	13,813
Insurance carriers, except direct life	0	41,324	114,025	229,211
Insurance agencies, brokerages, and related activities	0	30,388	43,060	106,709
Funds, trusts, and other financial vehicles	0	8,631	10,993	65,449
Other real estate	2	63,686	174,619	437,689
Tenant-occupied housing	0	11,606	135,968	154,886

## APPENDIX

Owner-occupied dwellings	0	0	496,646	627,506
Automotive equipment rental and leasing	0	5,235	20,199	28,493
General and consumer goods rental except video tapes and discs	0	8,885	11,435	18,969
Video tape and disc rental	0	1,895	3,175	5,210
Commercial and industrial machinery and equipment rental and leasing	0	30,648	83,926	126,756
Lessors of nonfinancial intangible assets	0	(6)	4,201	6,539
Legal services	1	49,729	86,846	136,508
Accounting, tax preparation, bookkeeping, and payroll services	1	50,699	61,457	87,386
Architectural, engineering, and related services	1	76,966	85,521	159,749
Specialized design services	0	6,287	6,545	8,227
Custom computer programming services	0	8,986	10,255	15,615
Computer systems design services	0	16,824	17,375	24,437
Other computer related services, including facilities management	0	6,038	8,732	17,798
Management consulting services	1	37,704	36,919	61,996
Environmental and other technical consulting services	0	10,734	8,689	13,891
Scientific research and development services	1	95,469	124,828	282,294
Advertising, public relations, and related services	0	18,793	23,443	44,674
Photographic services	0	5,535	2,055	4,211
Veterinary services	0	6,105	7,737	12,373
Marketing research and all other miscellaneous professional, scientific, and technical services	0	18,742	16,425	24,930
Management of companies and enterprises	1	89,742	112,901	166,535
Office administrative services	0	31,028	9,080	25,984
Facilities support services	0	2,139	2,825	6,694
Employment services	2	75,162	117,496	189,317
Business support services	1	22,349	19,004	34,362
Travel arrangement and reservation services	0	2,359	3,143	7,616
Investigation and security services	0	13,283	13,589	20,420
Services to buildings	1	34,469	35,722	55,785

## APPENDIX

Landscape and horticultural services	1	18,494	19,442	31,978
Other support services	0	7,893	10,003	20,092
Waste management and remediation services	0	13,414	25,206	44,468
Elementary and secondary schools	0	9,157	7,339	9,398
Junior colleges, colleges, universities, and professional schools	1	30,513	36,623	59,360
Other educational services	0	11,507	9,820	21,396
Offices of physicians	1	160,535	188,979	276,549
Offices of dentists	0	28,627	35,735	55,619
Offices of other health practitioners	1	39,172	36,101	50,202
Outpatient care centers	0	35,636	37,387	65,634
Medical and diagnostic laboratories	0	8,531	12,947	21,364
Home health care services	1	33,916	24,360	31,862
Other ambulatory health care services	0	10,258	11,244	18,477
Hospitals	3	264,142	305,467	590,003
Nursing and community care facilities	1	39,610	45,660	78,080
Residential mental retardation, mental health, substance abuse and other facilities	0	17,225	18,423	26,869
Individual and family services	2	43,748	39,484	59,790
Child day care services	1	15,600	18,256	25,644
Community food, housing, and other relief services, including rehabilitation services	0	12,708	13,941	29,717
Performing arts companies	0	2,441	3,261	6,886
Commercial Sports Except Racing	0	4,883	5,274	14,037
Racing and Track Operation	0	1,636	2,681	3,702
Independent artists, writers, and performers	0	4,479	4,800	6,908
Promoters of performing arts and sports and agents for public figures	0	2,937	4,466	13,551
Museums, historical sites, zoos, and parks	0	2,978	3,262	6,278
Amusement parks and arcades	0	798	1,919	2,894
Gambling industries (except casino hotels)	0	5,624	12,375	19,836
Other amusement and recreation industries	0	4,541	5,616	11,577

## APPENDIX

Fitness and recreational sports centers	0	3,756	5,746	10,937
Bowling centers	0	648	970	1,929
Hotels and motels, including casino hotels	0	5,496	9,947	15,435
Other accommodations	0	2,429	2,888	3,999
Full-service restaurants	2	56,933	82,591	148,999
Limited-service restaurants	2	48,317	73,342	162,520
All other food and drinking places	1	37,596	47,583	69,001
Automotive repair and maintenance, except car washes	1	43,591	50,453	77,427
Car washes	0	18,675	28,032	43,485
Electronic and precision equipment repair and maintenance	0	8,179	11,050	19,488
Commercial and industrial machinery and equipment repair and maintenance	0	22,147	25,957	41,778
Personal and household goods repair and maintenance	0	13,021	10,121	13,808
Personal care services	1	20,106	15,287	20,380
Death care services	0	2,195	2,577	4,244
Dry-cleaning and laundry services	0	4,402	4,645	6,682
Other personal services	1	16,157	13,190	18,185
Religious organizations	1	62,315	24,464	109,918
Grantmaking, giving, and social advocacy organizations	0	12,455	30,949	56,680
Business and professional associations	0	10,250	13,890	26,156
Labor and civic organizations	0	7,356	15,067	31,747
Private households	0	5,839	5,839	5,839
Postal service	0	21,353	21,373	23,750
Federal electric utilities	0	2,284	4,350	17,340
Other federal government enterprises	0	1,171	(715)	2,203
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	2,025	2,361	3,677
Local government passenger transit	0	10,312	(6,435)	4,968
Local government electric utilities	0	4,303	10,604	21,052
Other local government enterprises	0	34,143	66,730	121,963

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	3	242,351	534,416	1,117,446

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 20. Louisiana

**Table 407: Detailed NASA Impacts by Types of Impact, Louisiana.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>2,474</i>	<i>141,466,875</i>	<i>205,085,238</i>	<i>425,076,081</i>
Oilseed farming	0	76,644	158,444	313,410
Grain farming	1	46,859	88,973	400,631
Vegetable and melon farming	0	7,787	11,550	45,455
Fruit farming	0	1,240	1,993	6,529
Tree nut farming	0	2,269	2,382	6,278
Greenhouse, nursery, and floriculture production	0	10,056	13,202	48,566
Tobacco farming	0	0	0	0
Cotton farming	0	3,142	4,214	14,827
Sugarcane and sugar beet farming	1	15,332	22,349	84,640
All other crop farming	4	22,137	27,420	100,464
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	9,868	22,450	112,305



## APPENDIX

Dairy cattle and milk production	0	1,388	2,579	23,714
Poultry and egg production	0	5,198	7,215	152,535
Animal production, except cattle and poultry and eggs	2	58,739	137,472	283,429
Forestry, forest products, and timber tract production	0	5,643	5,399	7,528
Commercial logging	3	124,135	115,791	199,934
Commercial fishing	1	56,442	34,081	54,626
Commercial hunting and trapping	0	22,328	14,769	16,920
Support activities for agriculture and forestry	2	61,335	47,643	60,272
Oil and gas extraction	3	199,932	772,185	1,481,226
Coal mining	0	29,988	65,308	101,980
Copper, nickel, lead, and zinc mining	0	54,326	371,762	598,593
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	2,898	7,455	13,797
Sand and gravel mining	1	(1,291)	18,780	80,724
Other clay, ceramic, refractory minerals mining	0	(904)	(427)	2,009
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	4,255	7,213	10,392
Other nonmetallic minerals	0	(6,255)	(3,617)	4,455
Drilling oil and gas wells	0	92	201	506
Support activities for oil and gas operations	0	3,626	5,544	13,009
Metal mining services	0	6,628	28,532	61,024
Other nonmetallic minerals services	0	1,615	6,702	13,656
Electric power generation - Hydroelectric	0	14,807	76,145	168,929
Electric power generation - Fossil fuel	4	536,248	2,933,133	6,194,365
Electric power generation - Nuclear	5	835,856	2,504,153	4,971,909
Electric power generation - Solar	0	3,195	12,527	25,663
Electric power generation - Wind	0	1,873	24,509	45,154

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	3,843	24,329	89,637
Electric power generation - All other	0	3,352	2,882	8,554
Electric power transmission and distribution	11	1,376,630	7,269,450	16,107,964
Natural gas distribution	0	43,732	184,474	365,540
Water, sewage and other systems	9	355,707	1,065,518	2,131,026
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	290	18,583,205	5,437,108	18,890,566
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	10	576,689	720,978	1,814,161
Maintenance and repair construction of residential structures	3	195,246	267,539	670,843
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1,052	451	1,411
Dog and cat food manufacturing	0	210	783	6,456
Other animal food manufacturing	0	8,365	16,491	112,941
Flour milling	0	3,353	8,339	46,769
Rice milling	0	2,318	4,805	34,808
Malt manufacturing	0	3,187	8,977	49,961

## APPENDIX

Wet corn milling	0	1,244	4,104	25,260
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	1,884	4,718	41,414
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	7,423	22,181	104,054
Nonchocolate confectionery manufacturing	0	645	1,042	6,699
Chocolate and confectionery manufacturing from cacao beans	0	483	1,341	5,774
Confectionery manufacturing from purchased chocolate	0	3,659	5,902	30,780
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	9,070	15,905	62,608
Canned fruits and vegetables manufacturing	0	5,277	11,585	41,536
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	8,361	18,869	60,999
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	2,330	7,438	39,205
Fluid milk manufacturing	0	13,818	26,741	172,399
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	276	440	3,287
Frozen cakes and other pastries manufacturing	1	14,759	23,198	43,307
Poultry processing	1	37,526	56,081	307,800
Animal, except poultry, slaughtering	0	4,767	7,089	72,812
Meat processed from carcasses	0	21,108	24,447	237,106
Rendering and meat byproduct processing	0	2,387	2,576	16,554
Seafood product preparation and packaging	0	27,244	36,441	197,877
Bread and bakery product, except frozen, manufacturing	2	59,662	88,163	221,018
Cookie and cracker manufacturing	0	5,036	7,996	32,954
Dry pasta, mixes, and dough manufacturing	0	2,708	8,117	26,474
Tortilla manufacturing	0	1,993	2,635	11,593

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	5,828	10,310	40,264
Other snack food manufacturing	0	4,918	6,390	35,985
Coffee and tea manufacturing	0	13,180	30,742	108,909
Flavoring syrup and concentrate manufacturing	0	1,580	14,523	47,717
Mayonnaise, dressing, and sauce manufacturing	0	3,804	8,910	33,035
Spice and extract manufacturing	0	3,865	6,888	31,986
All other food manufacturing	0	2,748	4,085	23,002
Bottled and canned soft drinks & water	1	45,965	119,254	479,753
Manufactured ice	0	3,144	2,346	10,509
Breweries	0	9,447	31,012	96,914
Wineries	0	80	169	700
Distilleries	0	2,171	16,941	40,432
Tobacco product manufacturing	0	129	5,779	13,662
Fiber, yarn, and thread mills	0	322	1,241	10,922
Broadwoven fabric mills	0	2,965	5,411	13,096
Narrow fabric mills and schiffli machine embroidery	0	195	238	880
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	91	146	451
Textile and fabric finishing mills	0	109	185	990
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	299	596	3,060
Textile bag and canvas mills	0	2,470	3,606	10,251
Rope, cordage, twine, tire cord and tire fabric mills	0	3,660	7,905	20,277
Other textile product mills	0	1,361	1,972	6,465
Hosiery and sock mills	0	131	275	682
Other apparel knitting mills	0	115	249	650
Cut and sew apparel contractors	0	171	235	808
Mens and boys cut and sew apparel manufacturing	0	581	1,030	3,211
Womens and girls cut and sew apparel manufacturing	0	296	682	2,667
Other cut and sew apparel manufacturing	0	303	563	2,436
Apparel accessories and other apparel manufacturing	0	195	367	1,480
Leather and hide tanning and finishing	0	322	981	3,426

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	58	67	417
Sawmills	2	89,814	159,722	472,666
Wood preservation	0	7,572	35,335	93,535
Veneer and plywood manufacturing	2	133,155	241,011	631,666
Engineered wood member and truss manufacturing	1	38,670	63,194	144,542
Reconstituted wood product manufacturing	1	34,919	126,754	350,751
Wood windows and door manufacturing	1	25,661	42,236	121,756
Cut stock, resawing lumber, and planing	0	3,163	7,325	21,277
Other millwork, including flooring	0	6,889	12,338	43,792
Wood container and pallet manufacturing	0	11,351	15,036	46,111
Manufactured home (mobile home) manufacturing	0	71	148	309
Prefabricated wood building manufacturing	0	4,258	5,469	20,588
All other miscellaneous wood product manufacturing	1	67,613	99,616	266,940
Pulp mills	0	0	0	0
Paper mills	1	87,268	293,161	752,608
Paperboard mills	1	66,624	224,055	599,397
Paperboard container manufacturing	1	61,919	113,371	380,110
Paper bag and coated and treated paper manufacturing	0	14,390	33,554	114,260
Stationery product manufacturing	0	1,851	3,207	15,325
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	2,420	4,355	15,007
Printing	2	102,561	146,273	364,862
Support activities for printing	0	764	1,083	2,229
Petroleum refineries	1	184,098	1,801,629	7,443,131
Asphalt paving mixture and block manufacturing	0	20,809	36,527	176,040
Asphalt shingle and coating materials manufacturing	0	11,377	40,219	84,819
Petroleum lubricating oil and grease manufacturing	0	44,757	181,492	552,736

## APPENDIX

All other petroleum and coal products manufacturing	0	11,567	41,293	99,173
Petrochemical manufacturing	0	38,082	366,774	1,403,314
Industrial gas manufacturing	0	56,874	161,644	377,255
Synthetic dye and pigment manufacturing	0	29,943	73,002	173,350
Other basic inorganic chemical manufacturing	1	103,285	247,621	640,392
Other basic organic chemical manufacturing	1	128,727	283,041	1,361,511
Plastics material and resin manufacturing	0	63,469	112,138	556,998
Synthetic rubber manufacturing	0	25,709	43,158	130,185
Artificial and synthetic fibers and filaments manufacturing	0	625	1,019	4,307
Nitrogenous fertilizer manufacturing	0	35,916	94,415	199,759
Phosphatic fertilizer manufacturing	0	9,186	25,751	66,203
Fertilizer mixing	0	844	1,664	4,588
Pesticide and other agricultural chemical manufacturing	0	20,852	77,853	220,249
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	3,607	15,971	52,358
In-vitro diagnostic substance manufacturing	0	18	28	100
Biological product (except diagnostic) manufacturing	0	15	32	149
Paint and coating manufacturing	0	6,659	13,933	53,425
Adhesive manufacturing	0	7,649	13,297	47,127
Soap and other detergent manufacturing	0	39,432	147,018	391,001
Polish and other sanitation good manufacturing	0	717	830	4,651
Surface active agent manufacturing	0	5,661	20,454	45,658
Toilet preparation manufacturing	0	2,824	7,915	25,735
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	128	155	762
Custom compounding of purchased resins	0	2,750	5,252	23,903
Photographic film and chemical manufacturing	0	3,576	8,273	32,842
Other miscellaneous chemical product manufacturing	0	25,835	41,725	124,342

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	6,760	12,704	45,874
Unlaminated plastics profile shape manufacturing	0	25	61	204
Plastics pipe and pipe fitting manufacturing	0	8,594	23,891	71,025
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	354	746	1,954
Polystyrene foam product manufacturing	0	330	623	2,063
Urethane and other foam product (except polystyrene) manufacturing	0	647	1,176	4,176
Plastics bottle manufacturing	0	5,957	11,320	40,495
Other plastics product manufacturing	0	10,286	16,848	54,553
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	17,450	31,644	67,484
Other rubber product manufacturing	0	3,687	6,044	16,974
Pottery, ceramics, and plumbing fixture manufacturing	0	(366)	(195)	2,720
Brick, tile, and other structural clay product manufacturing	0	28,258	55,848	111,208
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	18,098	28,482	63,505
Glass container manufacturing	0	4,921	9,303	23,640
Glass product manufacturing made of purchased glass	0	612	1,342	6,056
Cement manufacturing	0	7,622	24,700	96,136
Ready-mix concrete manufacturing	2	116,258	214,186	735,943
Concrete block and brick manufacturing	1	26,520	54,585	155,861
Concrete pipe manufacturing	0	30,246	53,783	138,803
Other concrete product manufacturing	2	131,200	205,320	530,924
Lime manufacturing	0	69	888	6,838
Gypsum product manufacturing	2	167,207	493,739	1,201,537
Abrasive product manufacturing	0	1,590	5,842	11,322
Cut stone and stone product manufacturing	0	6,074	7,555	20,968

## APPENDIX

Ground or treated mineral and earth manufacturing	0	23,094	78,812	183,032
Mineral wool manufacturing	0	4,352	11,619	29,468
Miscellaneous nonmetallic mineral products manufacturing	0	9,513	27,858	80,039
Iron and steel mills and ferroalloy manufacturing	0	28,739	40,620	210,259
Iron, steel pipe and tube manufacturing from purchased steel	0	38,846	50,596	196,960
Rolled steel shape manufacturing	0	1,114	2,013	13,993
Steel wire drawing	0	(151)	(86)	975
Alumina refining and primary aluminum production	0	6,851	12,079	74,812
Secondary smelting and alloying of aluminum	0	169	251	2,224
Aluminum sheet, plate, and foil manufacturing	0	(626)	(394)	5,326
Other aluminum rolling, drawing and extruding	0	2,964	3,756	17,819
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	(37)	(35)	65
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	228	503	2,082
Nonferrous metal foundries	0	1,181	1,573	3,603
Custom roll forming	0	1,901	3,032	10,915
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	144	210	662
Nonferrous forging	0	429	548	1,358
Cutlery, utensil, pot, and pan manufacturing	0	(26)	239	1,384
Handtool manufacturing	0	23	64	261
Prefabricated metal buildings and components manufacturing	1	55,208	82,470	267,288
Fabricated structural metal manufacturing	5	332,351	514,855	1,561,480
Plate work manufacturing	0	15,901	16,588	51,183
Metal window and door manufacturing	0	5,320	8,851	29,004



## APPENDIX

Sheet metal work manufacturing	0	9,421	12,598	34,289
Ornamental and architectural metal work manufacturing	0	16,773	23,631	69,906
Power boiler and heat exchanger manufacturing	0	1,843	2,625	6,123
Metal tank (heavy gauge) manufacturing	0	31,755	39,573	107,566
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	305	407	2,241
Hardware manufacturing	0	7	62	833
Spring and wire product manufacturing	0	2,472	3,581	11,731
Machine shops	1	67,888	80,244	154,792
Turned product and screw, nut, and bolt manufacturing	0	584	900	3,039
Metal heat treating	0	13,188	21,189	42,843
Metal coating and nonprecious engraving	0	14,976	28,192	60,044
Electroplating, anodizing, and coloring metal	0	1,957	2,291	6,542
Valve and fittings, other than plumbing, manufacturing	0	25,946	43,860	106,786
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	95	515	1,751
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	49	146	348
Fabricated pipe and pipe fitting manufacturing	1	44,701	52,771	122,008
Other fabricated metal manufacturing	2	93,492	131,133	390,763
Farm machinery and equipment manufacturing	0	928	1,322	3,898
Lawn and garden equipment manufacturing	0	566	986	3,537
Construction machinery manufacturing	0	216	391	1,172
Mining machinery and equipment manufacturing	0	13	14	33

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	4,235	4,943	14,183
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	171	209	585
Sawmill, woodworking, and paper machinery	0	553	604	1,711
Printing machinery and equipment manufacturing	0	39	43	109
All other industrial machinery manufacturing	0	132	159	432
Optical instrument and lens manufacturing	0	12	18	47
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	9,973	19,113	56,317
Air purification and ventilation equipment manufacturing	0	118	135	312
Heating equipment (except warm air furnaces) manufacturing	0	645	929	2,296
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4,741	8,857	31,754
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	225	280	509
Cutting tool and machine tool accessory manufacturing	0	83	88	183
Machine tool manufacturing	0	418	455	1,127
Rolling mill and other metalworking machinery manufacturing	0	6	7	13
Turbine and turbine generator set units manufacturing	0	27	28	98
Speed changer, industrial high-speed drive, and gear manufacturing	0	192	229	742
Mechanical power transmission equipment manufacturing	0	149	211	664
Other engine equipment manufacturing	0	413	721	3,706
Pump and pumping equipment manufacturing	0	1,936	3,318	9,451

## APPENDIX

Air and gas compressor manufacturing	0	169	260	830
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	218	226	511
Overhead cranes, hoists, and monorail systems manufacturing	0	6,470	11,453	33,998
Industrial truck, trailer, and stacker manufacturing	0	782	1,188	3,138
Power-driven handtool manufacturing	0	128	278	755
Welding and soldering equipment manufacturing	0	184	195	566
Packaging machinery manufacturing	0	33	48	138
Industrial process furnace and oven manufacturing	0	29	34	84
Fluid power cylinder and actuator manufacturing	0	1,061	1,244	2,847
Fluid power pump and motor manufacturing	0	1,140	1,673	5,087
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	806	1,001	2,700
Electronic computer manufacturing	0	8	15	104
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	2	5	48
Telephone apparatus manufacturing	0	59	89	488
Broadcast and wireless communications equipment manufacturing	0	35	45	152
Other communications equipment manufacturing	0	(11)	(7)	138
Audio and video equipment manufacturing	0	134	205	1,175
Printed circuit assembly (electronic assembly) manufacturing	0	589	745	2,759
Bare printed circuit board manufacturing	0	0	0	0

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Semiconductor and related device manufacturing	0	48	85	702
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	346	435	1,085
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	67	74	300
Electromedical and electrotherapeutic apparatus manufacturing	0	24	39	120
Search, detection, and navigation instruments manufacturing	0	159	203	464
Automatic environmental control manufacturing	0	193	244	871
Industrial process variable instruments manufacturing	0	2,843	3,596	9,151
Totalizing fluid meter and counting device manufacturing	0	428	687	1,904
Electricity and signal testing instruments manufacturing	0	22	28	84
Analytical laboratory instrument manufacturing	0	8	12	47
Irradiation apparatus manufacturing	0	9	15	64
Watch, clock, and other measuring and controlling device manufacturing	0	92	129	356
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	(0)	10	228
Electric lamp bulb and part manufacturing	0	745	1,138	2,565
Lighting fixture manufacturing	0	2,957	4,136	12,826
Small electrical appliance manufacturing	0	263	466	1,439
Household cooking appliance manufacturing	0	308	614	2,919
Household refrigerator and home freezer manufacturing	0	247	561	2,279
Household laundry equipment manufacturing	0	313	571	3,602

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Other major household appliance manufacturing	0	117	232	1,132
Power, distribution, and specialty transformer manufacturing	0	5,301	7,437	20,534
Motor and generator manufacturing	0	1,415	2,052	6,419
Switchgear and switchboard apparatus manufacturing	0	26,636	41,355	118,307
Relay and industrial control manufacturing	0	1,280	1,625	4,669
Storage battery manufacturing	0	639	951	2,504
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	3,534	5,283	19,261
Other communication and energy wire manufacturing	0	496	816	3,013
Wiring device manufacturing	0	88	143	703
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	17	19	62
Automobile manufacturing	0	(705)	(531)	313
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	50	144	532
Motor vehicle body manufacturing	0	1,200	1,660	5,105
Truck trailer manufacturing	0	5	13	94
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	(3,113)	(2,694)	13,582
Motor vehicle gasoline engine and engine parts manufacturing	0	2,089	3,609	16,341
Motor vehicle electrical and electronic equipment manufacturing	0	(136)	689	6,901
Motor vehicle transmission and power train parts manufacturing	0	192	1,015	7,540
Motor vehicle seating and interior trim manufacturing	0	59	100	629
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	(1,249)	1,406	25,866
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0

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Aircraft manufacturing	6	766,707	1,700,451	5,012,826
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	1,086	1,971	4,016
Guided missile and space vehicle manufacturing	0	18	27	58
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	269	404	820
Railroad rolling stock manufacturing	0	186	328	1,359
Ship building and repairing	0	7,244	9,842	22,370
Boat building	1	36,199	53,283	159,811
Motorcycle, bicycle, and parts manufacturing	0	46	195	481
Military armored vehicle, tank, and tank component manufacturing	0	2,310	6,147	17,785
All other transportation equipment manufacturing	0	3,690	8,006	24,932
Wood kitchen cabinet and countertop manufacturing	0	11,397	14,536	42,110
Upholstered household furniture manufacturing	0	194	244	982
Nonupholstered wood household furniture manufacturing	0	1,314	1,428	5,059
Other household nonupholstered furniture manufacturing	0	14	18	165
Institutional furniture manufacturing	0	95	101	241
Wood office furniture manufacturing	0	19	24	100
Custom architectural woodwork and millwork	0	287	276	1,150
Office furniture, except wood, manufacturing	0	696	1,050	3,427
Showcase, partition, shelving, and locker manufacturing	0	117	149	541
Mattress manufacturing	0	75	131	728
Blind and shade manufacturing	0	99	102	501
Surgical and medical instrument manufacturing	0	11	52	1,091
Surgical appliance and supplies manufacturing	0	887	1,787	5,308

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Dental equipment and supplies manufacturing	0	47	80	156
Ophthalmic goods manufacturing	0	117	244	632
Dental laboratories	0	1,579	1,513	3,129
Jewelry and silverware manufacturing	0	14,825	20,614	45,573
Sporting and athletic goods manufacturing	0	1,112	1,618	8,486
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	893	1,183	4,320
Sign manufacturing	0	7,445	6,107	22,284
Gasket, packing, and sealing device manufacturing	0	8,383	10,627	25,429
Musical instrument manufacturing	0	23	27	300
Fasteners, buttons, needles, and pins manufacturing	0	238	307	942
Broom, brush, and mop manufacturing	0	287	500	3,233
Burial casket manufacturing	0	442	552	2,229
All other miscellaneous manufacturing	0	16,756	20,417	48,993
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	74,487	204,832	446,951
Wholesale - Professional and commercial equipment and supplies	3	273,303	521,807	935,280
Wholesale - Household appliances and electrical and electronic goods	4	355,163	948,578	1,965,722
Wholesale - Machinery, equipment, and supplies	6	470,583	925,152	1,567,243
Wholesale - Other durable goods merchant wholesalers	12	872,654	1,509,696	2,888,399
Wholesale - Drugs and druggists' sundries	1	215,074	737,195	1,309,826
Wholesale - Grocery and related product wholesalers	5	318,876	475,948	941,855
Wholesale - Petroleum and petroleum products	1	76,003	881,374	1,033,169
Wholesale - Other nondurable goods merchant wholesalers	6	449,764	998,856	1,814,387
Wholesale - Wholesale electronic markets and agents and brokers	6	580,156	362,017	407,354
Retail - Motor vehicle and parts dealers	7	386,872	705,460	996,872

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Retail - Furniture and home furnishings stores	5	190,359	278,746	459,723
Retail - Electronics and appliance stores	5	230,069	294,049	477,339
Retail - Building material and garden equipment and supplies stores	13	560,411	1,168,411	1,620,261
Retail - Food and beverage stores	22	688,487	1,052,685	1,685,612
Retail - Health and personal care stores	11	507,538	657,060	977,805
Retail - Gasoline stores	7	210,575	439,382	792,913
Retail - Clothing and clothing accessories stores	12	263,659	520,882	1,057,286
Retail - Sporting goods, hobby, musical instrument and book stores	7	150,222	224,068	378,726
Retail - General merchandise stores	24	698,997	1,150,102	1,814,645
Retail - Miscellaneous store retailers	15	297,920	412,324	681,007
Retail - Nonstore retailers	10	118,194	524,575	1,263,857
Air transportation	2	338,213	637,680	954,705
Rail transportation	1	162,161	325,627	630,981
Water transportation	1	43,064	78,732	369,612
Truck transportation	12	679,742	880,802	1,944,077
Transit and ground passenger transportation	13	278,563	337,565	531,386
Pipeline transportation	1	167,905	301,604	393,452
Scenic and sightseeing transportation and support activities for transportation	6	451,989	541,238	1,064,980
Couriers and messengers	5	178,684	289,272	528,191
Warehousing and storage	7	476,383	670,784	1,110,508
Newspaper publishers	2	78,524	138,726	183,396
Periodical publishers	0	17,185	28,399	62,137
Book publishers	0	7,243	26,863	46,035
Directory, mailing list, and other publishers	0	9,337	34,551	58,278
Greeting card publishing	0	1,232	5,324	7,635
Software publishers	1	89,527	255,788	356,749
Motion picture and video industries	3	184,581	726,161	1,024,517
Sound recording industries	0	4,929	100,236	123,597
Radio and television broadcasting	3	223,738	148,147	880,305



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Cable and other subscription programming	0	5,451	39,031	125,270
Wired telecommunications carriers	4	387,185	998,069	2,053,896
Wireless telecommunications carriers (except satellite)	1	98,201	563,840	1,627,117
Satellite, telecommunications resellers, and all other telecommunications	1	60,215	84,225	235,507
Data processing, hosting, and related services	3	220,774	480,351	1,231,789
News syndicates, libraries, archives and all other information services	0	7,533	12,488	26,841
Internet publishing and broadcasting and web search portals	0	26,295	80,068	331,218
Nondepository credit intermediation and related activities	8	497,314	657,940	1,297,398
Securities and commodity contracts intermediation and brokerage	5	426,557	440,508	1,199,940
Monetary authorities and depository credit intermediation	16	1,266,801	3,234,298	5,642,121
Other financial investment activities	13	134,015	192,647	1,329,228
Direct life insurance carriers	1	141,555	408,973	501,883
Insurance carriers, except direct life	3	334,819	1,874,567	3,006,999
Insurance agencies, brokerages, and related activities	9	507,079	978,480	2,138,931
Funds, trusts, and other financial vehicles	4	158,161	237,060	1,325,878
Other real estate	61	1,163,969	3,186,752	10,230,640
Tenant-occupied housing	10	173,916	2,314,124	2,691,187
Owner-occupied dwellings	0	0	8,261,363	10,438,136
Automotive equipment rental and leasing	3	93,924	356,130	573,392
General and consumer goods rental except video tapes and discs	3	149,480	208,593	339,559
Video tape and disc rental	1	33,251	62,256	96,477
Commercial and industrial machinery and equipment rental and leasing	4	317,379	1,021,538	1,485,438
Lessors of nonfinancial intangible assets	0	21,961	516,720	632,069

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Legal services	16	1,306,997	2,218,776	3,296,090
Accounting, tax preparation, bookkeeping, and payroll services	17	1,150,993	1,389,200	2,055,666
Architectural, engineering, and related services	24	2,264,158	2,564,871	4,510,084
Specialized design services	2	120,398	125,557	157,667
Custom computer programming services	3	218,929	252,239	407,313
Computer systems design services	4	309,926	325,996	459,845
Other computer related services, including facilities management	3	208,807	300,104	632,254
Management consulting services	57	4,346,706	4,293,932	6,964,787
Environmental and other technical consulting services	9	646,598	558,890	856,618
Scientific research and development services	30	1,967,321	2,686,920	6,470,334
Advertising, public relations, and related services	6	439,208	572,809	1,013,708
Photographic services	3	150,059	77,342	128,784
Veterinary services	2	99,703	128,954	220,891
Marketing research and all other miscellaneous professional, scientific, and technical services	40	2,967,217	2,554,574	3,560,652
Management of companies and enterprises	26	2,140,920	2,471,299	4,151,515
Office administrative services	12	766,501	439,312	901,004
Facilities support services	508	17,417,870	25,502,595	67,682,508
Employment services	85	3,991,097	7,142,520	10,220,770
Business support services	11	359,777	337,091	652,810
Travel arrangement and reservation services	1	46,075	66,654	202,828
Investigation and security services	27	771,316	793,743	1,277,761
Services to buildings	30	651,818	685,467	1,235,141
Landscape and horticultural services	14	325,575	350,449	676,017
Other support services	7	290,684	395,841	784,318
Waste management and remediation services	7	484,317	923,241	1,585,738
Elementary and secondary schools	7	338,856	313,906	376,838
Junior colleges, colleges, universities, and professional schools	9	396,113	594,270	851,320
Other educational services	9	192,481	185,483	407,962
Offices of physicians	29	2,651,460	3,230,079	4,961,439
Offices of dentists	8	459,922	605,687	941,548

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Offices of other health practitioners	12	731,613	700,485	970,719
Outpatient care centers	7	420,147	441,682	875,566
Medical and diagnostic laboratories	2	147,668	230,127	407,342
Home health care services	17	853,834	722,353	946,205
Other ambulatory health care services	3	213,654	238,147	379,011
Hospitals	53	4,020,443	4,615,839	9,019,362
Nursing and community care facilities	17	623,378	659,363	1,221,730
Residential mental retardation, mental health, substance abuse and other facilities	6	241,379	247,712	386,915
Individual and family services	23	576,814	555,047	859,317
Child day care services	10	230,850	286,402	405,402
Community food, housing, and other relief services, including rehabilitation services	5	125,439	146,325	366,294
Performing arts companies	2	35,075	86,439	179,877
Commercial Sports Except Racing	2	231,886	280,727	356,574
Racing and Track Operation	1	12,806	39,247	61,651
Independent artists, writers, and performers	10	109,933	241,885	302,910
Promoters of performing arts and sports and agents for public figures	3	57,069	246,936	478,205
Museums, historical sites, zoos, and parks	1	40,223	59,471	99,049
Amusement parks and arcades	0	6,813	13,452	23,423
Gambling industries (except casino hotels)	5	183,821	401,102	654,596
Other amusement and recreation industries	5	76,374	96,820	200,016
Fitness and recreational sports centers	5	67,577	102,617	194,017
Bowling centers	1	14,431	22,866	40,042
Hotels and motels, including casino hotels	5	206,892	426,093	646,258
Other accommodations	1	41,922	56,973	76,066
Full-service restaurants	57	1,272,255	2,018,025	3,568,435
Limited-service restaurants	47	851,568	1,476,987	3,318,616
All other food and drinking places	36	931,695	1,361,738	2,101,818
Automotive repair and maintenance, except car washes	14	639,939	943,798	1,384,499
Car washes	7	326,054	577,993	857,473

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Electronic and precision equipment repair and maintenance	9	487,317	696,850	1,273,516
Commercial and industrial machinery and equipment repair and maintenance	6	454,260	569,491	859,831
Personal and household goods repair and maintenance	26	1,035,555	1,244,393	1,606,675
Personal care services	11	251,524	265,985	346,931
Death care services	1	27,746	44,807	67,909
Dry-cleaning and laundry services	2	74,209	87,261	127,593
Other personal services	12	271,440	305,075	408,964
Religious organizations	13	625,109	624,631	1,518,248
Grantmaking, giving, and social advocacy organizations	2	106,274	637,710	845,973
Business and professional associations	2	120,320	278,728	468,950
Labor and civic organizations	4	84,261	350,922	560,133
Private households	7	112,944	112,944	112,944
Postal service	4	350,562	350,759	388,108
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	15,441	7,588	68,985
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	12,646	14,813	28,464
Local government passenger transit	1	112,905	(59,201)	64,621
Local government electric utilities	1	42,638	113,321	264,074
Other local government enterprises	11	673,714	1,345,359	3,068,777
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	189	30,448,987	38,702,367	79,781,129

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 408: Detailed M2M Program Impacts by Types of Impact, Louisiana.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,220</i>	<i>68,533,320</i>	<i>104,275,457</i>	<i>209,543,236</i>
Oilseed farming	0	33,300	100,061	224,355
Grain farming	1	18,842	39,850	162,842
Vegetable and melon farming	0	3,745	5,822	21,628
Fruit farming	0	771	1,252	3,870
Tree nut farming	0	2,206	2,309	6,010
Greenhouse, nursery, and floriculture production	0	4,317	5,863	21,067
Tobacco farming	0	0	0	0
Cotton farming	0	1,140	1,527	5,334
Sugarcane and sugar beet farming	0	5,515	8,355	29,043
All other crop farming	1	8,264	10,636	37,881
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	4,382	9,587	41,957
Dairy cattle and milk production	0	777	1,491	11,980
Poultry and egg production	0	2,042	2,892	59,935
Animal production, except cattle and poultry and eggs	1	17,455	45,634	96,671
Forestry, forest products, and timber tract production	0	2,926	2,786	3,723
Commercial logging	1	52,953	49,234	79,968
Commercial fishing	0	35,459	16,180	26,178
Commercial hunting and trapping	0	10,724	6,627	6,714
Support activities for agriculture and forestry	1	26,295	20,292	25,541
Oil and gas extraction	1	72,062	369,684	677,810
Coal mining	0	15,300	28,670	50,131
Copper, nickel, lead, and zinc mining	0	17,398	84,415	142,675
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	2,375	2,862	5,451
Sand and gravel mining	0	(1,341)	9,384	33,552
Other clay, ceramic, refractory minerals mining	0	(477)	(175)	834
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	3,574	4,046	5,322
Other nonmetallic minerals	0	(6,780)	(2,062)	2,344
Drilling oil and gas wells	0	32	74	185
Support activities for oil and gas operations	0	1,123	1,792	4,146
Metal mining services	0	1,794	9,852	20,687
Other nonmetallic minerals services	0	455	2,416	4,730
Electric power generation - Hydroelectric	0	21,781	98,442	197,401
Electric power generation - Fossil fuel	3	479,859	2,406,980	4,991,612
Electric power generation - Nuclear	4	652,478	1,889,562	3,732,884
Electric power generation - Solar	0	2,635	9,703	19,186
Electric power generation - Wind	0	1,630	20,132	34,294
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	7,325	34,415	120,247
Electric power generation - All other	0	6,908	4,269	10,856
Electric power transmission and distribution	9	1,127,230	5,828,977	12,750,462
Natural gas distribution	0	24,721	107,940	187,570
Water, sewage and other systems	7	475,082	1,039,187	1,833,545
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	96	6,777,889	1,643,587	6,011,120
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	5	301,933	379,105	926,917
Maintenance and repair construction of residential structures	2	92,548	127,729	309,578
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	467	194	605
Dog and cat food manufacturing	0	85	329	2,605
Other animal food manufacturing	0	3,864	7,975	51,959
Flour milling	0	1,334	3,355	19,096
Rice milling	0	1,548	3,072	23,041
Malt manufacturing	0	1,375	4,355	18,269
Wet corn milling	0	858	3,090	19,084
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	1,205	3,124	25,228
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	4,563	13,729	63,880
Nonchocolate confectionery manufacturing	0	364	580	3,417
Chocolate and confectionery manufacturing from cacao beans	0	452	1,264	5,037
Confectionery manufacturing from purchased chocolate	0	1,928	3,143	15,144
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	5,140	8,946	33,116
Canned fruits and vegetables manufacturing	0	3,522	7,748	27,332

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	5,829	13,007	38,774
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	1,472	4,838	22,690
Fluid milk manufacturing	0	6,796	13,471	83,165
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	147	242	1,599
Frozen cakes and other pastries manufacturing	0	7,447	11,566	21,087
Poultry processing	0	14,893	23,505	122,108
Animal, except poultry, slaughtering	0	1,850	2,800	28,109
Meat processed from carcasses	0	10,029	11,787	110,689
Rendering and meat byproduct processing	0	1,413	1,504	9,638
Seafood product preparation and packaging	0	11,558	16,070	77,877
Bread and bakery product, except frozen, manufacturing	1	29,155	43,157	106,022
Cookie and cracker manufacturing	0	2,640	4,459	16,678
Dry pasta, mixes, and dough manufacturing	0	1,476	4,329	14,498
Tortilla manufacturing	0	911	1,196	5,152
Roasted nuts and peanut butter manufacturing	0	3,362	6,637	22,557
Other snack food manufacturing	0	2,454	3,207	17,380
Coffee and tea manufacturing	0	7,111	16,864	56,708
Flavoring syrup and concentrate manufacturing	0	1,087	9,474	31,822
Mayonnaise, dressing, and sauce manufacturing	0	2,154	4,926	17,411
Spice and extract manufacturing	0	2,796	5,089	21,453
All other food manufacturing	0	1,662	2,481	13,162
Bottled and canned soft drinks & water	0	20,341	54,899	211,045
Manufactured ice	0	1,450	1,193	4,437
Breweries	0	4,483	15,194	45,734
Wineries	0	83	176	711
Distilleries	0	1,148	9,358	20,088
Tobacco product manufacturing	0	56	3,302	6,805
Fiber, yarn, and thread mills	0	146	625	4,907
Broadwoven fabric mills	0	1,218	2,456	5,798



## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	124	153	522
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	82	136	416
Textile and fabric finishing mills	0	106	180	927
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	170	353	1,691
Textile bag and canvas mills	0	1,182	1,754	4,796
Rope, cordage, twine, tire cord and tire fabric mills	0	1,165	2,652	6,329
Other textile product mills	0	744	1,099	3,391
Hosiery and sock mills	0	63	142	307
Other apparel knitting mills	0	83	172	411
Cut and sew apparel contractors	0	131	180	591
Mens and boys cut and sew apparel manufacturing	0	460	826	2,208
Womens and girls cut and sew apparel manufacturing	0	280	639	2,196
Other cut and sew apparel manufacturing	0	250	458	1,756
Apparel accessories and other apparel manufacturing	0	150	283	995
Leather and hide tanning and finishing	0	154	480	1,628
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	41	47	271
Sawmills	1	31,599	58,704	163,913
Wood preservation	0	2,301	11,642	28,936
Veneer and plywood manufacturing	1	51,917	94,270	249,736
Engineered wood member and truss manufacturing	0	14,658	24,683	55,136
Reconstituted wood product manufacturing	0	13,342	50,400	148,983
Wood windows and door manufacturing	0	8,250	14,048	39,386
Cut stock, resawing lumber, and planing	0	1,618	4,014	10,693
Other millwork, including flooring	0	2,307	4,326	14,349
Wood container and pallet manufacturing	0	6,720	9,193	27,486
Manufactured home (mobile home) manufacturing	0	28	69	132

## APPENDIX

Prefabricated wood building manufacturing	0	1,749	2,276	7,820
All other miscellaneous wood product manufacturing	1	44,960	67,357	169,223
Pulp mills	0	0	0	0
Paper mills	0	37,197	108,952	306,250
Paperboard mills	0	30,303	93,150	266,346
Paperboard container manufacturing	0	37,015	65,195	218,036
Paper bag and coated and treated paper manufacturing	0	7,052	14,945	52,752
Stationery product manufacturing	0	1,238	1,987	8,536
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	1,236	2,098	7,301
Printing	1	54,775	77,815	186,820
Support activities for printing	0	491	682	1,390
Petroleum refineries	0	107,876	935,977	3,937,387
Asphalt paving mixture and block manufacturing	0	7,005	11,539	52,513
Asphalt shingle and coating materials manufacturing	0	3,937	12,501	27,221
Petroleum lubricating oil and grease manufacturing	0	40,966	166,773	495,603
All other petroleum and coal products manufacturing	0	3,191	10,799	26,079
Petrochemical manufacturing	0	17,563	168,955	647,646
Industrial gas manufacturing	0	42,825	129,826	290,597
Synthetic dye and pigment manufacturing	0	18,441	46,388	118,743
Other basic inorganic chemical manufacturing	0	53,582	138,107	345,744
Other basic organic chemical manufacturing	0	63,921	142,075	708,966
Plastics material and resin manufacturing	0	32,087	57,841	298,832
Synthetic rubber manufacturing	0	11,444	19,326	60,925
Artificial and synthetic fibers and filaments manufacturing	0	409	647	2,742
Nitrogenous fertilizer manufacturing	0	17,395	48,739	92,516
Phosphatic fertilizer manufacturing	0	2,630	7,452	19,467
Fertilizer mixing	0	314	647	1,771

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	8,701	33,219	93,145
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	2,787	13,060	38,573
In-vitro diagnostic substance manufacturing	0	22	34	122
Biological product (except diagnostic) manufacturing	0	16	34	149
Paint and coating manufacturing	0	3,535	7,935	29,448
Adhesive manufacturing	0	4,044	7,708	25,250
Soap and other detergent manufacturing	0	18,244	85,550	185,742
Polish and other sanitation good manufacturing	0	409	555	2,562
Surface active agent manufacturing	0	2,052	8,739	17,510
Toilet preparation manufacturing	0	1,695	5,421	15,992
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	52	63	321
Custom compounding of purchased resins	0	1,750	3,860	18,181
Photographic film and chemical manufacturing	0	1,996	5,104	18,316
Other miscellaneous chemical product manufacturing	0	11,805	20,264	60,909
Plastics packaging materials and unlaminated film and sheet manufacturing	0	4,129	7,681	27,164
Unlaminated plastics profile shape manufacturing	0	13	31	101
Plastics pipe and pipe fitting manufacturing	0	3,839	11,136	31,834
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	171	361	936
Polystyrene foam product manufacturing	0	141	262	862
Urethane and other foam product (except polystyrene) manufacturing	0	308	552	1,948
Plastics bottle manufacturing	0	4,059	7,631	26,724
Other plastics product manufacturing	0	5,052	8,245	25,306
Tire manufacturing	0	0	0	0

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	7,889	13,954	29,156
Other rubber product manufacturing	0	1,538	2,503	7,228
Pottery, ceramics, and plumbing fixture manufacturing	0	(129)	(65)	948
Brick, tile, and other structural clay product manufacturing	0	8,566	16,133	33,407
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	12,721	19,779	43,880
Glass container manufacturing	0	2,958	5,248	13,920
Glass product manufacturing made of purchased glass	0	328	699	3,146
Cement manufacturing	0	2,292	7,011	27,604
Ready-mix concrete manufacturing	1	33,698	59,669	207,632
Concrete block and brick manufacturing	0	7,418	14,413	41,848
Concrete pipe manufacturing	0	7,817	13,374	34,942
Other concrete product manufacturing	1	37,532	56,422	148,109
Lime manufacturing	0	27	351	2,745
Gypsum product manufacturing	1	116,610	333,929	830,484
Abrasive product manufacturing	0	964	3,344	6,625
Cut stone and stone product manufacturing	0	1,973	2,444	6,759
Ground or treated mineral and earth manufacturing	0	12,886	42,478	101,559
Mineral wool manufacturing	0	1,643	4,061	10,388
Miscellaneous nonmetallic mineral products manufacturing	0	3,333	9,056	25,517
Iron and steel mills and ferroalloy manufacturing	0	12,419	15,105	81,316
Iron, steel pipe and tube manufacturing from purchased steel	0	18,699	21,591	84,255
Rolled steel shape manufacturing	0	396	658	5,047
Steel wire drawing	0	(81)	(31)	416
Alumina refining and primary aluminum production	0	5,775	9,268	54,801
Secondary smelting and alloying of aluminum	0	114	139	1,285
Aluminum sheet, plate, and foil manufacturing	0	(343)	(189)	2,834

## APPENDIX

Other aluminum rolling, drawing and extruding	0	2,203	2,413	12,294
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	(23)	(20)	41
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	123	216	1,007
Nonferrous metal foundries	0	791	942	2,234
Custom roll forming	0	1,232	1,944	6,391
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	77	112	342
Nonferrous forging	0	252	325	759
Cutlery, utensil, pot, and pan manufacturing	0	(19)	191	1,043
Handtool manufacturing	0	15	43	175
Prefabricated metal buildings and components manufacturing	0	17,154	25,956	79,659
Fabricated structural metal manufacturing	3	195,066	303,827	905,959
Plate work manufacturing	0	8,452	8,833	26,291
Metal window and door manufacturing	0	1,664	2,787	8,915
Sheet metal work manufacturing	0	3,718	4,992	13,119
Ornamental and architectural metal work manufacturing	0	5,915	8,376	23,617
Power boiler and heat exchanger manufacturing	0	1,174	1,715	4,148
Metal tank (heavy gauge) manufacturing	0	15,605	19,589	51,881
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	186	249	1,269
Hardware manufacturing	0	3	28	368
Spring and wire product manufacturing	0	1,038	1,490	4,790
Machine shops	1	40,278	47,839	90,121
Turned product and screw, nut, and bolt manufacturing	0	397	611	1,976
Metal heat treating	0	10,237	16,422	33,238

## APPENDIX

Metal coating and nonprecious engraving	0	8,001	15,084	32,169
Electroplating, anodizing, and coloring metal	0	1,260	1,477	4,134
Valve and fittings, other than plumbing, manufacturing	0	11,627	19,542	47,334
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	37	196	673
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	31	93	206
Fabricated pipe and pipe fitting manufacturing	0	16,367	19,402	44,745
Other fabricated metal manufacturing	2	85,701	119,757	342,930
Farm machinery and equipment manufacturing	0	412	625	1,652
Lawn and garden equipment manufacturing	0	366	627	2,053
Construction machinery manufacturing	0	360	702	1,964
Mining machinery and equipment manufacturing	0	4	5	11
Oil and gas field machinery and equipment manufacturing	0	1,664	1,960	5,562
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	143	179	489
Sawmill, woodworking, and paper machinery	0	317	351	909
Printing machinery and equipment manufacturing	0	25	28	64
All other industrial machinery manufacturing	0	79	97	252
Optical instrument and lens manufacturing	0	9	14	35
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	2,732	5,836	16,441
Air purification and ventilation equipment manufacturing	0	66	78	173
Heating equipment (except warm air furnaces) manufacturing	0	333	504	1,084
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,631	3,209	11,110
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	170	215	373
Cutting tool and machine tool accessory manufacturing	0	51	54	111
Machine tool manufacturing	0	335	368	857
Rolling mill and other metalworking machinery manufacturing	0	3	3	7
Turbine and turbine generator set units manufacturing	0	20	22	64
Speed changer, industrial high-speed drive, and gear manufacturing	0	139	172	498
Mechanical power transmission equipment manufacturing	0	75	107	334
Other engine equipment manufacturing	0	228	396	1,869
Pump and pumping equipment manufacturing	0	756	1,452	3,638
Air and gas compressor manufacturing	0	75	124	368
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	97	101	226
Overhead cranes, hoists, and monorail systems manufacturing	0	73	139	392
Industrial truck, trailer, and stacker manufacturing	0	390	611	1,604
Power-driven handtool manufacturing	0	136	299	720
Welding and soldering equipment manufacturing	0	127	140	312
Packaging machinery manufacturing	0	24	36	99

## APPENDIX

Industrial process furnace and oven manufacturing	0	27	32	77
Fluid power cylinder and actuator manufacturing	0	188	227	536
Fluid power pump and motor manufacturing	0	345	546	1,448
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	399	512	1,272
Electronic computer manufacturing	0	7	12	82
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	2	3	31
Telephone apparatus manufacturing	0	29	43	238
Broadcast and wireless communications equipment manufacturing	0	22	28	91
Other communications equipment manufacturing	0	(6)	(4)	79
Audio and video equipment manufacturing	0	133	199	1,065
Printed circuit assembly (electronic assembly) manufacturing	0	561	707	2,543
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	40	69	553
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	264	325	782
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	63	71	274
Electromedical and electrotherapeutic apparatus manufacturing	0	18	29	87
Search, detection, and navigation instruments manufacturing	0	33	43	97
Automatic environmental control manufacturing	0	194	242	795



## APPENDIX

Industrial process variable instruments manufacturing	0	1,581	1,969	4,961
Totalizing fluid meter and counting device manufacturing	0	201	325	897
Electricity and signal testing instruments manufacturing	0	16	20	59
Analytical laboratory instrument manufacturing	0	6	8	33
Irradiation apparatus manufacturing	0	7	11	47
Watch, clock, and other measuring and controlling device manufacturing	0	87	119	306
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	(0)	7	148
Electric lamp bulb and part manufacturing	0	519	804	1,784
Lighting fixture manufacturing	0	1,730	2,402	7,156
Small electrical appliance manufacturing	0	170	295	844
Household cooking appliance manufacturing	0	181	380	1,791
Household refrigerator and home freezer manufacturing	0	140	338	1,419
Household laundry equipment manufacturing	0	152	289	1,814
Other major household appliance manufacturing	0	66	154	668
Power, distribution, and specialty transformer manufacturing	0	5,906	8,366	22,254
Motor and generator manufacturing	0	818	1,145	3,714
Switchgear and switchboard apparatus manufacturing	0	21,424	33,015	94,479
Relay and industrial control manufacturing	0	1,001	1,273	3,485
Storage battery manufacturing	0	434	609	1,632
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	3,769	5,603	17,972
Other communication and energy wire manufacturing	0	288	457	1,617
Wiring device manufacturing	0	41	66	300

## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	12	14	43
Automobile manufacturing	0	(356)	(233)	148
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	18	50	176
Motor vehicle body manufacturing	0	534	745	2,360
Truck trailer manufacturing	0	2	5	34
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	(1,249)	(1,084)	5,479
Motor vehicle gasoline engine and engine parts manufacturing	0	1,058	1,832	8,748
Motor vehicle electrical and electronic equipment manufacturing	0	(63)	314	2,889
Motor vehicle transmission and power train parts manufacturing	0	137	739	4,743
Motor vehicle seating and interior trim manufacturing	0	13	23	141
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	(514)	528	10,956
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	66	171	477
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	26	45	95
Guided missile and space vehicle manufacturing	0	5	7	15
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	27	41	79
Railroad rolling stock manufacturing	0	134	242	921
Ship building and repairing	0	4,750	6,592	14,488
Boat building	0	13,498	20,007	58,695
Motorcycle, bicycle, and parts manufacturing	0	38	152	337

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	447	1,221	2,982
All other transportation equipment manufacturing	0	1,818	4,108	12,604
Wood kitchen cabinet and countertop manufacturing	0	4,233	4,966	14,747
Upholstered household furniture manufacturing	0	144	180	717
Nonupholstered wood household furniture manufacturing	0	702	742	2,569
Other household nonupholstered furniture manufacturing	0	8	10	87
Institutional furniture manufacturing	0	35	37	89
Wood office furniture manufacturing	0	5	6	26
Custom architectural woodwork and millwork	0	97	92	372
Office furniture, except wood, manufacturing	0	263	392	1,340
Showcase, partition, shelving, and locker manufacturing	0	47	55	207
Mattress manufacturing	0	35	54	327
Blind and shade manufacturing	0	37	38	205
Surgical and medical instrument manufacturing	0	6	28	542
Surgical appliance and supplies manufacturing	0	597	1,216	3,382
Dental equipment and supplies manufacturing	0	30	51	94
Ophthalmic goods manufacturing	0	64	138	358
Dental laboratories	0	983	942	1,916
Jewelry and silverware manufacturing	0	7,859	10,758	22,861
Sporting and athletic goods manufacturing	0	543	769	3,918
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	1,091	1,487	4,584
Sign manufacturing	0	3,008	2,527	8,583
Gasket, packing, and sealing device manufacturing	0	3,561	4,433	10,387
Musical instrument manufacturing	0	26	29	255
Fasteners, buttons, needles, and pins manufacturing	0	154	197	545

## APPENDIX

Broom, brush, and mop manufacturing	0	186	370	1,946
Burial casket manufacturing	0	137	172	680
All other miscellaneous manufacturing	0	8,102	9,773	22,603
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	37,100	102,059	222,644
Wholesale - Professional and commercial equipment and supplies	2	150,614	288,047	504,380
Wholesale - Household appliances and electrical and electronic goods	2	194,528	520,428	1,060,743
Wholesale - Machinery, equipment, and supplies	2	187,679	370,563	624,585
Wholesale - Other durable goods merchant wholesalers	5	384,364	665,342	1,262,163
Wholesale - Drugs and druggists' sundries	1	98,759	332,993	577,947
Wholesale - Grocery and related product wholesalers	2	143,571	212,540	420,530
Wholesale - Petroleum and petroleum products	0	34,248	448,785	517,573
Wholesale - Other nondurable goods merchant wholesalers	3	208,126	477,349	849,756
Wholesale - Wholesale electronic markets and agents and brokers	3	276,682	163,743	184,150
Retail - Motor vehicle and parts dealers	3	168,431	308,897	432,916
Retail - Furniture and home furnishings stores	2	85,767	125,540	203,603
Retail - Electronics and appliance stores	2	102,491	131,497	209,326
Retail - Building material and garden equipment and supplies stores	5	208,113	434,750	594,314
Retail - Food and beverage stores	10	328,529	496,941	776,916
Retail - Health and personal care stores	5	220,019	286,576	424,981
Retail - Gasoline stores	3	109,624	212,516	361,613
Retail - Clothing and clothing accessories stores	5	122,432	239,966	472,798
Retail - Sporting goods, hobby, musical instrument and book stores	3	66,189	99,008	164,243

## APPENDIX

Retail - General merchandise stores	10	295,022	489,123	766,196
Retail - Miscellaneous store retailers	6	137,810	188,946	301,261
Retail - Nonstore retailers	4	57,230	257,039	589,760
Air transportation	1	182,978	353,724	521,435
Rail transportation	1	108,203	192,189	397,277
Water transportation	0	26,913	47,884	219,587
Truck transportation	7	417,396	526,477	1,126,970
Transit and ground passenger transportation	8	207,142	253,081	373,147
Pipeline transportation	0	78,589	151,669	201,944
Scenic and sightseeing transportation and support activities for transportation	3	229,497	278,140	547,098
Couriers and messengers	3	100,532	168,124	300,014
Warehousing and storage	4	271,327	381,024	625,861
Newspaper publishers	1	35,592	61,020	79,480
Periodical publishers	0	10,525	17,052	34,377
Book publishers	0	3,666	12,918	22,112
Directory, mailing list, and other publishers	0	4,046	15,209	25,555
Greeting card publishing	0	404	1,846	2,618
Software publishers	1	41,012	114,222	155,755
Motion picture and video industries	1	121,523	483,276	563,773
Sound recording industries	0	3,166	60,797	69,110
Radio and television broadcasting	1	157,988	114,414	459,835
Cable and other subscription programming	0	3,997	22,757	60,515
Wired telecommunications carriers	2	206,301	495,549	989,711
Wireless telecommunications carriers (except satellite)	1	69,478	328,279	916,034
Satellite, telecommunications resellers, and all other telecommunications	0	39,174	47,896	119,072
Data processing, hosting, and related services	2	130,912	267,367	653,248
News syndicates, libraries, archives and all other information services	0	4,669	7,694	15,557
Internet publishing and broadcasting and web search portals	0	24,037	69,678	248,128

## APPENDIX

Nondepository credit intermediation and related activities	4	264,100	353,710	656,449
Securities and commodity contracts intermediation and brokerage	2	218,067	221,290	563,818
Monetary authorities and depository credit intermediation	7	586,900	1,551,893	2,625,737
Other financial investment activities	6	84,998	118,765	653,444
Direct life insurance carriers	0	54,921	163,908	196,335
Insurance carriers, except direct life	1	153,171	882,969	1,361,596
Insurance agencies, brokerages, and related activities	4	242,512	470,032	995,777
Funds, trusts, and other financial vehicles	2	85,984	126,595	598,356
Other real estate	28	669,686	1,821,830	5,089,540
Tenant-occupied housing	4	91,660	1,149,938	1,317,996
Owner-occupied dwellings	0	0	4,075,130	5,148,880
Automotive equipment rental and leasing	1	60,659	188,998	292,048
General and consumer goods rental except video tapes and discs	1	80,784	105,608	160,572
Video tape and disc rental	0	15,508	28,009	42,328
Commercial and industrial machinery and equipment rental and leasing	2	166,169	460,448	651,009
Lessors of nonfinancial intangible assets	0	12,647	292,200	355,040
Legal services	7	596,475	1,053,403	1,526,986
Accounting, tax preparation, bookkeeping, and payroll services	9	647,387	784,818	1,131,850
Architectural, engineering, and related services	8	744,833	847,641	1,467,834
Specialized design services	1	69,054	72,215	88,793
Custom computer programming services	2	120,710	138,126	217,767
Computer systems design services	2	192,183	201,518	279,390
Other computer related services, including facilities management	2	140,292	193,654	389,021
Management consulting services	51	4,134,336	4,091,509	6,450,057
Environmental and other technical consulting services	6	414,926	361,802	545,935

## APPENDIX

Scientific research and development services	2	187,605	259,280	579,316
Advertising, public relations, and related services	2	211,593	274,798	464,155
Photographic services	1	77,959	42,462	66,692
Veterinary services	1	45,294	59,411	99,069
Marketing research and all other miscellaneous professional, scientific, and technical services	28	2,160,035	1,853,200	2,542,304
Management of companies and enterprises	13	1,144,110	1,333,040	2,169,511
Office administrative services	7	545,849	318,996	590,556
Facilities support services	336	13,375,319	19,364,387	47,806,361
Employment services	48	2,476,563	4,551,478	6,263,930
Business support services	5	175,921	168,128	315,182
Travel arrangement and reservation services	1	27,213	39,698	115,831
Investigation and security services	15	475,936	491,109	765,007
Services to buildings	16	385,775	406,943	697,342
Landscape and horticultural services	7	169,203	182,442	339,663
Other support services	4	155,951	212,747	417,671
Waste management and remediation services	4	268,459	515,527	872,476
Elementary and secondary schools	4	199,675	184,145	217,413
Junior colleges, colleges, universities, and professional schools	5	255,884	380,422	517,759
Other educational services	5	101,489	98,121	208,020
Offices of physicians	13	1,173,750	1,441,146	2,196,253
Offices of dentists	4	213,382	284,001	435,352
Offices of other health practitioners	5	324,390	313,093	432,872
Outpatient care centers	3	205,590	216,998	423,721
Medical and diagnostic laboratories	1	67,345	107,756	184,608
Home health care services	8	375,734	321,519	424,077
Other ambulatory health care services	1	98,507	110,465	172,966
Hospitals	25	1,991,808	2,277,337	4,342,490
Nursing and community care facilities	7	289,987	307,200	554,380
Residential mental retardation, mental health, substance abuse and other facilities	3	126,721	130,118	199,109

## APPENDIX

Individual and family services	12	297,197	291,020	447,893
Child day care services	5	111,885	140,865	194,563
Community food, housing, and other relief services, including rehabilitation services	2	68,984	81,475	197,105
Performing arts companies	1	20,500	48,839	92,055
Commercial Sports Except Racing	1	114,750	138,440	172,006
Racing and Track Operation	0	6,515	18,971	28,670
Independent artists, writers, and performers	5	70,609	151,440	181,055
Promoters of performing arts and sports and agents for public figures	1	32,860	130,069	235,338
Museums, historical sites, zoos, and parks	1	20,570	30,067	48,529
Amusement parks and arcades	0	3,527	6,076	10,692
Gambling industries (except casino hotels)	2	90,786	186,729	300,921
Other amusement and recreation industries	2	35,009	42,573	87,624
Fitness and recreational sports centers	2	35,497	50,373	93,839
Bowling centers	0	6,581	10,054	17,410
Hotels and motels, including casino hotels	3	141,105	278,068	415,212
Other accommodations	1	29,733	39,748	51,945
Full-service restaurants	26	623,048	994,102	1,719,673
Limited-service restaurants	21	411,743	709,907	1,538,489
All other food and drinking places	19	531,710	764,488	1,145,495
Automotive repair and maintenance, except car washes	7	338,675	478,536	697,486
Car washes	3	158,722	280,122	412,357
Electronic and precision equipment repair and maintenance	8	462,528	662,693	1,141,111
Commercial and industrial machinery and equipment repair and maintenance	3	235,434	290,004	435,388
Personal and household goods repair and maintenance	15	674,520	715,005	925,814
Personal care services	5	126,723	122,640	161,731
Death care services	0	14,537	22,197	33,469
Dry-cleaning and laundry services	1	36,831	42,626	62,171
Other personal services	6	147,140	144,909	199,521
Religious organizations	7	343,551	267,211	765,710
Grantmaking, giving, and social advocacy organizations	1	67,242	346,153	459,166



## APPENDIX

Business and professional associations	1	62,452	130,757	212,237
Labor and civic organizations	2	46,261	170,384	277,670
Private households	3	59,301	59,301	59,301
Postal service	2	187,336	187,454	206,981
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	8,541	4,828	37,954
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	4,051	4,636	8,293
Local government passenger transit	1	69,316	(46,187)	26,774
Local government electric utilities	0	32,690	79,296	179,638
Other local government enterprises	6	399,604	738,837	1,665,823
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	44	6,991,331	9,083,395	18,993,081

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 21. Maine

**Table 409: Detailed NASA Impacts by Types of Impact, Maine.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	55	3,435,529	5,072,231	9,792,966
Oilseed farming	0	2	2	20
Grain farming	0	173	739	2,135
Vegetable and melon farming	0	1,667	3,229	6,596
Fruit farming	0	648	1,482	2,498
Tree nut farming	0	1	1	1
Greenhouse, nursery, and floriculture production	0	428	642	1,166
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	825	1,195	2,186
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	58	426	1,413
Dairy cattle and milk production	0	231	721	3,955
Poultry and egg production	0	208	333	3,318
Animal production, except cattle and poultry and eggs	0	1,661	9,229	14,025
Forestry, forest products, and timber tract production	0	101	86	138
Commercial logging	0	978	867	2,005
Commercial fishing	0	2,975	1,282	1,413
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	4,050	3,026	4,036
Oil and gas extraction	0	42	44	2,746
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	390	455	1,924
Sand and gravel mining	0	147	192	993

## APPENDIX

Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	28	38	253
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	2
Metal mining services	0	1	1	13
Other nonmetallic minerals services	0	0	0	3
Electric power generation - Hydroelectric	0	1,359	5,762	8,998
Electric power generation - Fossil fuel	0	1,585	8,117	18,286
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	48	500	752
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	979	4,920	11,272
Electric power generation - All other	0	729	470	1,457
Electric power transmission and distribution	0	8,072	40,472	91,449
Natural gas distribution	0	1,001	4,275	12,199
Water, sewage and other systems	0	285	856	1,774
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

## APPENDIX

Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	16,184	16,342	52,753
Maintenance and repair construction of residential structures	0	4,732	5,169	16,869
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	22	9	33
Dog and cat food manufacturing	0	1	6	77
Other animal food manufacturing	0	330	596	5,420
Flour milling	0	21	40	435
Rice milling	0	0	0	0
Malt manufacturing	0	18	39	716
Wet corn milling	0	592	1,536	15,547
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	16	24	197
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	47	66	577
Frozen fruits, juices and vegetables manufacturing	0	329	578	2,988
Frozen specialties manufacturing	0	177	260	1,258
Canned fruits and vegetables manufacturing	0	168	295	1,433
Canned specialties	0	89	207	1,023
Dehydrated food products manufacturing	0	21	38	178
Cheese manufacturing	0	13	20	498

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	639	988	6,368
Creamery butter manufacturing	0	36	149	1,530
Ice cream and frozen dessert manufacturing	0	36	55	382
Frozen cakes and other pastries manufacturing	0	271	395	770
Poultry processing	0	97	125	660
Animal, except poultry, slaughtering	0	128	182	2,551
Meat processed from carcasses	0	672	734	5,840
Rendering and meat byproduct processing	0	11	15	73
Seafood product preparation and packaging	0	572	699	4,200
Bread and bakery product, except frozen, manufacturing	0	1,035	1,374	3,967
Cookie and cracker manufacturing	0	18	26	343
Dry pasta, mixes, and dough manufacturing	0	25	57	346
Tortilla manufacturing	0	4	5	61
Roasted nuts and peanut butter manufacturing	0	58	62	351
Other snack food manufacturing	0	47	59	547
Coffee and tea manufacturing	0	14	27	319
Flavoring syrup and concentrate manufacturing	0	5	36	293
Mayonnaise, dressing, and sauce manufacturing	0	5	9	123
Spice and extract manufacturing	0	3	4	36
All other food manufacturing	0	204	271	1,335
Bottled and canned soft drinks & water	0	1,424	2,769	13,023
Manufactured ice	0	58	23	140
Breweries	0	631	1,560	5,058
Wineries	0	7	12	43
Distilleries	0	190	1,107	2,674
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	52	68	365
Broadwoven fabric mills	0	171	209	782
Narrow fabric mills and schiffli machine embroidery	0	27	29	92
Nonwoven fabric mills	0	153	196	844
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	2	3	10
Fabric coating mills	0	22	25	103
Carpet and rug mills	0	148	197	1,004
Curtain and linen mills	0	6	8	49
Textile bag and canvas mills	0	73	82	263
Rope, cordage, twine, tire cord and tire fabric mills	0	169	208	756
Other textile product mills	0	41	47	160
Hosiery and sock mills	0	1	1	4
Other apparel knitting mills	0	1	2	4
Cut and sew apparel contractors	0	3	4	12
Mens and boys cut and sew apparel manufacturing	0	4	6	26
Womens and girls cut and sew apparel manufacturing	0	4	6	51
Other cut and sew apparel manufacturing	0	9	12	33
Apparel accessories and other apparel manufacturing	0	5	6	22
Leather and hide tanning and finishing	0	8	16	62
Footwear manufacturing	0	206	247	770
Other leather and allied product manufacturing	0	13	14	36
Sawmills	0	1,137	1,624	5,875
Wood preservation	0	71	206	676
Veneer and plywood manufacturing	0	106	155	509
Engineered wood member and truss manufacturing	0	55	73	219
Reconstituted wood product manufacturing	0	171	411	1,328
Wood windows and door manufacturing	0	1,105	1,510	4,248
Cut stock, resawing lumber, and planing	0	72	116	353
Other millwork, including flooring	0	107	146	531
Wood container and pallet manufacturing	0	338	399	1,140
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	111	129	444
All other miscellaneous wood product manufacturing	0	341	421	1,417

## APPENDIX

Pulp mills	0	176	251	1,200
Paper mills	0	3,578	6,672	26,627
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	437	627	3,410
Paper bag and coated and treated paper manufacturing	0	80	127	532
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	559	1,255	4,612
All other converted paper product manufacturing	0	753	1,003	3,521
Printing	0	4,105	6,009	13,587
Support activities for printing	0	91	131	222
Petroleum refineries	0	1,009	6,526	57,243
Asphalt paving mixture and block manufacturing	0	78	149	1,489
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	3	10	167
Industrial gas manufacturing	0	263	367	2,077
Synthetic dye and pigment manufacturing	0	1	1	10
Other basic inorganic chemical manufacturing	0	16	22	166
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	38	50	508
Synthetic rubber manufacturing	0	11	14	105
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	17	24	237
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	18	20	128
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	85	86	256

## APPENDIX

Pharmaceutical preparation manufacturing	0	574	941	3,596
In-vitro diagnostic substance manufacturing	0	123	136	472
Biological product (except diagnostic) manufacturing	0	30	41	191
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	248	353	2,033
Polish and other sanitation good manufacturing	0	55	63	442
Surface active agent manufacturing	0	18	25	177
Toilet preparation manufacturing	0	33	43	362
Printing ink manufacturing	0	3	3	17
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	12	14	103
Plastics packaging materials and unlaminated film and sheet manufacturing	0	91	197	640
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	23	80	216
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	113	279	718
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	71	153	552
Plastics bottle manufacturing	0	28	62	214
Other plastics product manufacturing	0	691	1,318	3,805
Tire manufacturing	0	23	43	255
Rubber and plastics hoses and belting manufacturing	0	9	21	58
Other rubber product manufacturing	0	23	49	170



## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	(2)	3	73
Brick, tile, and other structural clay product manufacturing	0	39	82	418
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	143	256	745
Cement manufacturing	0	121	284	907
Ready-mix concrete manufacturing	0	451	781	3,185
Concrete block and brick manufacturing	0	160	294	840
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	297	443	1,270
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	101	264	750
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	252	303	744
Ground or treated mineral and earth manufacturing	0	60	175	512
Mineral wool manufacturing	0	18	44	147
Miscellaneous nonmetallic mineral products manufacturing	0	12	30	94
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	43	67	216
Secondary processing of other nonferrous metals	0	2	11	39
Ferrous metal foundries	0	6	17	50
Nonferrous metal foundries	0	2	5	18
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	10	18	48
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	15	61	113
Handtool manufacturing	0	43	86	182
Prefabricated metal buildings and components manufacturing	0	57	95	247
Fabricated structural metal manufacturing	0	264	470	1,320
Plate work manufacturing	0	88	95	294
Metal window and door manufacturing	0	65	120	262
Sheet metal work manufacturing	0	109	160	394
Ornamental and architectural metal work manufacturing	0	36	57	171
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	7	9	25
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	8	17	62
Spring and wire product manufacturing	0	45	73	275
Machine shops	0	767	965	1,893
Turned product and screw, nut, and bolt manufacturing	0	118	191	460
Metal heat treating	0	8	14	30
Metal coating and nonprecious engraving	0	54	119	232
Electroplating, anodizing, and coloring metal	0	39	47	96

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	5	11	25
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	168	536	909
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	122	407	748
Fabricated pipe and pipe fitting manufacturing	0	29	37	92
Other fabricated metal manufacturing	0	86	134	387
Farm machinery and equipment manufacturing	0	7	11	51
Lawn and garden equipment manufacturing	0	14	27	144
Construction machinery manufacturing	0	6	11	36
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	1
Sawmill, woodworking, and paper machinery	0	19	21	58
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	1	1	4
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	2	4	14
Air purification and ventilation equipment manufacturing	0	0	0	0

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	48	73	227
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	7	14	61
Industrial mold manufacturing	0	1	1	3
Special tool, die, jig, and fixture manufacturing	0	3	4	10
Cutting tool and machine tool accessory manufacturing	0	9	10	26
Machine tool manufacturing	0	4	4	12
Rolling mill and other metalworking machinery manufacturing	0	13	16	35
Turbine and turbine generator set units manufacturing	0	10	13	51
Speed changer, industrial high-speed drive, and gear manufacturing	0	4	7	24
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	1	3
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	8	8	27
Overhead cranes, hoists, and monorail systems manufacturing	0	1	1	5
Industrial truck, trailer, and stacker manufacturing	0	0	0	2
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	(0)	0	0
Packaging machinery manufacturing	0	0	0	1
Industrial process furnace and oven manufacturing	0	3	4	10
Fluid power cylinder and actuator manufacturing	0	(0)	0	1

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Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2	3	10
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	2	4	10
Other communications equipment manufacturing	0	1	2	9
Audio and video equipment manufacturing	0	0	0	1
Printed circuit assembly (electronic assembly) manufacturing	0	13	29	85
Bare printed circuit board manufacturing	0	0	1	2
Semiconductor and related device manufacturing	0	61	162	420
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	18	33	75
Electronic connector manufacturing	0	32	66	163
Other electronic component manufacturing	0	7	9	29
Electromedical and electrotherapeutic apparatus manufacturing	0	0	1	3
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	2	4	9
Industrial process variable instruments manufacturing	0	2	4	8
Totalizing fluid meter and counting device manufacturing	0	0	0	0

## APPENDIX

Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	1	3	8
Irradiation apparatus manufacturing	0	0	0	1
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	1
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	2
Electric lamp bulb and part manufacturing	0	1	1	14
Lighting fixture manufacturing	0	0	0	3
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	3	3	33
Household refrigerator and home freezer manufacturing	0	3	3	30
Household laundry equipment manufacturing	0	4	5	57
Other major household appliance manufacturing	0	1	1	12
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	5
Switchgear and switchboard apparatus manufacturing	0	22	24	92
Relay and industrial control manufacturing	0	12	13	42
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	1	1	10
Wiring device manufacturing	0	6	6	29
Carbon and graphite product manufacturing	0	13	14	61
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0

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Automobile manufacturing	0	2	7	48
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	13	19	72
Truck trailer manufacturing	0	0	0	1
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	955	1,084	4,651
Motor vehicle gasoline engine and engine parts manufacturing	0	20	31	151
Motor vehicle electrical and electronic equipment manufacturing	0	146	219	992
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	169	296	1,347
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	594	1,048	4,101
Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	29	53	162
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	1
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	4	5	13
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	290	337	810
Boat building	0	1,212	1,582	6,301
Motorcycle, bicycle, and parts manufacturing	0	5	12	46
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0

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Wood kitchen cabinet and countertop manufacturing	0	76	125	316
Upholstered household furniture manufacturing	0	10	16	55
Nonupholstered wood household furniture manufacturing	0	71	89	261
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	9	11	28
Wood office furniture manufacturing	0	0	0	1
Custom architectural woodwork and millwork	0	19	19	59
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	19	32	98
Mattress manufacturing	0	6	16	59
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	7	13	45
Surgical appliance and supplies manufacturing	0	127	234	684
Dental equipment and supplies manufacturing	0	0	0	1
Ophthalmic goods manufacturing	0	1	3	8
Dental laboratories	0	15	14	27
Jewelry and silverware manufacturing	0	32	44	168
Sporting and athletic goods manufacturing	0	22	27	144
Doll, toy, and game manufacturing	0	41	52	386
Office supplies (except paper) manufacturing	0	3	4	26
Sign manufacturing	0	452	390	1,107
Gasket, packing, and sealing device manufacturing	0	21	25	73
Musical instrument manufacturing	0	70	71	169
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	114	155	563
Burial casket manufacturing	0	0	0	0



## APPENDIX

All other miscellaneous manufacturing	0	217	257	809
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,427	6,132	14,563
Wholesale - Professional and commercial equipment and supplies	0	8,665	15,180	26,476
Wholesale - Household appliances and electrical and electronic goods	0	2,431	5,937	13,056
Wholesale - Machinery, equipment, and supplies	0	5,411	9,975	18,276
Wholesale - Other durable goods merchant wholesalers	0	6,517	10,807	22,027
Wholesale - Drugs and druggists' sundries	0	6,989	20,161	44,412
Wholesale - Grocery and related product wholesalers	0	9,482	13,277	27,686
Wholesale - Petroleum and petroleum products	0	1,453	25,185	28,544
Wholesale - Other nondurable goods merchant wholesalers	0	11,586	25,361	48,925
Wholesale - Wholesale electronic markets and agents and brokers	0	6,875	3,132	3,830
Retail - Motor vehicle and parts dealers	0	11,141	17,212	25,686
Retail - Furniture and home furnishings stores	0	4,219	5,680	9,631
Retail - Electronics and appliance stores	0	5,381	5,473	9,507
Retail - Building material and garden equipment and supplies stores	0	7,205	12,644	18,805
Retail - Food and beverage stores	1	19,671	26,984	45,802
Retail - Health and personal care stores	0	10,355	12,232	18,626
Retail - Gasoline stores	0	4,994	9,640	19,775
Retail - Clothing and clothing accessories stores	0	5,985	9,209	19,231
Retail - Sporting goods, hobby, musical instrument and book stores	0	4,838	6,361	10,739
Retail - General merchandise stores	1	15,192	22,151	36,922
Retail - Miscellaneous store retailers	0	8,908	10,736	19,044

## APPENDIX

Retail - Nonstore retailers	0	14,770	41,251	72,464
Air transportation	0	2,208	6,398	8,774
Rail transportation	0	2,180	2,795	7,707
Water transportation	0	606	992	10,526
Truck transportation	0	17,152	21,568	45,035
Transit and ground passenger transportation	0	5,161	8,347	11,066
Pipeline transportation	0	1,185	3,655	4,559
Scenic and sightseeing transportation and support activities for transportation	0	11,486	13,706	35,811
Couriers and messengers	0	6,348	8,485	14,776
Warehousing and storage	0	9,995	11,144	23,544
Newspaper publishers	0	4,340	7,325	10,316
Periodical publishers	0	2,063	3,190	6,423
Book publishers	0	1,021	3,382	7,420
Directory, mailing list, and other publishers	0	162	464	1,220
Greeting card publishing	0	301	1,235	1,623
Software publishers	0	2,620	6,570	9,387
Motion picture and video industries	0	1,954	3,424	11,749
Sound recording industries	0	241	1,030	1,886
Radio and television broadcasting	0	6,612	3,503	28,331
Cable and other subscription programming	0	151	1,161	4,531
Wired telecommunications carriers	0	8,794	20,560	44,671
Wireless telecommunications carriers (except satellite)	0	549	4,586	15,858
Satellite, telecommunications resellers, and all other telecommunications	0	403	629	2,632
Data processing, hosting, and related services	0	4,981	11,351	27,693
News syndicates, libraries, archives and all other information services	0	1,288	2,382	5,542
Internet publishing and broadcasting and web search portals	0	1,710	5,261	16,978
Nondepository credit intermediation and related activities	0	18,468	23,665	39,051
Securities and commodity contracts intermediation and brokerage	0	12,186	12,833	29,191

## APPENDIX

Monetary authorities and depository credit intermediation	1	46,703	95,861	195,374
Other financial investment activities	0	10,216	12,845	38,556
Direct life insurance carriers	0	10,124	20,388	30,269
Insurance carriers, except direct life	0	14,713	50,012	110,974
Insurance agencies, brokerages, and related activities	0	22,640	35,353	78,848
Funds, trusts, and other financial vehicles	0	2,828	3,605	21,961
Other real estate	3	55,119	206,321	576,276
Tenant-occupied housing	0	3,310	69,049	77,088
Owner-occupied dwellings	0	0	212,302	268,241
Automotive equipment rental and leasing	0	2,014	10,412	14,857
General and consumer goods rental except video tapes and discs	0	2,437	3,925	7,235
Video tape and disc rental	0	802	1,362	2,359
Commercial and industrial machinery and equipment rental and leasing	0	2,034	7,078	12,085
Lessors of nonfinancial intangible assets	0	109	891	2,602
Legal services	1	66,900	107,560	167,949
Accounting, tax preparation, bookkeeping, and payroll services	0	21,972	28,599	42,660
Architectural, engineering, and related services	0	36,006	42,078	79,695
Specialized design services	0	3,621	3,799	5,073
Custom computer programming services	0	6,212	7,343	11,373
Computer systems design services	0	14,250	14,571	19,325
Other computer related services, including facilities management	0	2,661	7,998	12,501
Management consulting services	1	53,450	52,969	90,340
Environmental and other technical consulting services	0	12,271	10,665	16,727
Scientific research and development services	14	950,117	1,252,782	2,954,722
Advertising, public relations, and related services	0	12,517	17,058	36,028
Photographic services	0	3,393	2,192	3,665
Veterinary services	0	3,046	4,250	6,659

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	1	55,200	52,453	81,755
Management of companies and enterprises	1	132,605	156,223	244,136
Office administrative services	0	18,711	12,801	23,050
Facilities support services	0	791	1,160	3,934
Employment services	1	40,691	76,643	115,201
Business support services	0	16,757	15,774	26,879
Travel arrangement and reservation services	0	3,345	5,183	14,007
Investigation and security services	0	4,488	4,605	6,540
Services to buildings	1	15,121	15,908	27,825
Landscape and horticultural services	0	12,157	13,020	22,263
Other support services	0	5,064	7,184	13,176
Waste management and remediation services	0	7,083	13,638	25,396
Elementary and secondary schools	0	11,163	9,675	12,025
Junior colleges, colleges, universities, and professional schools	0	17,077	23,163	33,213
Other educational services	0	6,439	5,920	13,090
Offices of physicians	1	62,526	75,023	109,518
Offices of dentists	0	13,931	18,034	26,343
Offices of other health practitioners	0	17,651	16,662	24,825
Outpatient care centers	0	11,183	11,838	23,555
Medical and diagnostic laboratories	0	3,593	5,772	10,162
Home health care services	0	13,404	9,569	13,494
Other ambulatory health care services	0	3,918	4,371	7,977
Hospitals	2	121,590	145,589	271,994
Nursing and community care facilities	0	17,735	20,806	35,769
Residential mental retardation, mental health, substance abuse and other facilities	0	8,353	9,018	13,685
Individual and family services	1	26,218	25,203	35,454
Child day care services	0	8,061	10,084	13,429
Community food, housing, and other relief services, including rehabilitation services	0	3,938	4,524	9,843
Performing arts companies	0	1,759	2,901	5,723

## APPENDIX

Commercial Sports Except Racing	0	1,472	1,854	4,580
Racing and Track Operation	0	529	863	1,963
Independent artists, writers, and performers	1	9,153	11,072	14,203
Promoters of performing arts and sports and agents for public figures	0	1,649	4,344	11,259
Museums, historical sites, zoos, and parks	0	1,204	1,498	2,694
Amusement parks and arcades	0	469	1,053	1,393
Gambling industries (except casino hotels)	0	3,667	9,226	14,867
Other amusement and recreation industries	0	4,647	5,860	10,234
Fitness and recreational sports centers	0	1,266	2,128	3,509
Bowling centers	0	529	778	1,430
Hotels and motels, including casino hotels	0	1,451	2,726	4,354
Other accommodations	0	733	942	1,309
Full-service restaurants	1	33,752	52,159	86,968
Limited-service restaurants	1	17,527	29,292	60,545
All other food and drinking places	1	22,619	31,816	48,138
Automotive repair and maintenance, except car washes	0	16,699	19,380	30,317
Car washes	0	8,290	12,919	19,601
Electronic and precision equipment repair and maintenance	0	4,638	6,428	11,065
Commercial and industrial machinery and equipment repair and maintenance	0	6,551	7,281	11,929
Personal and household goods repair and maintenance	0	8,917	5,196	7,797
Personal care services	0	9,491	6,675	9,086
Death care services	0	1,003	1,223	2,038
Dry-cleaning and laundry services	0	1,858	2,023	2,959
Other personal services	0	9,336	7,633	10,531
Religious organizations	0	13,509	4,214	25,647
Grantmaking, giving, and social advocacy organizations	0	7,141	17,488	29,933
Business and professional associations	0	3,373	4,652	9,490
Labor and civic organizations	0	4,908	10,182	22,253
Private households	0	2,695	2,695	2,695
Postal service	0	11,507	11,513	12,819
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	282	40	847
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	4,649	5,365	10,314
Local government passenger transit	0	2,501	(1,295)	2,202
Local government electric utilities	0	253	677	1,468
Other local government enterprises	0	15,172	30,021	61,560
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	6	798,579	1,031,167	1,568,487

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 410: Detailed M2M Program Impacts by Types of Impact, Maine.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	0	19,246	29,231	56,882
Oilseed farming	0	0	0	0
Grain farming	0	1	4	11
Vegetable and melon farming	0	9	19	36
Fruit farming	0	5	11	17
Tree nut farming	0	0	0	0

## APPENDIX

Greenhouse, nursery, and floriculture production	0	2	3	6
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	4	6	10
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	0	2	7
Dairy cattle and milk production	0	1	5	23
Poultry and egg production	0	1	2	15
Animal production, except cattle and poultry and eggs	0	7	44	68
Forestry, forest products, and timber tract production	0	1	1	1
Commercial logging	0	6	5	11
Commercial fishing	0	22	7	8
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	24	18	24
Oil and gas extraction	0	0	0	14
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	4	2	11
Sand and gravel mining	0	2	1	6
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	2
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	0
Metal mining services	0	0	0	0

## APPENDIX

Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	13	48	69
Electric power generation - Fossil fuel	0	10	50	109
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	3	4
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	12	46	105
Electric power generation - All other	0	9	5	12
Electric power transmission and distribution	0	46	235	517
Natural gas distribution	0	7	30	76
Water, sewage and other systems	0	2	5	10
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	99	100	314



## APPENDIX

Maintenance and repair construction of residential structures	0	25	28	88
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	0
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	2	4	33
Flour milling	0	0	0	2
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	3
Wet corn milling	0	4	12	120
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	1
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	0	0	3
Frozen fruits, juices and vegetables manufacturing	0	2	4	19
Frozen specialties manufacturing	0	1	2	8
Canned fruits and vegetables manufacturing	0	1	2	11
Canned specialties	0	1	1	6
Dehydrated food products manufacturing	0	0	0	1
Cheese manufacturing	0	0	0	3
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	4	6	35
Creamery butter manufacturing	0	0	1	10
Ice cream and frozen dessert manufacturing	0	0	0	2
Frozen cakes and other pastries manufacturing	0	2	2	4
Poultry processing	0	0	1	3
Animal, except poultry, slaughtering	0	1	1	11
Meat processed from carcasses	0	4	4	32

## APPENDIX

Rendering and meat byproduct processing	0	0	0	0
Seafood product preparation and packaging	0	3	4	19
Bread and bakery product, except frozen, manufacturing	0	6	8	22
Cookie and cracker manufacturing	0	0	0	2
Dry pasta, mixes, and dough manufacturing	0	0	0	2
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	0	0	2
Other snack food manufacturing	0	0	0	3
Coffee and tea manufacturing	0	0	0	2
Flavoring syrup and concentrate manufacturing	0	0	0	3
Mayonnaise, dressing, and sauce manufacturing	0	0	0	1
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	1	2	9
Bottled and canned soft drinks & water	0	7	15	66
Manufactured ice	0	0	0	1
Breweries	0	3	9	27
Wineries	0	0	0	1
Distilleries	0	1	7	15
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	2
Broadwoven fabric mills	0	1	1	4
Narrow fabric mills and schiffli machine embroidery	0	0	0	1
Nonwoven fabric mills	0	1	2	6
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	1
Carpet and rug mills	0	1	2	7
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	0	1	2
Rope, cordage, twine, tire cord and tire fabric mills	0	1	1	3
Other textile product mills	0	0	0	1
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	0

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	1	2	5
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	7	10	33
Wood preservation	0	0	1	3
Veneer and plywood manufacturing	0	1	1	3
Engineered wood member and truss manufacturing	0	0	0	1
Reconstituted wood product manufacturing	0	1	2	7
Wood windows and door manufacturing	0	6	9	25
Cut stock, resawing lumber, and planing	0	0	1	2
Other millwork, including flooring	0	1	1	3
Wood container and pallet manufacturing	0	2	2	6
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	1	1	3
All other miscellaneous wood product manufacturing	0	2	3	9
Pulp mills	0	1	1	5
Paper mills	0	18	29	124
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	3	4	23
Paper bag and coated and treated paper manufacturing	0	0	1	3
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	3	5	21

## APPENDIX

All other converted paper product manufacturing	0	5	6	21
Printing	0	29	42	91
Support activities for printing	0	1	1	2
Petroleum refineries	0	7	40	358
Asphalt paving mixture and block manufacturing	0	0	1	8
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	1
Industrial gas manufacturing	0	2	2	13
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	1
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	0	0	3
Synthetic rubber manufacturing	0	0	0	1
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	2
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	1
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	1	1	2
Pharmaceutical preparation manufacturing	0	5	9	31
In-vitro diagnostic substance manufacturing	0	2	2	7
Biological product (except diagnostic) manufacturing	0	0	1	2
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	1	2	12

## APPENDIX

Polish and other sanitation good manufacturing	0	0	1	3
Surface active agent manufacturing	0	0	0	1
Toilet preparation manufacturing	0	0	0	3
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	0	0	1
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1	2	5
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	1	2
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1	2	4
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	1	4
Plastics bottle manufacturing	0	0	0	2
Other plastics product manufacturing	0	5	9	25
Tire manufacturing	0	0	0	1
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	1
Pottery, ceramics, and plumbing fixture manufacturing	0	(0)	0	0
Brick, tile, and other structural clay product manufacturing	0	0	0	2
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	1	2	5

## APPENDIX

Cement manufacturing	0	1	2	5
Ready-mix concrete manufacturing	0	3	4	18
Concrete block and brick manufacturing	0	1	2	5
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	2	3	7
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	1	2	5
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	1	2	4
Ground or treated mineral and earth manufacturing	0	0	1	3
Mineral wool manufacturing	0	0	0	1
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	1
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	1	2
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0

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Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	1	1
Handtool manufacturing	0	0	1	2
Prefabricated metal buildings and components manufacturing	0	0	1	2
Fabricated structural metal manufacturing	0	2	3	8
Plate work manufacturing	0	1	1	2
Metal window and door manufacturing	0	0	1	2
Sheet metal work manufacturing	0	1	1	3
Ornamental and architectural metal work manufacturing	0	0	0	1
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	1	3
Machine shops	0	6	7	14
Turned product and screw, nut, and bolt manufacturing	0	1	2	4
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	1	1	2
Electroplating, anodizing, and coloring metal	0	0	1	1
Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	1	2	3
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	1	2	4

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Fabricated pipe and pipe fitting manufacturing	0	0	0	1
Other fabricated metal manufacturing	0	1	1	2
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	1
Construction machinery manufacturing	0	0	0	1
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	1	2
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0



## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	(0)	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	(0)	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0

## APPENDIX

Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	1
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	1	2	5
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	1	1
Electronic connector manufacturing	0	0	1	2
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	1
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	4	5	21
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	1

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	1	1	5
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	1	2	8
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	4	8	30
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	1	2	6
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	3	3	7
Boat building	0	5	7	26
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	0	1	2
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	0	1	1
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	1
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	1	2	5
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	0	0	0
Jewelry and silverware manufacturing	0	0	0	1
Sporting and athletic goods manufacturing	0	0	0	1
Doll, toy, and game manufacturing	0	0	0	3
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	2	2	6
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	1	1	2
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	1	1	4
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	1	1	4
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	15	37	88
Wholesale - Professional and commercial equipment and supplies	0	56	99	168
Wholesale - Household appliances and electrical and electronic goods	0	15	37	80
Wholesale - Machinery, equipment, and supplies	0	32	59	107
Wholesale - Other durable goods merchant wholesalers	0	37	62	125

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	38	107	230
Wholesale - Grocery and related product wholesalers	0	49	68	142
Wholesale - Petroleum and petroleum products	0	9	166	185
Wholesale - Other nondurable goods merchant wholesalers	0	64	145	274
Wholesale - Wholesale electronic markets and agents and brokers	0	40	17	21
Retail - Motor vehicle and parts dealers	0	56	88	130
Retail - Furniture and home furnishings stores	0	22	29	49
Retail - Electronics and appliance stores	0	27	28	48
Retail - Building material and garden equipment and supplies stores	0	40	70	102
Retail - Food and beverage stores	0	107	145	240
Retail - Health and personal care stores	0	51	61	92
Retail - Gasoline stores	0	34	60	117
Retail - Clothing and clothing accessories stores	0	32	48	98
Retail - Sporting goods, hobby, musical instrument and book stores	0	24	32	53
Retail - General merchandise stores	0	73	108	178
Retail - Miscellaneous store retailers	0	47	56	96
Retail - Nonstore retailers	0	82	231	387
Air transportation	0	13	40	54
Rail transportation	0	15	17	51
Water transportation	0	5	8	84
Truck transportation	0	324	397	806
Transit and ground passenger transportation	0	43	69	86
Pipeline transportation	0	5	17	22
Scenic and sightseeing transportation and support activities for transportation	0	86	104	273
Couriers and messengers	0	46	63	107
Warehousing and storage	0	63	70	146

## APPENDIX

Newspaper publishers	0	26	43	60
Periodical publishers	0	16	24	45
Book publishers	0	6	19	41
Directory, mailing list, and other publishers	0	1	3	7
Greeting card publishing	0	1	5	6
Software publishers	0	446	923	1,257
Motion picture and video industries	0	15	26	74
Sound recording industries	0	2	7	13
Radio and television broadcasting	0	63	37	198
Cable and other subscription programming	0	1	9	28
Wired telecommunications carriers	0	53	114	241
Wireless telecommunications carriers (except satellite)	0	4	31	103
Satellite, telecommunications resellers, and all other telecommunications	0	3	4	16
Data processing, hosting, and related services	0	35	74	172
News syndicates, libraries, archives and all other information services	0	10	18	40
Internet publishing and broadcasting and web search portals	0	19	56	155
Nondepository credit intermediation and related activities	0	113	147	228
Securities and commodity contracts intermediation and brokerage	0	73	76	161
Monetary authorities and depository credit intermediation	0	266	563	1,114
Other financial investment activities	0	75	92	220
Direct life insurance carriers	0	45	94	136
Insurance carriers, except direct life	0	79	278	593
Insurance agencies, brokerages, and related activities	0	123	194	419
Funds, trusts, and other financial vehicles	0	17	22	113
Other real estate	0	433	1,611	3,903
Tenant-occupied housing	0	20	390	429

## APPENDIX

Owner-occupied dwellings	0	0	1,188	1,502
Automotive equipment rental and leasing	0	15	65	89
General and consumer goods rental except video tapes and discs	0	16	24	41
Video tape and disc rental	0	4	7	12
Commercial and industrial machinery and equipment rental and leasing	0	16	47	78
Lessors of nonfinancial intangible assets	0	1	6	17
Legal services	0	450	754	1,147
Accounting, tax preparation, bookkeeping, and payroll services	0	143	188	273
Architectural, engineering, and related services	0	261	306	572
Specialized design services	0	24	25	33
Custom computer programming services	0	39	46	70
Computer systems design services	0	98	100	130
Other computer related services, including facilities management	0	21	60	89
Management consulting services	0	420	417	691
Environmental and other technical consulting services	0	94	83	127
Scientific research and development services	0	7,987	10,674	23,267
Advertising, public relations, and related services	0	83	113	226
Photographic services	0	20	13	21
Veterinary services	0	16	23	35
Marketing research and all other miscellaneous professional, scientific, and technical services	0	346	328	503
Management of companies and enterprises	0	930	1,106	1,674
Office administrative services	0	166	116	188
Facilities support services	0	6	8	27
Employment services	0	293	567	820
Business support services	0	98	94	155
Travel arrangement and reservation services	0	22	35	90
Investigation and security services	0	31	31	43
Services to buildings	0	106	112	187



## APPENDIX

Landscape and horticultural services	0	76	81	134
Other support services	0	32	45	82
Waste management and remediation services	0	44	86	157
Elementary and secondary schools	0	75	64	79
Junior colleges, colleges, universities, and professional schools	0	126	169	230
Other educational services	0	38	35	76
Offices of physicians	0	314	380	550
Offices of dentists	0	73	96	138
Offices of other health practitioners	0	89	85	126
Outpatient care centers	0	62	66	129
Medical and diagnostic laboratories	0	19	31	52
Home health care services	0	67	48	69
Other ambulatory health care services	0	21	23	41
Hospitals	0	684	815	1,486
Nursing and community care facilities	0	94	110	184
Residential mental retardation, mental health, substance abuse and other facilities	0	50	54	80
Individual and family services	0	153	150	210
Child day care services	0	44	56	73
Community food, housing, and other relief services, including rehabilitation services	0	25	29	60
Performing arts companies	0	12	19	33
Commercial Sports Except Racing	0	9	11	26
Racing and Track Operation	0	3	5	10
Independent artists, writers, and performers	0	69	81	100
Promoters of performing arts and sports and agents for public figures	0	11	27	64
Museums, historical sites, zoos, and parks	0	7	9	15
Amusement parks and arcades	0	3	5	7
Gambling industries (except casino hotels)	0	21	49	78
Other amusement and recreation industries	0	24	29	51

## APPENDIX

Fitness and recreational sports centers	0	7	12	19
Bowling centers	0	3	4	7
Hotels and motels, including casino hotels	0	11	20	31
Other accommodations	0	6	7	10
Full-service restaurants	0	188	293	478
Limited-service restaurants	0	97	161	321
All other food and drinking places	0	143	198	291
Automotive repair and maintenance, except car washes	0	107	119	185
Car washes	0	46	72	108
Electronic and precision equipment repair and maintenance	0	33	45	74
Commercial and industrial machinery and equipment repair and maintenance	0	39	43	69
Personal and household goods repair and maintenance	0	56	29	44
Personal care services	0	54	35	48
Death care services	0	6	7	11
Dry-cleaning and laundry services	0	11	12	17
Other personal services	0	57	41	58
Religious organizations	0	84	20	147
Grantmaking, giving, and social advocacy organizations	0	51	108	184
Business and professional associations	0	21	26	51
Labor and civic organizations	0	31	56	125
Private households	0	16	16	16
Postal service	0	72	72	80
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	2	0	5
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	15	17	31
Local government passenger transit	0	17	(11)	10
Local government electric utilities	0	2	4	8
Other local government enterprises	0	96	176	358

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 22. Maryland

**Table 411: Detailed NASA Impacts by Types of Impact, Maryland.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	35,563	3,016,077,526	4,269,334,597	7,459,697,782
Oilseed farming	5	863,284	1,756,132	2,437,747
Grain farming	29	922,798	1,733,204	5,099,344
Vegetable and melon farming	9	187,963	265,053	613,063
Fruit farming	4	58,433	88,974	175,134
Tree nut farming	0	528	549	744
Greenhouse, nursery, and floriculture production	14	312,846	392,316	805,225
Tobacco farming	0	4,304	3,916	7,207
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	14	82,404	96,539	200,922
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	10	90,632	211,362	714,302

## APPENDIX

Dairy cattle and milk production	4	79,192	143,529	819,987
Poultry and egg production	9	186,627	244,025	2,889,698
Animal production, except cattle and poultry and eggs	37	894,037	1,911,497	2,899,916
Forestry, forest products, and timber tract production	1	76,060	80,493	99,738
Commercial logging	2	115,395	117,526	186,853
Commercial fishing	8	187,441	145,157	276,679
Commercial hunting and trapping	1	61,641	49,667	67,789
Support activities for agriculture and forestry	40	1,200,933	986,306	1,288,525
Oil and gas extraction	19	879	9,516	4,621,996
Coal mining	1	86,911	265,483	415,448
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	2	132,991	411,405	652,403
Sand and gravel mining	2	140,823	233,517	370,444
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	18,914	21,389	52,986
Drilling oil and gas wells	0	30	30	281
Support activities for oil and gas operations	0	165	155	3,131
Metal mining services	0	174	233	45,854
Other nonmetallic minerals services	0	779	819	6,577
Electric power generation - Hydroelectric	4	636,825	1,084,622	2,064,466
Electric power generation - Fossil fuel	32	6,480,560	21,819,169	48,606,858
Electric power generation - Nuclear	11	2,277,209	5,412,374	11,304,229
Electric power generation - Solar	2	170,430	433,334	651,591
Electric power generation - Wind	0	32,274	243,689	364,910

## APPENDIX

Electric power generation - Geothermal	0	61,594	128,894	245,419
Electric power generation - Biomass	2	313,127	447,579	978,298
Electric power generation - All other	1	166,971	89,679	182,579
Electric power transmission and distribution	68	10,788,396	39,462,173	93,085,136
Natural gas distribution	9	1,104,029	2,782,890	6,462,519
Water, sewage and other systems	8	1,295,343	1,770,020	2,697,365
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	435	30,285,940	13,756,302	33,711,813
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	119	7,762,650	10,113,347	23,766,740
Maintenance and repair construction of residential structures	70	4,354,151	6,217,831	14,605,605
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	12,138	6,804	17,098
Dog and cat food manufacturing	1	35,171	180,782	758,086
Other animal food manufacturing	2	110,987	233,249	1,599,035
Flour milling	0	1,473	3,678	59,084
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	9,893	72,191	472,522
Fats and oils refining and blending	0	20,291	48,834	362,610
Breakfast cereal manufacturing	0	561	1,505	23,329
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	1	83,477	241,054	895,804
Nonchocolate confectionery manufacturing	1	44,885	75,889	327,185
Chocolate and confectionery manufacturing from cacao beans	0	21,921	59,302	228,061
Confectionery manufacturing from purchased chocolate	1	20,548	32,358	195,049
Frozen fruits, juices and vegetables manufacturing	1	21,202	46,556	314,853
Frozen specialties manufacturing	0	1,132	1,747	24,712
Canned fruits and vegetables manufacturing	1	84,669	184,951	693,756
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	19,183	41,805	161,021
Cheese manufacturing	1	63,036	101,916	932,336
Dry, condensed, and evaporated dairy product manufacturing	0	11,534	35,464	189,405
Fluid milk manufacturing	4	251,242	469,713	2,668,926
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	3	201,790	365,148	1,204,703
Frozen cakes and other pastries manufacturing	9	331,990	466,709	842,942
Poultry processing	8	371,460	540,399	2,480,063
Animal, except poultry, slaughtering	2	100,377	147,344	1,331,312
Meat processed from carcasses	5	305,963	351,369	2,784,309
Rendering and meat byproduct processing	1	49,319	53,481	262,197
Seafood product preparation and packaging	2	97,727	128,828	685,012
Bread and bakery product, except frozen, manufacturing	28	1,230,723	1,775,039	4,138,230
Cookie and cracker manufacturing	1	40,912	64,741	300,565
Dry pasta, mixes, and dough manufacturing	1	54,301	160,496	572,151
Tortilla manufacturing	0	0	0	0

## APPENDIX

Roasted nuts and peanut butter manufacturing	2	145,098	354,358	966,588
Other snack food manufacturing	2	175,188	422,769	1,311,386
Coffee and tea manufacturing	1	25,505	57,512	328,964
Flavoring syrup and concentrate manufacturing	0	22,258	227,408	339,868
Mayonnaise, dressing, and sauce manufacturing	1	33,092	76,215	306,440
Spice and extract manufacturing	5	451,055	794,264	2,834,696
All other food manufacturing	2	139,853	211,247	868,782
Bottled and canned soft drinks & water	8	632,335	1,562,902	6,410,532
Manufactured ice	0	28,547	19,298	73,302
Breweries	4	163,536	479,600	1,612,735
Wineries	0	11,462	22,748	111,505
Distilleries	1	99,500	570,501	1,248,065
Tobacco product manufacturing	1	155,157	3,450,374	4,906,911
Fiber, yarn, and thread mills	0	2,022	3,015	16,096
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	7,137	8,417	26,201
Nonwoven fabric mills	1	40,571	94,665	279,523
Knit fabric mills	0	471	504	962
Textile and fabric finishing mills	0	15,532	21,807	58,753
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	10,621	21,344	82,253
Curtain and linen mills	1	34,866	59,771	143,592
Textile bag and canvas mills	1	75,338	103,321	239,059
Rope, cordage, twine, tire cord and tire fabric mills	0	29,455	59,939	126,586
Other textile product mills	1	31,668	41,195	89,960
Hosiery and sock mills	0	3,714	6,507	16,243
Other apparel knitting mills	0	3,306	6,066	15,805
Cut and sew apparel contractors	1	10,593	14,051	58,099
Mens and boys cut and sew apparel manufacturing	1	43,983	80,827	212,135
Womens and girls cut and sew apparel manufacturing	0	8,529	22,124	92,163
Other cut and sew apparel manufacturing	0	2,391	4,995	20,454
Apparel accessories and other apparel manufacturing	0	21,425	38,234	67,312
Leather and hide tanning and finishing	0	0	0	0

## APPENDIX

Footwear manufacturing	0	28,493	38,449	92,100
Other leather and allied product manufacturing	0	2,741	3,023	10,356
Sawmills	2	96,514	170,274	601,167
Wood preservation	0	15,209	64,506	202,865
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	1	62,460	102,116	281,161
Reconstituted wood product manufacturing	0	8,125	28,936	85,888
Wood windows and door manufacturing	1	87,597	141,149	358,312
Cut stock, resawing lumber, and planing	0	17,920	36,959	102,592
Other millwork, including flooring	2	132,939	231,073	546,566
Wood container and pallet manufacturing	2	67,782	88,708	235,087
Manufactured home (mobile home) manufacturing	0	4	5	36
Prefabricated wood building manufacturing	0	11,044	13,670	43,004
All other miscellaneous wood product manufacturing	2	217,070	316,786	494,252
Pulp mills	0	2,863	3,718	18,812
Paper mills	3	279,439	456,961	2,149,689
Paperboard mills	0	18,482	32,311	157,688
Paperboard container manufacturing	7	430,827	552,190	3,021,698
Paper bag and coated and treated paper manufacturing	0	14,327	20,236	105,194
Stationery product manufacturing	0	19,785	24,313	100,732
Sanitary paper product manufacturing	0	16,399	32,149	170,116
All other converted paper product manufacturing	0	4,133	5,157	21,473
Printing	53	3,193,662	4,452,881	9,028,781
Support activities for printing	2	124,244	171,416	289,092
Petroleum refineries	1	153,301	1,501,137	9,611,316
Asphalt paving mixture and block manufacturing	1	49,751	89,424	414,497
Asphalt shingle and coating materials manufacturing	1	99,247	354,193	758,998
Petroleum lubricating oil and grease manufacturing	0	80,173	344,675	700,765



## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	3	363,203	980,068	3,426,447
Synthetic dye and pigment manufacturing	0	10,463	26,035	83,236
Other basic inorganic chemical manufacturing	2	171,349	417,531	1,252,766
Other basic organic chemical manufacturing	0	32,941	78,587	609,440
Plastics material and resin manufacturing	0	20,226	42,143	366,194
Synthetic rubber manufacturing	0	9,664	17,601	93,539
Artificial and synthetic fibers and filaments manufacturing	1	32,597	61,205	451,143
Nitrogenous fertilizer manufacturing	0	18,230	48,733	156,648
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	12,630	25,130	71,121
Pesticide and other agricultural chemical manufacturing	1	166,131	625,228	2,013,798
Medicinal and botanical manufacturing	1	170,682	317,527	625,374
Pharmaceutical preparation manufacturing	6	1,283,692	5,547,152	10,917,322
In-vitro diagnostic substance manufacturing	3	393,867	667,720	1,460,520
Biological product (except diagnostic) manufacturing	3	627,492	1,694,962	2,856,554
Paint and coating manufacturing	2	169,433	375,104	1,397,569
Adhesive manufacturing	1	156,445	281,257	835,342
Soap and other detergent manufacturing	1	54,816	107,717	699,472
Polish and other sanitation good manufacturing	2	136,365	283,806	980,738
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	2	311,507	1,053,412	2,370,763
Printing ink manufacturing	0	8,597	9,760	38,989
Explosives manufacturing	0	1,116	1,353	4,492
Custom compounding of purchased resins	0	19,634	37,950	132,588
Photographic film and chemical manufacturing	0	2,186	3,689	23,392
Other miscellaneous chemical product manufacturing	1	116,293	197,112	850,972

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	2	116,856	248,620	750,280
Unlaminated plastics profile shape manufacturing	0	2,798	6,192	14,923
Plastics pipe and pipe fitting manufacturing	0	31,144	104,486	225,415
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	4,127	10,075	22,279
Polystyrene foam product manufacturing	1	38,891	81,208	223,717
Urethane and other foam product (except polystyrene) manufacturing	1	69,873	141,201	430,773
Plastics bottle manufacturing	1	53,693	116,091	407,919
Other plastics product manufacturing	15	1,363,600	2,493,305	5,278,893
Tire manufacturing	0	11,012	17,648	62,534
Rubber and plastics hoses and belting manufacturing	0	14,029	23,640	50,945
Other rubber product manufacturing	1	87,314	156,730	417,388
Pottery, ceramics, and plumbing fixture manufacturing	1	60,242	76,116	154,737
Brick, tile, and other structural clay product manufacturing	1	44,755	77,963	190,030
Flat glass manufacturing	0	7,656	13,516	51,438
Other pressed and blown glass and glassware manufacturing	1	61,994	90,336	202,189
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	1	47,873	76,967	198,088
Cement manufacturing	1	81,197	202,806	512,368
Ready-mix concrete manufacturing	4	316,179	535,826	1,781,078
Concrete block and brick manufacturing	2	123,983	236,055	574,920
Concrete pipe manufacturing	1	83,489	139,182	370,385
Other concrete product manufacturing	3	183,290	271,380	695,655
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	2	142,426	391,445	974,714
Abrasive product manufacturing	0	10,701	31,006	66,056
Cut stone and stone product manufacturing	2	85,164	100,241	215,319

## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	2,032	4,978	12,456
Miscellaneous nonmetallic mineral products manufacturing	1	46,397	116,044	258,549
Iron and steel mills and ferroalloy manufacturing	1	(80,700)	49,485	1,004,113
Iron, steel pipe and tube manufacturing from purchased steel	0	20,191	47,123	140,742
Rolled steel shape manufacturing	0	6,796	29,457	75,325
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	(600)	1,277	10,904
Secondary smelting and alloying of aluminum	0	5,017	14,556	74,794
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	10,616	21,960	69,667
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	4,056	8,523	27,459
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	(1,035)	3,056	8,157
Nonferrous metal foundries	0	5,437	17,346	41,333
Custom roll forming	0	12,639	19,793	90,243
Crown and closure manufacturing and metal stamping	0	11,995	17,293	51,892
Iron and steel forging	0	8,543	11,707	36,518
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	334	800	2,590
Handtool manufacturing	0	5,253	8,434	14,759
Prefabricated metal buildings and components manufacturing	1	58,066	82,430	261,349
Fabricated structural metal manufacturing	1	89,175	132,682	409,670
Plate work manufacturing	0	19,725	20,812	63,379
Metal window and door manufacturing	1	49,828	75,840	183,238

## APPENDIX

Sheet metal work manufacturing	1	108,405	139,380	319,812
Ornamental and architectural metal work manufacturing	2	189,321	250,627	580,545
Power boiler and heat exchanger manufacturing	0	2,953	4,072	9,620
Metal tank (heavy gauge) manufacturing	0	7,116	8,724	23,324
Metal cans manufacturing	0	23,931	53,785	236,792
Metal barrels, drums and pails manufacturing	0	9,954	12,571	50,737
Hardware manufacturing	0	6,123	9,605	33,334
Spring and wire product manufacturing	1	84,873	115,980	315,251
Machine shops	7	457,145	529,576	1,005,087
Turned product and screw, nut, and bolt manufacturing	0	13,641	19,005	48,995
Metal heat treating	0	2,108	3,209	8,638
Metal coating and nonprecious engraving	1	35,158	60,915	131,171
Electroplating, anodizing, and coloring metal	1	40,472	45,629	107,085
Valve and fittings, other than plumbing, manufacturing	1	105,004	168,990	395,064
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	4,236	7,725	19,609
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	732	914	1,932
Small arms, ordnance, and accessories manufacturing	0	31,644	75,962	140,563
Fabricated pipe and pipe fitting manufacturing	0	1,259	1,440	4,798
Other fabricated metal manufacturing	3	156,956	208,620	553,301
Farm machinery and equipment manufacturing	0	4,361	6,317	22,379
Lawn and garden equipment manufacturing	0	12,751	22,623	95,890
Construction machinery manufacturing	1	65,527	122,865	372,111
Mining machinery and equipment manufacturing	0	47	55	164

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	1,031	1,219	3,408
Semiconductor machinery manufacturing	0	1,732	1,947	5,191
Food product machinery manufacturing	0	31	34	113
Sawmill, woodworking, and paper machinery	0	27,418	30,404	83,880
Printing machinery and equipment manufacturing	0	661	741	1,921
All other industrial machinery manufacturing	0	1,171	1,489	3,952
Optical instrument and lens manufacturing	1	52,859	83,365	221,970
Photographic and photocopying equipment manufacturing	0	9,509	14,138	45,384
Other commercial service industry machinery manufacturing	0	8,818	14,496	44,437
Air purification and ventilation equipment manufacturing	0	5,631	7,722	19,048
Heating equipment (except warm air furnaces) manufacturing	0	26,681	38,239	81,899
Air conditioning, refrigeration, and warm air heating equipment manufacturing	2	131,228	251,377	676,504
Industrial mold manufacturing	0	3,002	3,420	6,880
Special tool, die, jig, and fixture manufacturing	0	3,643	4,650	8,855
Cutting tool and machine tool accessory manufacturing	0	534	549	1,397
Machine tool manufacturing	0	3,573	3,999	10,050
Rolling mill and other metalworking machinery manufacturing	0	23,103	29,542	67,052
Turbine and turbine generator set units manufacturing	0	63	76	316
Speed changer, industrial high-speed drive, and gear manufacturing	0	8,940	13,304	38,146
Mechanical power transmission equipment manufacturing	0	1,669	2,145	5,969
Other engine equipment manufacturing	1	150,021	292,571	1,173,848
Pump and pumping equipment manufacturing	0	7,598	13,717	33,996

## APPENDIX

Air and gas compressor manufacturing	0	7,614	13,270	35,056
Elevator and moving stairway manufacturing	0	576	913	4,061
Conveyor and conveying equipment manufacturing	0	4,369	4,541	10,445
Overhead cranes, hoists, and monorail systems manufacturing	0	258	492	2,009
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	41,878	110,643	211,053
Welding and soldering equipment manufacturing	0	1,112	1,398	4,043
Packaging machinery manufacturing	0	2,017	2,956	7,082
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	9,774	12,748	37,323
Electronic computer manufacturing	1	49,525	125,527	607,847
Computer storage device manufacturing	0	(5)	42	1,404
Computer terminals and other computer peripheral equipment manufacturing	5	308,585	624,221	2,576,903
Telephone apparatus manufacturing	0	9,311	17,713	59,586
Broadcast and wireless communications equipment manufacturing	0	21,244	31,166	69,002
Other communications equipment manufacturing	0	38,297	62,022	154,233
Audio and video equipment manufacturing	0	8,836	16,179	47,991
Printed circuit assembly (electronic assembly) manufacturing	1	69,871	107,359	329,208
Bare printed circuit board manufacturing	0	5,745	7,744	23,360

## APPENDIX

Semiconductor and related device manufacturing	1	50,111	91,618	329,752
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	2,080	3,120	9,131
Electronic connector manufacturing	0	32,619	49,606	118,273
Other electronic component manufacturing	2	118,476	139,661	455,565
Electromedical and electrotherapeutic apparatus manufacturing	0	4,858	10,300	22,586
Search, detection, and navigation instruments manufacturing	0	28,685	46,285	85,899
Automatic environmental control manufacturing	0	7,012	10,322	32,916
Industrial process variable instruments manufacturing	0	4,617	7,035	18,913
Totalizing fluid meter and counting device manufacturing	0	8,153	17,424	36,879
Electricity and signal testing instruments manufacturing	0	14,507	21,189	52,916
Analytical laboratory instrument manufacturing	3	396,661	702,260	1,446,477
Irradiation apparatus manufacturing	0	156	329	1,000
Watch, clock, and other measuring and controlling device manufacturing	1	24,054	43,961	129,931
Blank magnetic and optical recording media manufacturing	3	575,834	1,606,185	3,946,323
Software and other prerecorded and record reproducing	0	62,129	90,277	153,359
Electric lamp bulb and part manufacturing	0	3,961	4,955	16,146
Lighting fixture manufacturing	0	41,014	48,379	139,386
Small electrical appliance manufacturing	0	5,682	7,649	29,962
Household cooking appliance manufacturing	0	3,421	5,075	31,452
Household refrigerator and home freezer manufacturing	0	3,623	5,411	29,002
Household laundry equipment manufacturing	0	5,442	7,868	60,537

## APPENDIX

Other major household appliance manufacturing	0	1,754	2,552	14,581
Power, distribution, and specialty transformer manufacturing	0	3,051	3,744	13,544
Motor and generator manufacturing	0	1,135	1,400	6,116
Switchgear and switchboard apparatus manufacturing	0	27,897	35,903	129,132
Relay and industrial control manufacturing	0	4,491	5,218	17,759
Storage battery manufacturing	1	108,558	133,739	403,238
Primary battery manufacturing	2	179,638	155,016	735,446
Fiber optic cable manufacturing	0	46,076	58,149	225,097
Other communication and energy wire manufacturing	0	52,682	69,486	245,654
Wiring device manufacturing	0	10,468	13,682	48,925
Carbon and graphite product manufacturing	0	5,685	6,739	23,028
All other miscellaneous electrical equipment and component manufacturing	1	97,032	103,085	300,790
Automobile manufacturing	0	9,181	44,048	172,236
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	3,974	5,687	16,680
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	2	155,694	318,018	1,043,601
Travel trailer and camper manufacturing	0	9,050	10,663	63,132
Motor vehicle gasoline engine and engine parts manufacturing	0	15,728	24,748	81,605
Motor vehicle electrical and electronic equipment manufacturing	0	11,931	22,057	81,253
Motor vehicle transmission and power train parts manufacturing	1	205,296	347,420	990,618
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	1	111,910	196,159	825,155
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	3	349,473	607,230	1,718,575



## APPENDIX

Aircraft manufacturing	0	17,006	40,702	108,929
Aircraft engine and engine parts manufacturing	0	7,156	21,494	41,354
Other aircraft parts and auxiliary equipment manufacturing	0	6,049	11,040	21,391
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	8,705	13,514	26,274
Railroad rolling stock manufacturing	0	6,316	11,761	44,922
Ship building and repairing	0	13,749	19,258	45,816
Boat building	1	54,777	84,398	332,811
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	21,882	63,094	174,477
All other transportation equipment manufacturing	0	4,357	10,550	58,863
Wood kitchen cabinet and countertop manufacturing	3	133,880	216,562	436,196
Upholstered household furniture manufacturing	1	34,082	52,630	141,893
Nonupholstered wood household furniture manufacturing	0	16,113	18,190	42,263
Other household nonupholstered furniture manufacturing	0	16,940	28,993	76,709
Institutional furniture manufacturing	0	13,215	15,289	42,178
Wood office furniture manufacturing	0	1,599	2,497	6,200
Custom architectural woodwork and millwork	0	9,425	9,413	23,721
Office furniture, except wood, manufacturing	0	24,248	47,721	118,722
Showcase, partition, shelving, and locker manufacturing	0	19,260	32,528	73,090
Mattress manufacturing	1	80,987	244,696	634,185
Blind and shade manufacturing	1	48,427	52,486	178,995
Surgical and medical instrument manufacturing	1	62,350	231,083	406,310
Surgical appliance and supplies manufacturing	1	115,056	426,890	654,583

## APPENDIX

Dental equipment and supplies manufacturing	0	2,197	6,769	13,101
Ophthalmic goods manufacturing	0	7,098	29,486	61,272
Dental laboratories	1	52,170	53,236	103,233
Jewelry and silverware manufacturing	2	73,552	134,593	309,842
Sporting and athletic goods manufacturing	0	14,436	31,755	93,149
Doll, toy, and game manufacturing	2	56,260	182,656	502,271
Office supplies (except paper) manufacturing	0	2,687	6,490	34,174
Sign manufacturing	4	181,227	183,558	435,154
Gasket, packing, and sealing device manufacturing	0	13,027	24,596	73,127
Musical instrument manufacturing	1	49,302	50,396	104,436
Fasteners, buttons, needles, and pins manufacturing	0	3,588	6,805	20,059
Broom, brush, and mop manufacturing	1	80,013	218,702	314,101
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	2	110,353	168,272	409,264
Wholesale - Motor vehicle and motor vehicle parts and supplies	23	1,505,775	3,969,399	8,685,122
Wholesale - Professional and commercial equipment and supplies	69	9,145,512	16,322,990	25,862,783
Wholesale - Household appliances and electrical and electronic goods	30	3,258,869	8,136,158	15,267,981
Wholesale - Machinery, equipment, and supplies	31	2,610,542	5,123,949	8,547,337
Wholesale - Other durable goods merchant wholesalers	88	7,060,903	12,159,392	22,220,839
Wholesale - Drugs and druggists' sundries	19	3,482,149	10,688,625	18,584,691
Wholesale - Grocery and related product wholesalers	87	5,903,745	8,485,969	16,578,193
Wholesale - Petroleum and petroleum products	7	701,473	13,130,382	14,377,146
Wholesale - Other nondurable goods merchant wholesalers	106	8,686,481	20,749,418	35,255,815
Wholesale - Wholesale electronic markets and agents and brokers	68	7,654,457	3,818,234	4,379,583
Retail - Motor vehicle and parts dealers	124	7,696,023	12,091,575	16,977,559

## APPENDIX

Retail - Furniture and home furnishings stores	91	4,035,063	5,379,241	8,562,453
Retail - Electronics and appliance stores	82	4,504,936	4,880,501	7,863,856
Retail - Building material and garden equipment and supplies stores	103	4,882,511	8,975,045	12,598,452
Retail - Food and beverage stores	375	14,502,413	19,886,648	30,672,324
Retail - Health and personal care stores	185	8,205,858	10,014,337	15,223,865
Retail - Gasoline stores	77	3,502,934	5,644,303	9,567,450
Retail - Clothing and clothing accessories stores	204	5,287,957	8,866,023	17,984,881
Retail - Sporting goods, hobby, musical instrument and book stores	109	3,146,868	4,141,096	6,516,664
Retail - General merchandise stores	358	10,252,022	15,576,751	25,287,649
Retail - Miscellaneous store retailers	214	5,801,089	6,932,465	10,894,939
Retail - Nonstore retailers	221	4,562,659	15,841,242	31,983,079
Air transportation	46	5,856,041	13,712,181	19,687,904
Rail transportation	15	2,064,750	2,827,631	6,483,839
Water transportation	10	921,206	1,655,965	6,537,814
Truck transportation	147	9,918,331	11,865,738	24,931,654
Transit and ground passenger transportation	384	7,540,636	8,870,324	14,556,723
Pipeline transportation	1	291,344	1,157,498	1,315,243
Scenic and sightseeing transportation and support activities for transportation	157	10,909,828	12,343,262	25,247,157
Couriers and messengers	121	5,133,382	7,050,764	12,789,813
Warehousing and storage	136	7,523,962	8,591,555	16,569,049
Newspaper publishers	20	1,142,600	1,809,866	2,369,604
Periodical publishers	24	3,035,476	4,511,971	6,265,619
Book publishers	9	734,175	2,157,400	3,837,134
Directory, mailing list, and other publishers	6	400,234	1,180,123	1,757,452
Greeting card publishing	0	14,989	41,646	67,025
Software publishers	65	9,763,379	23,366,172	27,830,820
Motion picture and video industries	34	2,107,650	3,521,428	7,983,098
Sound recording industries	6	385,824	1,565,004	2,322,907
Radio and television broadcasting	25	32,633,191	32,479,506	34,670,411

## APPENDIX

Cable and other subscription programming	11	6,001,576	18,975,679	30,555,611
Wired telecommunications carriers	68	7,495,415	17,527,164	34,543,114
Wireless telecommunications carriers (except satellite)	25	3,166,696	16,529,314	41,202,922
Satellite, telecommunications resellers, and all other telecommunications	14	1,363,142	1,712,094	4,624,279
Data processing, hosting, and related services	56	5,401,985	10,803,513	23,680,295
News syndicates, libraries, archives and all other information services	6	350,064	574,205	978,619
Internet publishing and broadcasting and web search portals	33	4,228,373	11,809,640	31,107,113
Nondepository credit intermediation and related activities	158	15,194,721	19,675,443	32,551,509
Securities and commodity contracts intermediation and brokerage	92	16,817,292	16,437,674	28,054,892
Monetary authorities and depository credit intermediation	267	25,124,614	52,186,388	93,556,043
Other financial investment activities	338	23,829,164	26,867,398	52,803,832
Direct life insurance carriers	18	3,042,591	6,828,390	8,715,695
Insurance carriers, except direct life	91	11,774,350	46,575,028	79,700,158
Insurance agencies, brokerages, and related activities	184	13,518,817	23,003,116	47,279,839
Funds, trusts, and other financial vehicles	64	4,331,640	5,938,924	23,135,715
Other real estate	1,593	68,699,965	155,086,598	338,892,011
Tenant-occupied housing	169	6,761,470	74,714,577	81,711,219
Owner-occupied dwellings	0	0	222,407,013	281,008,658
Automotive equipment rental and leasing	27	7,613,813	13,401,346	15,712,649
General and consumer goods rental except video tapes and discs	14	5,792,157	6,057,996	6,640,003
Video tape and disc rental	11	959,148	1,288,138	1,780,890
Commercial and industrial machinery and equipment rental and leasing	18	8,879,918	12,138,308	14,167,599
Lessors of nonfinancial intangible assets	5	460,352	9,239,410	11,369,858

## APPENDIX

Legal services	419	38,136,525	69,579,915	97,577,417
Accounting, tax preparation, bookkeeping, and payroll services	254	19,830,844	28,443,455	38,245,172
Architectural, engineering, and related services	522	52,568,763	65,989,853	108,152,129
Specialized design services	72	4,609,707	4,903,171	6,066,417
Custom computer programming services	49	6,141,353	7,022,435	9,522,071
Computer systems design services	113	13,761,477	14,046,406	18,219,656
Other computer related services, including facilities management	27	2,929,459	7,478,450	10,867,463
Management consulting services	3,434	332,536,354	331,242,832	488,439,575
Environmental and other technical consulting services	120	11,209,569	10,103,789	14,007,947
Scientific research and development services	5,890	701,042,629	946,003,057	1,692,350,987
Advertising, public relations, and related services	102	7,517,470	10,871,540	18,667,628
Photographic services	49	2,467,255	1,452,524	2,374,441
Veterinary services	40	2,033,023	3,170,614	4,668,140
Marketing research and all other miscellaneous professional, scientific, and technical services	511	31,914,505	30,216,118	43,203,597
Management of companies and enterprises	493	64,733,487	75,616,000	106,665,876
Office administrative services	191	14,819,750	7,130,390	14,288,560
Facilities support services	32	1,677,614	2,406,418	5,086,384
Employment services	829	42,022,090	70,888,659	101,004,917
Business support services	169	6,683,693	6,155,605	11,035,856
Travel arrangement and reservation services	46	3,104,552	4,407,659	9,324,335
Investigation and security services	184	7,416,297	7,666,089	10,968,764
Services to buildings	576	16,344,645	17,262,789	27,683,718
Landscape and horticultural services	221	8,829,710	9,475,656	14,705,498
Other support services	69	3,181,513	4,242,968	8,005,440
Waste management and remediation services	69	4,825,274	9,014,760	15,435,624
Elementary and secondary schools	183	9,309,139	8,220,864	9,852,706
Junior colleges, colleges, universities, and professional schools	237	16,857,947	23,137,734	29,820,704
Other educational services	245	7,844,241	7,325,907	13,196,003
Offices of physicians	462	49,015,709	58,224,478	85,381,340
Offices of dentists	151	10,337,602	13,118,754	19,532,772

## APPENDIX

Offices of other health practitioners	212	11,969,280	11,149,587	15,806,299
Outpatient care centers	171	12,763,973	13,411,998	23,647,571
Medical and diagnostic laboratories	48	3,832,265	5,999,914	9,438,015
Home health care services	309	14,560,310	11,400,275	15,357,000
Other ambulatory health care services	57	3,625,510	4,008,106	6,452,054
Hospitals	868	68,882,595	81,925,056	153,418,834
Nursing and community care facilities	316	13,687,640	16,022,772	26,425,303
Residential mental retardation, mental health, substance abuse and other facilities	156	5,843,934	6,306,765	9,777,902
Individual and family services	274	9,731,821	8,595,583	12,138,596
Child day care services	259	6,964,154	7,850,862	10,788,443
Community food, housing, and other relief services, including rehabilitation services	96	4,284,074	4,640,561	9,287,968
Performing arts companies	46	2,106,588	3,209,406	5,264,195
Commercial Sports Except Racing	45	3,916,659	4,214,577	6,170,127
Racing and Track Operation	9	443,933	760,464	1,175,057
Independent artists, writers, and performers	177	6,498,553	7,119,658	8,094,803
Promoters of performing arts and sports and agents for public figures	39	1,458,012	2,764,776	6,366,113
Museums, historical sites, zoos, and parks	14	571,817	700,814	1,236,382
Amusement parks and arcades	11	312,837	572,913	805,364
Gambling industries (except casino hotels)	73	3,497,913	9,235,947	13,200,396
Other amusement and recreation industries	91	3,422,275	3,985,854	6,091,598
Fitness and recreational sports centers	99	2,523,892	3,317,172	4,994,402
Bowling centers	12	333,814	462,623	765,495
Hotels and motels, including casino hotels	83	4,191,770	7,543,998	10,916,080
Other accommodations	27	1,743,550	2,292,146	2,854,571
Full-service restaurants	756	20,132,329	31,347,561	52,090,283
Limited-service restaurants	705	16,493,524	27,227,376	55,198,405
All other food and drinking places	508	18,278,308	24,289,957	34,718,629
Automotive repair and maintenance, except car washes	277	16,011,020	18,724,680	27,326,664
Car washes	144	8,046,782	12,353,637	17,933,982

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Electronic and precision equipment repair and maintenance	586	45,440,032	67,028,705	102,667,717
Commercial and industrial machinery and equipment repair and maintenance	44	3,487,309	4,086,297	6,241,180
Personal and household goods repair and maintenance	83	4,245,981	2,353,516	3,543,683
Personal care services	328	9,077,497	6,035,092	8,401,137
Death care services	22	1,025,804	1,294,557	1,989,152
Dry-cleaning and laundry services	49	1,832,907	2,031,908	2,928,077
Other personal services	267	7,280,475	5,327,456	7,682,939
Religious organizations	375	21,658,240	9,713,791	34,945,331
Grantmaking, giving, and social advocacy organizations	79	4,732,823	13,554,580	20,261,912
Business and professional associations	36	3,994,321	5,910,500	8,724,724
Labor and civic organizations	91	3,645,105	8,548,078	13,209,259
Private households	157	3,361,855	3,361,855	3,361,855
Postal service	96	8,851,242	8,861,337	9,754,059
Federal electric utilities	0	0	0	0
Other federal government enterprises	58	2,982,944	2,219,340	12,584,723
State government passenger transit	25	2,766,754	(1,672,135)	1,925,832
State government electric utilities	0	0	0	0
Other state government enterprises	2	379,896	293,496	567,095
Local government passenger transit	17	2,150,442	(1,531,530)	187,577
Local government electric utilities	0	0	0	0
Other local government enterprises	26	2,983,139	2,388,427	6,378,001
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	3,125	561,900,067	646,162,992	1,348,808,072

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 412: Detailed M2M Program Impacts by Types of Impact, Maryland.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>361</i>	<i>34,039,321</i>	<i>47,770,157</i>	<i>82,637,804</i>
Oilseed farming	0	7,878	23,876	38,184
Grain farming	0	7,674	15,928	42,865
Vegetable and melon farming	0	2,128	3,145	6,866
Fruit farming	0	856	1,317	2,446
Tree nut farming	0	12	13	17
Greenhouse, nursery, and floriculture production	0	3,007	3,899	7,817
Tobacco farming	0	68	73	139
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	712	867	1,752
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	800	1,800	5,440
Dairy cattle and milk production	0	1,005	1,878	9,390
Poultry and egg production	0	1,671	2,226	25,833
Animal production, except cattle and poultry and eggs	0	5,582	13,242	20,612
Forestry, forest products, and timber tract production	0	731	770	913
Commercial logging	0	923	937	1,375
Commercial fishing	0	2,649	1,548	2,984
Commercial hunting and trapping	0	697	528	637
Support activities for agriculture and forestry	0	9,642	7,833	10,217
Oil and gas extraction	0	5	75	35,629
Coal mining	0	510	1,365	2,363
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0



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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,581	2,518	4,077
Sand and gravel mining	0	1,877	1,581	2,100
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	251	158	364
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	1	1	16
Metal mining services	0	1	2	306
Other nonmetallic minerals services	0	3	4	34
Electric power generation - Hydroelectric	0	6,997	10,975	19,579
Electric power generation - Fossil fuel	0	56,097	183,701	388,285
Electric power generation - Nuclear	0	20,452	51,991	105,034
Electric power generation - Solar	0	1,222	2,996	4,364
Electric power generation - Wind	0	212	1,542	2,177
Electric power generation - Geothermal	0	859	1,629	3,145
Electric power generation - Biomass	0	4,820	5,445	12,093
Electric power generation - All other	0	2,670	1,151	2,033
Electric power transmission and distribution	0	80,985	308,356	699,674
Natural gas distribution	0	13,259	34,555	70,753
Water, sewage and other systems	0	15,817	19,203	26,295
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	64,386	84,246	192,252
Maintenance and repair construction of residential structures	1	48,611	69,839	158,748
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	125	68	170
Dog and cat food manufacturing	0	338	1,801	7,246
Other animal food manufacturing	0	1,101	2,420	15,777
Flour milling	0	15	37	607
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	143	1,054	6,803
Fats and oils refining and blending	0	286	710	4,850
Breakfast cereal manufacturing	0	5	13	206
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	1,211	3,522	12,982
Nonchocolate confectionery manufacturing	0	601	1,004	3,965
Chocolate and confectionery manufacturing from cacao beans	0	486	1,325	4,717
Confectionery manufacturing from purchased chocolate	0	257	409	2,278
Frozen fruits, juices and vegetables manufacturing	0	302	669	4,215
Frozen specialties manufacturing	0	16	24	318
Canned fruits and vegetables manufacturing	0	1,386	3,035	11,190

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	329	709	2,521
Cheese manufacturing	0	834	1,348	12,564
Dry, condensed, and evaporated dairy product manufacturing	0	173	547	2,600
Fluid milk manufacturing	0	2,924	5,599	30,463
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	2,557	4,790	13,980
Frozen cakes and other pastries manufacturing	0	3,976	5,523	9,742
Poultry processing	0	3,473	5,336	23,179
Animal, except poultry, slaughtering	0	927	1,384	12,224
Meat processed from carcasses	0	3,410	3,974	30,481
Rendering and meat byproduct processing	0	654	701	3,422
Seafood product preparation and packaging	0	965	1,321	6,267
Bread and bakery product, except frozen, manufacturing	0	14,263	20,606	47,078
Cookie and cracker manufacturing	0	508	855	3,602
Dry pasta, mixes, and dough manufacturing	0	702	2,029	7,427
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	1,962	5,342	12,686
Other snack food manufacturing	0	2,050	4,973	14,850
Coffee and tea manufacturing	0	337	771	4,201
Flavoring syrup and concentrate manufacturing	0	330	3,181	4,877
Mayonnaise, dressing, and sauce manufacturing	0	453	1,020	3,909
Spice and extract manufacturing	0	7,760	13,954	45,231
All other food manufacturing	0	2,006	3,043	11,797
Bottled and canned soft drinks & water	0	6,561	16,861	66,105
Manufactured ice	0	309	231	727
Breweries	0	1,847	5,592	18,112
Wineries	0	273	541	2,592
Distilleries	0	1,216	7,285	14,332
Tobacco product manufacturing	0	1,600	47,029	58,312
Fiber, yarn, and thread mills	0	20	34	160
Broadwoven fabric mills	0	0	0	0

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	98	117	337
Nonwoven fabric mills	0	515	1,279	3,421
Knit fabric mills	0	9	10	19
Textile and fabric finishing mills	0	350	491	1,274
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	141	303	1,003
Curtain and linen mills	0	466	834	1,870
Textile bag and canvas mills	0	810	1,129	2,513
Rope, cordage, twine, tire cord and tire fabric mills	0	199	426	838
Other textile product mills	0	374	496	1,021
Hosiery and sock mills	0	42	78	171
Other apparel knitting mills	0	53	94	225
Cut and sew apparel contractors	0	172	227	892
Mens and boys cut and sew apparel manufacturing	0	742	1,383	3,141
Womens and girls cut and sew apparel manufacturing	0	190	489	1,791
Other cut and sew apparel manufacturing	0	43	89	325
Apparel accessories and other apparel manufacturing	0	388	694	1,066
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	365	504	1,132
Other leather and allied product manufacturing	0	45	50	157
Sawmills	0	605	1,108	3,739
Wood preservation	0	82	369	1,132
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	377	633	1,718
Reconstituted wood product manufacturing	0	45	166	481
Wood windows and door manufacturing	0	582	971	2,400
Cut stock, resawing lumber, and planing	0	148	327	850
Other millwork, including flooring	0	967	1,758	3,897
Wood container and pallet manufacturing	0	689	927	2,398
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	45	55	171
All other miscellaneous wood product manufacturing	0	2,387	3,657	5,104
Pulp mills	0	20	25	129
Paper mills	0	2,338	3,344	17,200
Paperboard mills	0	165	268	1,380
Paperboard container manufacturing	0	5,183	6,439	35,010
Paper bag and coated and treated paper manufacturing	0	142	184	983
Stationery product manufacturing	0	249	285	1,067
Sanitary paper product manufacturing	0	153	271	1,513
All other converted paper product manufacturing	0	47	55	232
Printing	0	31,074	43,209	84,200
Support activities for printing	0	1,623	2,192	3,662
Petroleum refineries	0	1,619	14,291	93,251
Asphalt paving mixture and block manufacturing	0	368	641	2,735
Asphalt shingle and coating materials manufacturing	0	726	2,390	5,208
Petroleum lubricating oil and grease manufacturing	0	756	3,139	6,153
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	416	1,202	4,011
Synthetic dye and pigment manufacturing	0	108	276	948
Other basic inorganic chemical manufacturing	0	1,382	3,591	10,444
Other basic organic chemical manufacturing	0	284	686	5,497
Plastics material and resin manufacturing	0	186	395	3,595
Synthetic rubber manufacturing	0	85	155	858
Artificial and synthetic fibers and filaments manufacturing	0	46	81	612
Nitrogenous fertilizer manufacturing	0	196	561	1,670
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	116	242	677

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	1,641	6,310	20,172
Medicinal and botanical manufacturing	0	3,076	6,240	10,376
Pharmaceutical preparation manufacturing	0	23,507	107,521	190,606
In-vitro diagnostic substance manufacturing	0	11,298	19,292	41,826
Biological product (except diagnostic) manufacturing	0	14,570	41,412	64,145
Paint and coating manufacturing	0	1,749	4,137	15,075
Adhesive manufacturing	0	1,827	3,542	9,725
Soap and other detergent manufacturing	0	508	1,236	6,636
Polish and other sanitation good manufacturing	0	1,534	3,723	10,607
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	4,362	16,841	34,382
Printing ink manufacturing	0	109	126	492
Explosives manufacturing	0	7	8	29
Custom compounding of purchased resins	0	277	594	2,109
Photographic film and chemical manufacturing	0	17	31	181
Other miscellaneous chemical product manufacturing	0	1,117	2,006	8,746
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,755	3,689	10,921
Unlaminated plastics profile shape manufacturing	0	32	70	165
Plastics pipe and pipe fitting manufacturing	0	275	937	2,004
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	38	94	206
Polystyrene foam product manufacturing	0	368	757	2,073
Urethane and other foam product (except polystyrene) manufacturing	0	761	1,515	4,596
Plastics bottle manufacturing	0	767	1,640	5,645
Other plastics product manufacturing	0	14,721	26,832	53,865
Tire manufacturing	0	72	117	441

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Rubber and plastics hoses and belting manufacturing	0	129	211	447
Other rubber product manufacturing	0	696	1,239	3,396
Pottery, ceramics, and plumbing fixture manufacturing	0	447	539	1,164
Brick, tile, and other structural clay product manufacturing	0	320	532	1,354
Flat glass manufacturing	0	72	119	474
Other pressed and blown glass and glassware manufacturing	0	686	988	2,209
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	480	750	1,928
Cement manufacturing	0	409	978	2,510
Ready-mix concrete manufacturing	0	1,653	2,712	9,007
Concrete block and brick manufacturing	0	626	1,137	2,804
Concrete pipe manufacturing	0	148	244	672
Other concrete product manufacturing	0	725	1,049	2,714
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	1,457	3,848	9,764
Abrasive product manufacturing	0	129	359	781
Cut stone and stone product manufacturing	0	729	851	1,804
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	15	34	86
Miscellaneous nonmetallic mineral products manufacturing	0	138	333	725
Iron and steel mills and ferroalloy manufacturing	1	(61,345)	31,624	662,258
Iron, steel pipe and tube manufacturing from purchased steel	0	454	933	2,793
Rolled steel shape manufacturing	0	90	357	1,012
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	(15)	29	235
Secondary smelting and alloying of aluminum	0	105	245	1,323
Aluminum sheet, plate, and foil manufacturing	0	0	0	0

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Other aluminum rolling, drawing and extruding	0	314	556	1,903
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	77	149	523
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	(14)	33	98
Nonferrous metal foundries	0	99	282	696
Custom roll forming	0	176	273	1,146
Crown and closure manufacturing and metal stamping	0	204	295	864
Iron and steel forging	0	145	200	602
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	5	12	37
Handtool manufacturing	0	82	133	232
Prefabricated metal buildings and components manufacturing	0	107	152	475
Fabricated structural metal manufacturing	0	617	922	2,805
Plate work manufacturing	0	177	187	551
Metal window and door manufacturing	0	337	514	1,218
Sheet metal work manufacturing	0	1,342	1,732	3,836
Ornamental and architectural metal work manufacturing	0	1,215	1,614	3,592
Power boiler and heat exchanger manufacturing	0	42	59	143
Metal tank (heavy gauge) manufacturing	0	49	61	158
Metal cans manufacturing	0	328	751	3,239
Metal barrels, drums and pails manufacturing	0	133	169	626
Hardware manufacturing	0	64	100	338
Spring and wire product manufacturing	0	1,130	1,533	4,071
Machine shops	0	4,268	4,958	9,210
Turned product and screw, nut, and bolt manufacturing	0	265	368	912
Metal heat treating	0	39	60	161



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Metal coating and nonprecious engraving	0	466	807	1,739
Electroplating, anodizing, and coloring metal	0	617	697	1,606
Valve and fittings, other than plumbing, manufacturing	0	1,042	1,665	3,878
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	91	166	407
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	7	9	20
Small arms, ordnance, and accessories manufacturing	0	381	897	1,550
Fabricated pipe and pipe fitting manufacturing	0	8	9	30
Other fabricated metal manufacturing	0	14,568	19,261	48,954
Farm machinery and equipment manufacturing	0	41	64	195
Lawn and garden equipment manufacturing	0	158	276	1,068
Construction machinery manufacturing	0	17	34	95
Mining machinery and equipment manufacturing	0	0	0	1
Oil and gas field machinery and equipment manufacturing	0	7	8	22
Semiconductor machinery manufacturing	0	26	29	71
Food product machinery manufacturing	0	1	1	2
Sawmill, woodworking, and paper machinery	0	296	333	833
Printing machinery and equipment manufacturing	0	19	22	51
All other industrial machinery manufacturing	0	16	21	54
Optical instrument and lens manufacturing	0	47,081	79,108	181,800
Photographic and photocopying equipment manufacturing	0	272	410	1,253

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Other commercial service industry machinery manufacturing	0	62	109	320
Air purification and ventilation equipment manufacturing	0	57	81	192
Heating equipment (except warm air furnaces) manufacturing	0	298	445	836
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,129	2,206	5,791
Industrial mold manufacturing	0	33	38	74
Special tool, die, jig, and fixture manufacturing	0	78	102	185
Cutting tool and machine tool accessory manufacturing	0	11	11	29
Machine tool manufacturing	0	62	70	167
Rolling mill and other metalworking machinery manufacturing	0	8	10	19
Turbine and turbine generator set units manufacturing	0	1	1	3
Speed changer, industrial high-speed drive, and gear manufacturing	0	123	189	489
Mechanical power transmission equipment manufacturing	0	22	28	77
Other engine equipment manufacturing	0	1,982	3,856	14,177
Pump and pumping equipment manufacturing	0	58	108	252
Air and gas compressor manufacturing	0	7	12	34
Elevator and moving stairway manufacturing	0	6	10	44
Conveyor and conveying equipment manufacturing	0	34	36	82
Overhead cranes, hoists, and monorail systems manufacturing	0	1	3	12
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	1,132	3,024	5,133
Welding and soldering equipment manufacturing	0	13	16	42
Packaging machinery manufacturing	0	34	51	119

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Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	110	146	401
Electronic computer manufacturing	0	118	307	1,208
Computer storage device manufacturing	0	(0)	1	27
Computer terminals and other computer peripheral equipment manufacturing	0	8,151	16,440	68,315
Telephone apparatus manufacturing	0	90	168	567
Broadcast and wireless communications equipment manufacturing	0	479	690	1,485
Other communications equipment manufacturing	0	348	556	1,459
Audio and video equipment manufacturing	0	192	345	958
Printed circuit assembly (electronic assembly) manufacturing	0	2,639	4,048	12,035
Bare printed circuit board manufacturing	0	102	137	443
Semiconductor and related device manufacturing	0	2,006	3,602	12,439
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	44	65	182
Electronic connector manufacturing	0	729	1,100	2,671
Other electronic component manufacturing	0	3,899	4,586	14,364
Electromedical and electrotherapeutic apparatus manufacturing	0	88	183	387
Search, detection, and navigation instruments manufacturing	0	16,691	27,092	48,115
Automatic environmental control manufacturing	0	260	377	1,103

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Industrial process variable instruments manufacturing	0	62	93	249
Totalizing fluid meter and counting device manufacturing	0	67	144	303
Electricity and signal testing instruments manufacturing	0	1,078	1,575	3,689
Analytical laboratory instrument manufacturing	0	23,989	43,870	80,915
Irradiation apparatus manufacturing	0	3	6	19
Watch, clock, and other measuring and controlling device manufacturing	0	85	149	408
Blank magnetic and optical recording media manufacturing	0	26,781	72,879	141,340
Software and other prerecorded and record reproducing	0	1,219	1,782	2,680
Electric lamp bulb and part manufacturing	0	47	60	192
Lighting fixture manufacturing	0	439	498	1,415
Small electrical appliance manufacturing	0	81	107	396
Household cooking appliance manufacturing	0	38	59	365
Household refrigerator and home freezer manufacturing	0	41	64	358
Household laundry equipment manufacturing	0	63	95	725
Other major household appliance manufacturing	0	19	29	166
Power, distribution, and specialty transformer manufacturing	0	76	94	328
Motor and generator manufacturing	0	15	18	80
Switchgear and switchboard apparatus manufacturing	0	499	635	2,299
Relay and industrial control manufacturing	0	92	107	349
Storage battery manufacturing	0	1,459	1,705	5,215
Primary battery manufacturing	0	2,507	1,738	9,381
Fiber optic cable manufacturing	0	863	1,082	3,708
Other communication and energy wire manufacturing	0	75	94	328
Wiring device manufacturing	0	153	200	665

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Carbon and graphite product manufacturing	0	126	149	540
All other miscellaneous electrical equipment and component manufacturing	0	50	54	160
Automobile manufacturing	0	110	459	1,935
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	41	59	178
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	993	2,125	6,516
Travel trailer and camper manufacturing	0	85	100	595
Motor vehicle gasoline engine and engine parts manufacturing	0	180	283	982
Motor vehicle electrical and electronic equipment manufacturing	0	106	194	658
Motor vehicle transmission and power train parts manufacturing	0	3,117	5,381	13,297
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	974	1,565	7,383
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3,844	7,222	19,090
Aircraft manufacturing	0	17	47	119
Aircraft engine and engine parts manufacturing	0	218	650	1,301
Other aircraft parts and auxiliary equipment manufacturing	0	84	154	298
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	78	122	222
Railroad rolling stock manufacturing	0	91	174	611
Ship building and repairing	0	171	245	563
Boat building	0	482	749	2,888
Motorcycle, bicycle, and parts manufacturing	0	0	0	0

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Military armored vehicle, tank, and tank component manufacturing	0	161	477	1,105
All other transportation equipment manufacturing	0	50	126	690
Wood kitchen cabinet and countertop manufacturing	0	1,395	2,064	4,266
Upholstered household furniture manufacturing	0	600	922	2,454
Nonupholstered wood household furniture manufacturing	0	201	219	494
Other household nonupholstered furniture manufacturing	0	234	395	985
Institutional furniture manufacturing	0	37	42	117
Wood office furniture manufacturing	0	27	43	107
Custom architectural woodwork and millwork	0	76	75	182
Office furniture, except wood, manufacturing	0	1,292	2,548	6,609
Showcase, partition, shelving, and locker manufacturing	0	205	320	744
Mattress manufacturing	0	898	2,404	6,794
Blind and shade manufacturing	0	436	468	1,744
Surgical and medical instrument manufacturing	0	780	2,812	4,658
Surgical appliance and supplies manufacturing	0	1,745	6,566	9,417
Dental equipment and supplies manufacturing	0	34	101	186
Ophthalmic goods manufacturing	0	93	396	825
Dental laboratories	0	773	789	1,504
Jewelry and silverware manufacturing	0	922	1,661	3,676
Sporting and athletic goods manufacturing	0	165	354	1,008
Doll, toy, and game manufacturing	0	829	2,527	6,200
Office supplies (except paper) manufacturing	0	38	93	450
Sign manufacturing	0	1,397	1,449	3,208
Gasket, packing, and sealing device manufacturing	0	130	241	702
Musical instrument manufacturing	0	1,251	1,272	2,030
Fasteners, buttons, needles, and pins manufacturing	0	53	100	267

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Broom, brush, and mop manufacturing	0	999	3,131	3,667
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	1,210	1,838	4,323
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	16,337	43,035	94,208
Wholesale - Professional and commercial equipment and supplies	1	105,195	188,041	291,359
Wholesale - Household appliances and electrical and electronic goods	0	45,584	113,254	209,519
Wholesale - Machinery, equipment, and supplies	0	21,715	42,759	71,043
Wholesale - Other durable goods merchant wholesalers	1	71,655	123,546	224,061
Wholesale - Drugs and druggists' sundries	0	37,246	112,434	190,994
Wholesale - Grocery and related product wholesalers	1	62,372	88,908	173,683
Wholesale - Petroleum and petroleum products	0	6,438	135,913	146,483
Wholesale - Other nondurable goods merchant wholesalers	1	89,088	219,723	365,862
Wholesale - Wholesale electronic markets and agents and brokers	1	90,472	42,857	49,177
Retail - Motor vehicle and parts dealers	1	77,912	123,110	171,443
Retail - Furniture and home furnishings stores	1	42,947	57,230	89,581
Retail - Electronics and appliance stores	1	47,434	51,589	81,517
Retail - Building material and garden equipment and supplies stores	1	45,348	83,308	115,612
Retail - Food and beverage stores	4	164,105	222,622	335,255
Retail - Health and personal care stores	2	84,560	103,825	157,285
Retail - Gasoline stores	1	40,819	61,214	97,996
Retail - Clothing and clothing accessories stores	2	58,327	97,020	191,031
Retail - Sporting goods, hobby, musical instrument and book stores	1	32,751	43,225	66,762

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Retail - General merchandise stores	4	102,144	156,372	252,072
Retail - Miscellaneous store retailers	2	63,415	75,066	113,883
Retail - Nonstore retailers	2	51,667	181,463	349,049
Air transportation	0	60,122	144,347	204,062
Rail transportation	0	20,775	25,223	61,438
Water transportation	0	11,049	19,287	74,660
Truck transportation	2	115,420	135,324	276,863
Transit and ground passenger transportation	4	93,165	110,516	170,229
Pipeline transportation	0	1,842	7,963	9,245
Scenic and sightseeing transportation and support activities for transportation	1	95,407	109,251	223,422
Couriers and messengers	1	53,942	76,409	135,516
Warehousing and storage	1	83,199	94,874	181,253
Newspaper publishers	0	10,447	16,089	20,755
Periodical publishers	0	35,343	51,576	66,022
Book publishers	0	7,451	20,928	37,071
Directory, mailing list, and other publishers	0	4,938	14,734	21,805
Greeting card publishing	0	122	357	568
Software publishers	1	311,288	650,658	747,596
Motion picture and video industries	0	29,799	50,282	94,753
Sound recording industries	0	5,669	21,724	29,706
Radio and television broadcasting	0	445,378	484,052	351,900
Cable and other subscription programming	0	86,257	217,911	291,728
Wired telecommunications carriers	1	80,542	174,293	333,768
Wireless telecommunications carriers (except satellite)	0	43,945	187,199	453,392
Satellite, telecommunications resellers, and all other telecommunications	0	16,597	17,367	41,525
Data processing, hosting, and related services	0	55,093	103,539	216,683
News syndicates, libraries, archives and all other information services	0	4,573	7,465	11,965
Internet publishing and broadcasting and web search portals	0	67,646	180,295	410,785



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Nondepository credit intermediation and related activities	2	178,469	234,454	365,169
Securities and commodity contracts intermediation and brokerage	1	181,633	174,491	278,826
Monetary authorities and depository credit intermediation	2	208,371	448,952	780,519
Other financial investment activities	3	343,172	376,198	589,658
Direct life insurance carriers	0	28,088	65,107	81,121
Insurance carriers, except direct life	1	112,505	457,483	753,790
Insurance agencies, brokerages, and related activities	2	154,539	264,055	526,525
Funds, trusts, and other financial vehicles	1	56,009	75,429	248,327
Other real estate	12	661,195	1,479,437	2,809,152
Tenant-occupied housing	2	84,988	885,460	954,394
Owner-occupied dwellings	0	0	2,606,112	3,292,791
Automotive equipment rental and leasing	0	105,032	151,211	169,666
General and consumer goods rental except video tapes and discs	0	65,012	63,718	65,202
Video tape and disc rental	0	10,635	13,778	18,576
Commercial and industrial machinery and equipment rental and leasing	0	96,934	113,904	128,907
Lessors of nonfinancial intangible assets	0	3,798	75,608	92,486
Legal services	3	305,018	578,401	791,692
Accounting, tax preparation, bookkeeping, and payroll services	2	181,705	261,452	343,202
Architectural, engineering, and related services	3	269,363	339,755	548,252
Specialized design services	1	54,746	58,373	70,760
Custom computer programming services	0	66,333	75,327	99,669
Computer systems design services	1	133,466	135,712	173,108
Other computer related services, including facilities management	0	31,051	76,367	105,997
Management consulting services	19	2,024,395	2,020,087	2,897,008
Environmental and other technical consulting services	1	96,758	87,968	120,092

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Scientific research and development services	38	5,240,526	7,167,357	11,851,707
Advertising, public relations, and related services	1	68,567	98,665	161,858
Photographic services	0	22,516	13,918	21,528
Veterinary services	0	21,628	34,206	49,024
Marketing research and all other miscellaneous professional, scientific, and technical services	19	1,281,818	1,209,537	1,698,386
Management of companies and enterprises	4	585,213	689,851	942,945
Office administrative services	2	161,329	79,000	143,713
Facilities support services	0	28,307	40,311	80,080
Employment services	7	363,256	628,397	862,734
Business support services	1	57,989	54,473	94,568
Travel arrangement and reservation services	0	28,794	41,199	83,800
Investigation and security services	2	72,603	75,223	104,456
Services to buildings	4	119,471	126,497	193,319
Landscape and horticultural services	2	101,912	109,592	163,905
Other support services	1	30,370	40,596	76,051
Waste management and remediation services	1	45,914	86,311	145,760
Elementary and secondary schools	2	129,363	113,729	134,054
Junior colleges, colleges, universities, and professional schools	3	258,143	351,100	429,896
Other educational services	3	92,450	86,584	150,336
Offices of physicians	5	515,822	617,553	898,487
Offices of dentists	2	114,094	146,330	214,847
Offices of other health practitioners	2	126,232	118,536	167,654
Outpatient care centers	2	148,498	156,666	272,090
Medical and diagnostic laboratories	0	41,556	66,801	101,703
Home health care services	3	152,425	120,713	163,736
Other ambulatory health care services	1	39,702	44,158	69,935
Hospitals	10	810,490	959,971	1,754,310
Nursing and community care facilities	3	152,034	178,245	286,310
Residential mental retardation, mental health, substance abuse and other facilities	2	73,017	78,844	119,755

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Individual and family services	3	118,984	106,944	150,133
Child day care services	3	79,971	91,488	122,675
Community food, housing, and other relief services, including rehabilitation services	1	55,910	61,319	118,607
Performing arts companies	0	26,353	38,850	57,949
Commercial Sports Except Racing	0	39,426	42,291	60,725
Racing and Track Operation	0	5,339	8,692	12,921
Independent artists, writers, and performers	2	76,080	81,300	88,441
Promoters of performing arts and sports and agents for public figures	0	17,832	31,001	66,871
Museums, historical sites, zoos, and parks	0	6,945	8,415	14,388
Amusement parks and arcades	0	3,823	6,110	8,680
Gambling industries (except casino hotels)	1	41,111	102,321	144,415
Other amusement and recreation industries	1	35,411	39,534	60,263
Fitness and recreational sports centers	1	30,003	36,854	54,751
Bowling centers	0	3,611	4,825	7,895
Hotels and motels, including casino hotels	1	54,106	93,226	132,927
Other accommodations	0	27,484	35,548	43,342
Full-service restaurants	7	201,661	315,867	513,885
Limited-service restaurants	7	181,230	297,425	581,802
All other food and drinking places	5	191,330	250,164	347,715
Automotive repair and maintenance, except car washes	3	180,210	203,412	295,087
Car washes	2	87,969	134,617	193,986
Electronic and precision equipment repair and maintenance	14	1,233,697	1,822,245	2,627,019
Commercial and industrial machinery and equipment repair and maintenance	0	31,067	35,765	54,386
Personal and household goods repair and maintenance	1	44,427	22,116	33,294
Personal care services	4	108,749	66,167	93,126
Death care services	0	12,805	15,280	23,357
Dry-cleaning and laundry services	1	21,258	23,194	33,347
Other personal services	3	84,603	54,330	80,603
Religious organizations	5	282,658	98,678	418,516
Grantmaking, giving, and social advocacy organizations	1	71,087	174,656	261,063

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Business and professional associations	0	44,978	60,365	85,766
Labor and civic organizations	1	47,509	98,530	155,452
Private households	2	41,800	41,800	41,800
Postal service	1	83,450	83,551	91,790
Federal electric utilities	0	0	0	0
Other federal government enterprises	3	205,157	182,318	637,806
State government passenger transit	2	281,053	(174,156)	162,633
State government electric utilities	0	0	0	0
Other state government enterprises	0	2,099	1,578	2,871
Local government passenger transit	0	22,526	(19,916)	1,358
Local government electric utilities	0	0	0	0
Other local government enterprises	0	31,439	23,287	61,751
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	55	9,759,326	11,417,119	23,817,186

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 23. Massachusetts

**Table 413: Detailed NASA Impacts by Types of Impact, Massachusetts.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>2,600</i>	<i>241,309,566</i>	<i>345,287,579</i>	<i>582,114,382</i>
Oilseed farming	0	(5)	(11)	771
Grain farming	0	557	2,599	11,259
Vegetable and melon farming	1	13,059	24,057	68,471
Fruit farming	2	8,062	22,096	61,415
Tree nut farming	0	42	44	48
Greenhouse, nursery, and floriculture production	1	25,131	32,244	57,604
Tobacco farming	0	853	847	1,447
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	5,796	7,513	14,098
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(337)	4,509	12,288
Dairy cattle and milk production	0	584	6,139	22,645
Poultry and egg production	0	1,145	2,056	15,813
Animal production, except cattle and poultry and eggs	2	4,967	68,955	104,629
Forestry, forest products, and timber tract production	0	12,276	12,598	15,445
Commercial logging	0	15,531	15,644	21,654
Commercial fishing	1	162,809	72,433	79,893
Commercial hunting and trapping	0	13,173	8,451	8,864
Support activities for agriculture and forestry	3	101,464	83,450	107,345
Oil and gas extraction	1	108,752	117,334	443,712
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	8,514	27,988	45,597
Sand and gravel mining	0	13,271	24,205	38,878

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	1,237	2,057	3,092
Drilling oil and gas wells	0	4	3	18
Support activities for oil and gas operations	0	60	12	159
Metal mining services	0	682	299	2,874
Other nonmetallic minerals services	0	64	48	259
Electric power generation - Hydroelectric	0	14,684	36,515	94,794
Electric power generation - Fossil fuel	2	284,033	914,635	2,513,423
Electric power generation - Nuclear	0	50,962	102,222	231,298
Electric power generation - Solar	0	2,900	6,531	9,916
Electric power generation - Wind	0	1,641	6,624	23,157
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	4,961	3,041	13,224
Electric power transmission and distribution	3	390,210	1,188,921	3,263,828
Natural gas distribution	2	321,743	806,661	1,489,100
Water, sewage and other systems	1	47,154	76,868	173,862
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	9	743,461	862,457	1,911,821
Maintenance and repair construction of residential structures	4	334,869	411,791	929,810
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	682	358	822
Dog and cat food manufacturing	0	581	2,504	36,653
Other animal food manufacturing	0	19,085	36,884	220,293
Flour milling	0	16,737	26,616	178,888
Rice milling	0	0	0	0
Malt manufacturing	0	8,131	13,346	98,770
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	1,712	6,426	78,842
Fats and oils refining and blending	0	2,892	4,690	48,634
Breakfast cereal manufacturing	1	65,096	124,584	477,085
Beet sugar manufacturing	0	22,381	35,507	161,607
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	9,012	11,774	58,934
Chocolate and confectionery manufacturing from cacao beans	0	855	1,562	15,221
Confectionery manufacturing from purchased chocolate	0	6,391	8,163	74,850
Frozen fruits, juices and vegetables manufacturing	0	8,516	12,556	59,094
Frozen specialties manufacturing	1	42,736	55,554	245,816
Canned fruits and vegetables manufacturing	0	11,038	16,605	87,591
Canned specialties	0	2,948	5,606	34,284
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	4,188	5,500	67,439

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Dry, condensed, and evaporated dairy product manufacturing	0	5,799	10,664	88,188
Fluid milk manufacturing	1	42,088	56,761	386,285
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	10,689	14,588	88,397
Frozen cakes and other pastries manufacturing	1	46,380	57,481	113,321
Poultry processing	0	9,631	11,350	46,837
Animal, except poultry, slaughtering	0	14,578	19,055	160,619
Meat processed from carcasses	1	103,589	110,360	750,989
Rendering and meat byproduct processing	0	4,332	4,823	19,896
Seafood product preparation and packaging	1	90,918	102,255	418,096
Bread and bakery product, except frozen, manufacturing	4	189,503	225,096	590,570
Cookie and cracker manufacturing	0	10,436	12,962	62,691
Dry pasta, mixes, and dough manufacturing	0	14,269	25,621	102,028
Tortilla manufacturing	0	6,698	7,650	29,395
Roasted nuts and peanut butter manufacturing	0	16,633	25,210	89,651
Other snack food manufacturing	0	19,849	29,065	131,621
Coffee and tea manufacturing	0	3,438	5,408	55,423
Flavoring syrup and concentrate manufacturing	0	16,193	75,094	204,743
Mayonnaise, dressing, and sauce manufacturing	0	21,153	32,649	152,135
Spice and extract manufacturing	0	2,001	2,641	13,337
All other food manufacturing	1	38,601	47,097	217,863
Bottled and canned soft drinks & water	1	66,778	108,798	577,557
Manufactured ice	0	3,929	866	7,821
Breweries	1	83,093	174,005	507,527
Wineries	0	818	1,316	7,346
Distilleries	0	2,848	19,177	49,885
Tobacco product manufacturing	0	136	5,100	11,492
Fiber, yarn, and thread mills	0	3,683	5,468	22,939
Broadwoven fabric mills	0	3,640	5,209	16,772
Narrow fabric mills and schiffli machine embroidery	0	1,401	1,556	3,817
Nonwoven fabric mills	0	6,805	11,542	37,217
Knit fabric mills	0	1,907	2,490	5,469



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Textile and fabric finishing mills	0	4,314	5,443	15,677
Fabric coating mills	0	26,201	33,255	109,657
Carpet and rug mills	0	1,665	2,782	11,129
Curtain and linen mills	0	6,071	8,618	24,756
Textile bag and canvas mills	0	9,667	11,840	27,448
Rope, cordage, twine, tire cord and tire fabric mills	0	8,198	12,746	34,042
Other textile product mills	0	4,010	4,867	12,601
Hosiery and sock mills	0	550	691	1,793
Other apparel knitting mills	0	538	721	1,931
Cut and sew apparel contractors	0	11,365	12,361	24,837
Mens and boys cut and sew apparel manufacturing	0	10,660	16,590	44,700
Womens and girls cut and sew apparel manufacturing	0	977	1,924	8,754
Other cut and sew apparel manufacturing	0	1,067	1,638	4,657
Apparel accessories and other apparel manufacturing	0	1,621	2,473	6,433
Leather and hide tanning and finishing	0	570	1,044	2,120
Footwear manufacturing	0	25,930	32,297	62,300
Other leather and allied product manufacturing	0	2,242	2,393	4,772
Sawmills	0	3,302	3,750	22,272
Wood preservation	0	1,263	1,895	11,839
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	1,767	1,922	6,350
Reconstituted wood product manufacturing	0	132	178	1,680
Wood windows and door manufacturing	0	38,217	41,836	112,171
Cut stock, resawing lumber, and planing	0	624	693	3,272
Other millwork, including flooring	0	14,006	15,010	42,172
Wood container and pallet manufacturing	0	18,989	19,532	46,262
Manufactured home (mobile home) manufacturing	0	3	3	9
Prefabricated wood building manufacturing	0	880	924	2,576
All other miscellaneous wood product manufacturing	0	6,887	7,125	25,329

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Pulp mills	0	0	0	0
Paper mills	1	159,009	139,578	667,017
Paperboard mills	0	23,175	22,379	110,061
Paperboard container manufacturing	1	111,209	113,703	477,901
Paper bag and coated and treated paper manufacturing	1	103,280	103,381	404,578
Stationery product manufacturing	0	15,548	15,880	56,382
Sanitary paper product manufacturing	0	3,899	3,492	14,314
All other converted paper product manufacturing	0	26,724	26,757	59,547
Printing	6	451,915	673,601	1,154,688
Support activities for printing	1	52,501	77,332	102,577
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	6,073	17,180	51,262
Asphalt shingle and coating materials manufacturing	0	2,415	15,301	26,963
Petroleum lubricating oil and grease manufacturing	0	13,112	99,609	172,884
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	4,108	11,629	38,644
Synthetic dye and pigment manufacturing	0	3,263	7,972	28,974
Other basic inorganic chemical manufacturing	0	15,107	36,131	102,124
Other basic organic chemical manufacturing	0	11,880	26,869	168,423
Plastics material and resin manufacturing	0	43,537	78,480	434,023
Synthetic rubber manufacturing	0	1,355	2,429	15,375
Artificial and synthetic fibers and filaments manufacturing	1	75,133	126,118	505,810
Nitrogenous fertilizer manufacturing	0	3,944	10,446	34,697
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	878	1,725	5,950
Pesticide and other agricultural chemical manufacturing	0	380	1,329	9,154
Medicinal and botanical manufacturing	0	6,308	11,815	25,501

## APPENDIX

Pharmaceutical preparation manufacturing	1	192,925	838,844	1,816,572
In-vitro diagnostic substance manufacturing	0	22,832	38,409	81,545
Biological product (except diagnostic) manufacturing	0	21,099	57,210	95,730
Paint and coating manufacturing	0	15,272	32,861	108,562
Adhesive manufacturing	0	21,319	37,758	102,450
Soap and other detergent manufacturing	0	8,860	30,657	143,214
Polish and other sanitation good manufacturing	0	18,530	39,510	146,896
Surface active agent manufacturing	0	3,315	12,321	37,109
Toilet preparation manufacturing	0	1,464	4,246	19,371
Printing ink manufacturing	0	12,469	13,330	44,427
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	17,807	35,123	112,158
Photographic film and chemical manufacturing	0	8,657	21,315	72,768
Other miscellaneous chemical product manufacturing	0	18,081	29,577	91,209
Plastics packaging materials and unlaminated film and sheet manufacturing	0	44,541	72,388	217,303
Unlaminated plastics profile shape manufacturing	0	14,087	30,429	86,180
Plastics pipe and pipe fitting manufacturing	0	4,021	9,002	25,506
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	3,119	5,420	14,719
Polystyrene foam product manufacturing	0	19,873	32,546	93,491
Urethane and other foam product (except polystyrene) manufacturing	0	20,428	32,496	98,032
Plastics bottle manufacturing	0	3,978	6,568	25,405
Other plastics product manufacturing	3	185,619	271,755	750,110
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	756	1,145	2,772
Other rubber product manufacturing	1	51,512	76,241	238,654

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	7,107	9,066	19,729
Brick, tile, and other structural clay product manufacturing	0	13,190	22,361	44,761
Flat glass manufacturing	0	63	100	946
Other pressed and blown glass and glassware manufacturing	0	17,953	25,654	64,581
Glass container manufacturing	0	10,289	17,232	44,455
Glass product manufacturing made of purchased glass	0	9,311	15,033	43,820
Cement manufacturing	0	2,212	4,936	11,264
Ready-mix concrete manufacturing	0	15,270	24,610	72,312
Concrete block and brick manufacturing	0	5,586	9,838	24,805
Concrete pipe manufacturing	0	288	455	1,168
Other concrete product manufacturing	0	11,887	16,885	40,980
Lime manufacturing	0	216	493	1,529
Gypsum product manufacturing	0	408	1,019	4,422
Abrasive product manufacturing	0	11,226	32,292	52,879
Cut stone and stone product manufacturing	0	8,075	9,349	20,730
Ground or treated mineral and earth manufacturing	0	1,580	4,316	9,594
Mineral wool manufacturing	0	1,423	3,160	7,613
Miscellaneous nonmetallic mineral products manufacturing	0	661	1,489	4,169
Iron and steel mills and ferroalloy manufacturing	0	(34,666)	(19,774)	271,131
Iron, steel pipe and tube manufacturing from purchased steel	0	1,798	2,718	13,387
Rolled steel shape manufacturing	0	5,294	10,634	44,906
Steel wire drawing	0	11,214	15,141	46,811
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	3,547	6,207	25,632
Other aluminum rolling, drawing and extruding	0	343	511	3,060
Nonferrous metal (exc aluminum) smelting and refining	0	157	1,156	4,348

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	12,033	16,412	111,252
Nonferrous metal, except copper and aluminum, shaping	0	482	664	3,084
Secondary processing of other nonferrous metals	0	889	2,782	11,712
Ferrous metal foundries	0	2,046	3,537	8,109
Nonferrous metal foundries	0	3,970	6,298	16,535
Custom roll forming	0	1,208	2,223	7,216
Crown and closure manufacturing and metal stamping	0	27,080	45,526	102,655
Iron and steel forging	0	3,843	6,002	17,664
Nonferrous forging	0	7,715	10,742	24,856
Cutlery, utensil, pot, and pan manufacturing	0	69,110	284,971	420,582
Handtool manufacturing	0	52,298	102,394	151,822
Prefabricated metal buildings and components manufacturing	0	450	722	2,195
Fabricated structural metal manufacturing	0	9,231	16,039	37,333
Plate work manufacturing	0	6,598	6,993	18,429
Metal window and door manufacturing	0	3,485	6,330	14,202
Sheet metal work manufacturing	0	40,912	58,989	119,112
Ornamental and architectural metal work manufacturing	0	16,010	23,973	48,136
Power boiler and heat exchanger manufacturing	0	1,465	2,363	5,067
Metal tank (heavy gauge) manufacturing	0	1,919	2,584	6,206
Metal cans manufacturing	0	933	2,780	11,598
Metal barrels, drums and pails manufacturing	0	409	570	2,467
Hardware manufacturing	0	4,219	8,481	23,142
Spring and wire product manufacturing	2	130,444	206,045	560,760
Machine shops	2	155,242	192,112	334,282
Turned product and screw, nut, and bolt manufacturing	0	20,409	32,714	68,826
Metal heat treating	0	6,453	11,954	26,176
Metal coating and nonprecious engraving	0	30,047	65,140	115,058
Electroplating, anodizing, and coloring metal	0	26,711	31,640	63,278

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	15,708	30,477	56,484
Plumbing fixture fitting and trim manufacturing	0	9,564	39,883	80,178
Ball and roller bearing manufacturing	0	627	1,422	3,396
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	292	404	850
Small arms, ordnance, and accessories manufacturing	0	16,586	55,215	100,377
Fabricated pipe and pipe fitting manufacturing	0	2,126	2,646	5,001
Other fabricated metal manufacturing	0	20,911	31,459	68,240
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	2,053	2,913	14,682
Construction machinery manufacturing	0	108	162	614
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	2,761	2,960	7,732
Food product machinery manufacturing	0	46	51	154
Sawmill, woodworking, and paper machinery	0	3,767	3,963	7,558
Printing machinery and equipment manufacturing	0	959	1,015	2,283
All other industrial machinery manufacturing	0	778	857	2,156
Optical instrument and lens manufacturing	0	15,829	20,560	60,692
Photographic and photocopying equipment manufacturing	0	216	262	1,098
Other commercial service industry machinery manufacturing	0	3,071	4,203	11,058
Air purification and ventilation equipment manufacturing	0	695	845	2,284

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	8,249	9,895	27,623
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	6,530	9,043	27,759
Industrial mold manufacturing	0	2,370	2,514	5,061
Special tool, die, jig, and fixture manufacturing	0	1,744	1,905	3,669
Cutting tool and machine tool accessory manufacturing	0	1,576	1,648	3,794
Machine tool manufacturing	0	420	444	1,171
Rolling mill and other metalworking machinery manufacturing	0	931	998	1,918
Turbine and turbine generator set units manufacturing	0	376	443	1,493
Speed changer, industrial high-speed drive, and gear manufacturing	0	2,598	3,146	10,616
Mechanical power transmission equipment manufacturing	0	10,470	12,077	31,496
Other engine equipment manufacturing	0	966	1,382	7,095
Pump and pumping equipment manufacturing	0	911	1,194	3,179
Air and gas compressor manufacturing	0	93	115	447
Elevator and moving stairway manufacturing	0	48	59	242
Conveyor and conveying equipment manufacturing	0	257	266	628
Overhead cranes, hoists, and monorail systems manufacturing	0	60	81	289
Industrial truck, trailer, and stacker manufacturing	0	27	34	242
Power-driven handtool manufacturing	0	449	783	2,753
Welding and soldering equipment manufacturing	0	233	269	937
Packaging machinery manufacturing	0	512	609	1,541
Industrial process furnace and oven manufacturing	0	783	840	2,151
Fluid power cylinder and actuator manufacturing	0	1,183	1,369	3,399

## APPENDIX

Fluid power pump and motor manufacturing	0	299	366	973
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2,714	3,028	7,648
Electronic computer manufacturing	0	11,502	25,749	57,833
Computer storage device manufacturing	0	27,258	80,306	283,986
Computer terminals and other computer peripheral equipment manufacturing	0	51,445	98,053	242,947
Telephone apparatus manufacturing	0	9,999	19,044	43,118
Broadcast and wireless communications equipment manufacturing	0	605	926	2,236
Other communications equipment manufacturing	0	3,962	6,632	17,068
Audio and video equipment manufacturing	0	8,358	15,517	38,089
Printed circuit assembly (electronic assembly) manufacturing	0	11,626	18,382	50,644
Bare printed circuit board manufacturing	0	3,073	4,135	9,341
Semiconductor and related device manufacturing	1	74,606	136,431	359,223
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	18,447	26,502	43,899
Electronic connector manufacturing	0	53,759	81,941	147,075
Other electronic component manufacturing	0	12,884	15,112	46,891
Electromedical and electrotherapeutic apparatus manufacturing	0	6,382	13,841	25,637
Search, detection, and navigation instruments manufacturing	0	917	1,555	3,023
Automatic environmental control manufacturing	0	1,468	2,020	3,909
Industrial process variable instruments manufacturing	0	12,037	18,044	32,202
Totalizing fluid meter and counting device manufacturing	0	212	517	1,178



## APPENDIX

Electricity and signal testing instruments manufacturing	0	55,363	82,108	183,041
Analytical laboratory instrument manufacturing	5	816,769	1,482,521	2,602,177
Irradiation apparatus manufacturing	0	671	1,371	2,676
Watch, clock, and other measuring and controlling device manufacturing	0	3,282	5,965	12,540
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	19,847	29,302	44,047
Electric lamp bulb and part manufacturing	0	16,567	26,420	38,166
Lighting fixture manufacturing	0	9,285	13,730	36,940
Small electrical appliance manufacturing	0	1,848	3,587	8,905
Household cooking appliance manufacturing	0	4,850	10,614	26,861
Household refrigerator and home freezer manufacturing	0	4,732	12,254	29,187
Household laundry equipment manufacturing	0	8,130	16,284	55,731
Other major household appliance manufacturing	0	1,727	4,146	9,470
Power, distribution, and specialty transformer manufacturing	0	248	359	735
Motor and generator manufacturing	0	441	668	2,011
Switchgear and switchboard apparatus manufacturing	0	3,808	6,183	15,727
Relay and industrial control manufacturing	0	19,037	24,944	46,456
Storage battery manufacturing	0	3,735	5,862	18,134
Primary battery manufacturing	0	9,977	19,669	63,620
Fiber optic cable manufacturing	0	7,138	11,281	43,910
Other communication and energy wire manufacturing	0	5,270	9,142	32,347
Wiring device manufacturing	0	8,922	16,907	42,720
Carbon and graphite product manufacturing	0	4,633	6,507	15,738
All other miscellaneous electrical equipment and component manufacturing	0	29,740	33,500	74,022

## APPENDIX

Automobile manufacturing	0	205	1,778	5,540
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	787	1,398	3,184
Truck trailer manufacturing	0	9	14	44
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	2,269	2,677	8,571
Motor vehicle gasoline engine and engine parts manufacturing	0	354	645	2,154
Motor vehicle electrical and electronic equipment manufacturing	0	11,872	22,134	60,388
Motor vehicle transmission and power train parts manufacturing	0	1,144	2,351	7,008
Motor vehicle seating and interior trim manufacturing	0	229	471	2,278
Motor vehicle metal stamping	0	3,420	6,192	14,848
Other motor vehicle parts manufacturing	0	7,335	17,777	48,963
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,296	3,045	7,158
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	3,434	4,595	13,755
Other aircraft parts and auxiliary equipment manufacturing	0	34,347	41,693	120,479
Guided missile and space vehicle manufacturing	0	7,884	8,515	20,399
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	22	24	68
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	601	647	1,954
Boat building	0	16,271	19,242	80,141
Motorcycle, bicycle, and parts manufacturing	0	805	1,157	6,357
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	2,119	3,110	19,282

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	21,571	28,866	58,909
Upholstered household furniture manufacturing	0	655	833	3,630
Nonupholstered wood household furniture manufacturing	0	9,532	10,662	24,971
Other household nonupholstered furniture manufacturing	0	246	356	1,504
Institutional furniture manufacturing	0	8,483	9,271	29,466
Wood office furniture manufacturing	0	2,279	3,101	8,455
Custom architectural woodwork and millwork	0	1,398	1,347	3,257
Office furniture, except wood, manufacturing	8	694,948	1,145,633	2,918,034
Showcase, partition, shelving, and locker manufacturing	0	4,120	5,573	13,666
Mattress manufacturing	0	3,068	6,123	20,649
Blind and shade manufacturing	0	171	179	631
Surgical and medical instrument manufacturing	0	44,611	106,054	191,186
Surgical appliance and supplies manufacturing	0	41,844	98,237	172,419
Dental equipment and supplies manufacturing	0	1,722	3,429	6,978
Ophthalmic goods manufacturing	0	9,598	23,877	45,254
Dental laboratories	0	12,499	12,424	18,445
Jewelry and silverware manufacturing	0	22,821	29,843	59,343
Sporting and athletic goods manufacturing	0	47,996	71,852	132,790
Doll, toy, and game manufacturing	0	18,998	33,234	72,094
Office supplies (except paper) manufacturing	0	3,675	4,660	9,647
Sign manufacturing	0	36,216	34,698	53,862
Gasket, packing, and sealing device manufacturing	0	17,744	23,798	44,887
Musical instrument manufacturing	0	7,309	7,395	11,864
Fasteners, buttons, needles, and pins manufacturing	0	2,641	3,165	5,421
Broom, brush, and mop manufacturing	0	6,335	10,177	23,551
Burial casket manufacturing	0	8,075	9,684	17,208

## APPENDIX

All other miscellaneous manufacturing	0	30,246	36,372	66,214
Wholesale - Motor vehicle and motor vehicle parts and supplies	2	120,225	287,679	635,888
Wholesale - Professional and commercial equipment and supplies	6	896,067	1,589,446	2,446,720
Wholesale - Household appliances and electrical and electronic goods	2	333,093	749,965	1,304,862
Wholesale - Machinery, equipment, and supplies	3	276,654	481,170	774,091
Wholesale - Other durable goods merchant wholesalers	7	724,019	1,147,811	1,978,870
Wholesale - Drugs and druggists' sundries	2	464,333	1,329,489	2,250,993
Wholesale - Grocery and related product wholesalers	8	632,309	859,738	1,570,748
Wholesale - Petroleum and petroleum products	1	65,476	851,239	949,852
Wholesale - Other nondurable goods merchant wholesalers	10	1,079,922	2,141,469	3,563,345
Wholesale - Wholesale electronic markets and agents and brokers	10	1,275,259	602,368	681,970
Retail - Motor vehicle and parts dealers	8	501,225	628,939	925,456
Retail - Furniture and home furnishings stores	6	303,411	371,579	585,222
Retail - Electronics and appliance stores	5	295,023	292,715	473,421
Retail - Building material and garden equipment and supplies stores	6	315,665	436,778	655,683
Retail - Food and beverage stores	33	1,074,728	1,294,907	2,237,129
Retail - Health and personal care stores	13	693,804	755,243	1,133,034
Retail - Gasoline stores	5	167,093	237,786	483,140
Retail - Clothing and clothing accessories stores	15	493,970	610,551	1,267,256
Retail - Sporting goods, hobby, musical instrument and book stores	8	291,910	348,926	524,045
Retail - General merchandise stores	20	591,654	723,650	1,254,841
Retail - Miscellaneous store retailers	15	493,661	519,518	800,959

## APPENDIX

Retail - Nonstore retailers	15	1,131,079	2,235,512	3,297,472
Air transportation	4	471,980	1,191,332	1,750,819
Rail transportation	1	154,274	242,332	596,913
Water transportation	1	59,546	78,168	361,668
Truck transportation	9	726,803	862,022	1,682,615
Transit and ground passenger transportation	25	769,801	871,904	1,227,951
Pipeline transportation	0	51,604	111,421	130,941
Scenic and sightseeing transportation and support activities for transportation	10	591,533	650,809	1,456,957
Couriers and messengers	9	355,829	448,275	856,808
Warehousing and storage	6	405,764	451,969	817,818
Newspaper publishers	3	199,257	310,590	393,414
Periodical publishers	2	281,028	409,743	582,780
Book publishers	1	185,467	554,146	820,317
Directory, mailing list, and other publishers	3	240,910	690,532	1,030,378
Greeting card publishing	0	14,314	48,998	73,330
Software publishers	17	3,946,666	9,218,285	10,261,285
Motion picture and video industries	4	257,198	491,895	988,724
Sound recording industries	1	30,617	136,918	214,178
Radio and television broadcasting	3	351,090	151,132	936,059
Cable and other subscription programming	1	95,085	586,564	2,034,438
Wired telecommunications carriers	5	597,437	1,167,441	2,310,785
Wireless telecommunications carriers (except satellite)	2	251,397	1,025,453	3,192,722
Satellite, telecommunications resellers, and all other telecommunications	7	1,238,647	1,416,592	2,691,290
Data processing, hosting, and related services	7	1,092,729	2,156,198	3,794,478
News syndicates, libraries, archives and all other information services	3	221,670	362,820	544,197
Internet publishing and broadcasting and web search portals	8	1,747,547	4,607,174	9,407,059
Nondepository credit intermediation and related activities	7	757,234	1,053,779	1,605,729
Securities and commodity contracts intermediation and brokerage	7	2,255,599	2,149,174	2,928,003

## APPENDIX

Monetary authorities and depository credit intermediation	26	3,425,818	8,873,741	12,623,191
Other financial investment activities	25	3,755,527	4,095,564	5,673,863
Direct life insurance carriers	4	913,500	1,506,352	1,977,757
Insurance carriers, except direct life	12	1,621,647	4,151,160	8,860,429
Insurance agencies, brokerages, and related activities	30	2,806,704	3,901,512	7,790,578
Funds, trusts, and other financial vehicles	6	460,274	285,535	1,906,222
Other real estate	129	3,738,330	12,775,525	27,640,063
Tenant-occupied housing	9	249,220	4,588,856	4,961,962
Owner-occupied dwellings	0	0	13,309,154	16,815,961
Automotive equipment rental and leasing	4	242,629	743,355	1,058,090
General and consumer goods rental except video tapes and discs	3	237,600	280,400	419,336
Video tape and disc rental	1	45,900	67,572	107,410
Commercial and industrial machinery and equipment rental and leasing	4	446,458	989,869	1,399,585
Lessors of nonfinancial intangible assets	0	37,743	850,518	1,003,429
Legal services	39	4,673,864	7,480,056	10,083,679
Accounting, tax preparation, bookkeeping, and payroll services	18	1,867,592	2,738,488	3,437,406
Architectural, engineering, and related services	20	2,225,805	2,815,437	4,438,420
Specialized design services	6	485,687	511,380	597,395
Custom computer programming services	7	1,125,936	1,259,087	1,617,672
Computer systems design services	7	1,017,251	1,049,378	1,295,115
Other computer related services, including facilities management	4	486,220	923,754	1,367,977
Management consulting services	116	16,085,443	16,038,360	21,160,469
Environmental and other technical consulting services	8	872,130	815,308	1,061,168
Scientific research and development services	500	78,256,750	104,882,260	168,482,861
Advertising, public relations, and related services	13	1,497,944	2,310,453	3,286,784
Photographic services	3	208,623	164,249	217,137
Veterinary services	3	157,158	250,666	355,041

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	36	3,368,346	3,208,102	4,058,618
Management of companies and enterprises	45	7,137,213	8,143,964	10,956,447
Office administrative services	9	634,197	257,878	590,806
Facilities support services	1	61,764	76,650	162,225
Employment services	56	3,349,111	4,852,379	6,893,769
Business support services	18	943,720	823,078	1,328,999
Travel arrangement and reservation services	4	388,146	501,271	948,192
Investigation and security services	10	490,206	500,528	680,187
Services to buildings	30	1,110,955	1,144,617	1,677,753
Landscape and horticultural services	45	2,162,219	2,251,621	3,321,607
Other support services	7	429,555	515,513	889,810
Waste management and remediation services	5	432,429	795,345	1,274,608
Elementary and secondary schools	13	804,546	666,022	784,690
Junior colleges, colleges, universities, and professional schools	34	2,212,705	2,804,500	3,750,931
Other educational services	27	816,004	737,867	1,386,351
Offices of physicians	30	3,788,561	4,399,793	6,156,061
Offices of dentists	12	880,673	1,083,378	1,584,510
Offices of other health practitioners	16	1,069,266	1,014,654	1,357,028
Outpatient care centers	12	935,513	977,656	1,707,180
Medical and diagnostic laboratories	3	271,874	406,696	622,235
Home health care services	25	1,271,460	846,309	1,169,575
Other ambulatory health care services	5	287,217	312,468	506,356
Hospitals	77	7,402,869	8,570,981	14,938,429
Nursing and community care facilities	24	1,112,813	1,236,282	2,015,621
Residential mental retardation, mental health, substance abuse and other facilities	12	538,720	566,615	831,579
Individual and family services	47	1,658,764	1,512,084	2,121,443
Child day care services	17	608,735	728,702	922,294
Community food, housing, and other relief services, including rehabilitation services	9	402,985	447,896	891,413
Performing arts companies	4	174,785	285,664	449,759

## APPENDIX

Commercial Sports Except Racing	3	457,720	485,470	630,350
Racing and Track Operation	1	46,788	66,902	101,701
Independent artists, writers, and performers	18	662,327	738,239	834,859
Promoters of performing arts and sports and agents for public figures	4	171,913	416,767	792,426
Museums, historical sites, zoos, and parks	2	117,032	144,976	233,207
Amusement parks and arcades	1	25,650	117,268	131,740
Gambling industries (except casino hotels)	3	165,472	286,312	466,153
Other amusement and recreation industries	9	327,996	363,641	562,618
Fitness and recreational sports centers	7	221,322	378,867	495,876
Bowling centers	1	26,576	40,686	63,566
Hotels and motels, including casino hotels	13	673,891	1,161,490	1,677,429
Other accommodations	6	330,731	433,890	553,708
Full-service restaurants	63	1,928,145	2,848,410	4,576,826
Limited-service restaurants	35	941,859	1,457,441	2,857,912
All other food and drinking places	39	1,436,425	1,857,729	2,657,964
Automotive repair and maintenance, except car washes	17	1,080,945	1,110,749	1,642,001
Car washes	8	502,340	635,987	952,449
Electronic and precision equipment repair and maintenance	5	528,355	736,680	1,068,584
Commercial and industrial machinery and equipment repair and maintenance	5	481,730	516,793	748,044
Personal and household goods repair and maintenance	6	425,566	317,893	394,538
Personal care services	21	729,228	490,165	641,432
Death care services	1	71,754	86,698	131,582
Dry-cleaning and laundry services	4	153,432	163,478	232,710
Other personal services	18	676,841	495,470	653,770
Religious organizations	17	1,033,216	507,853	1,648,203
Grantmaking, giving, and social advocacy organizations	7	467,314	1,382,596	1,979,934
Business and professional associations	3	345,285	514,109	777,711
Labor and civic organizations	13	330,075	802,737	1,455,337
Private households	10	186,715	186,715	186,715
Postal service	7	640,290	641,290	703,608
Federal electric utilities	0	0	0	0



## APPENDIX

Other federal government enterprises	146	12,174,148	8,264,638	36,829,437
State government passenger transit	2	215,520	(184,062)	110,634
State government electric utilities	0	0	0	0
Other state government enterprises	1	153,644	81,740	201,662
Local government passenger transit	0	4,311	(4,123)	1,248
Local government electric utilities	1	102,002	224,315	443,428
Other local government enterprises	2	209,959	(20,922)	295,432
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	19	2,820,503	4,277,775	6,773,523

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 414: Detailed M2M Program Impacts by Types of Impact, Massachusetts.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	99	10,555,138	15,144,178	22,766,613
Oilseed farming	0	(0)	(1)	46
Grain farming	0	17	87	345
Vegetable and melon farming	0	544	1,050	2,821
Fruit farming	0	426	1,180	3,092
Tree nut farming	0	4	4	4

## APPENDIX

Greenhouse, nursery, and floriculture production	0	736	974	1,701
Tobacco farming	0	50	58	102
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	186	251	457
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(12)	150	362
Dairy cattle and milk production	0	26	277	894
Poultry and egg production	0	38	70	525
Animal production, except cattle and poultry and eggs	0	113	1,738	2,706
Forestry, forest products, and timber tract production	0	440	450	528
Commercial logging	0	608	610	781
Commercial fishing	0	7,680	2,555	2,847
Commercial hunting and trapping	0	467	281	262
Support activities for agriculture and forestry	0	3,031	2,466	3,167
Oil and gas extraction	0	1,916	2,669	9,940
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	461	782	1,303
Sand and gravel mining	0	820	761	1,025
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	61	56	78
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	1	0	3
Metal mining services	0	19	10	98

## APPENDIX

Other nonmetallic minerals services	0	1	1	6
Electric power generation - Hydroelectric	0	663	1,510	3,668
Electric power generation - Fossil fuel	0	9,899	30,829	80,590
Electric power generation - Nuclear	0	1,814	3,866	8,475
Electric power generation - Solar	0	84	182	268
Electric power generation - Wind	0	44	172	566
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	322	157	593
Electric power transmission and distribution	0	11,813	37,254	98,567
Natural gas distribution	0	11,537	29,870	48,779
Water, sewage and other systems	0	2,096	3,035	6,167
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	23,653	27,558	59,325

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Maintenance and repair construction of residential structures	0	13,812	17,088	37,337
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	26	13	30
Dog and cat food manufacturing	0	21	92	1,287
Other animal food manufacturing	0	659	1,331	7,557
Flour milling	0	416	666	4,540
Rice milling	0	0	0	0
Malt manufacturing	0	203	361	2,017
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	92	352	4,249
Fats and oils refining and blending	0	149	250	2,386
Breakfast cereal manufacturing	0	2,158	4,043	15,369
Beet sugar manufacturing	0	629	948	4,342
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	424	547	2,509
Chocolate and confectionery manufacturing from cacao beans	0	67	124	1,120
Confectionery manufacturing from purchased chocolate	0	285	368	3,120
Frozen fruits, juices and vegetables manufacturing	0	289	431	1,906
Frozen specialties manufacturing	0	1,493	1,920	8,025
Canned fruits and vegetables manufacturing	0	374	564	2,946
Canned specialties	0	78	144	910
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	122	159	2,002
Dry, condensed, and evaporated dairy product manufacturing	0	264	498	3,691
Fluid milk manufacturing	0	1,666	2,298	14,977
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	309	435	2,329
Frozen cakes and other pastries manufacturing	0	1,929	2,362	4,549
Poultry processing	0	294	365	1,426
Animal, except poultry, slaughtering	0	384	510	4,217
Meat processed from carcasses	0	4,221	4,562	30,050

## APPENDIX

Rendering and meat byproduct processing	0	209	229	943
Seafood product preparation and packaging	0	2,627	3,061	11,105
Bread and bakery product, except frozen, manufacturing	0	7,691	9,149	23,523
Cookie and cracker manufacturing	0	467	617	2,710
Dry pasta, mixes, and dough manufacturing	0	661	1,161	4,747
Tortilla manufacturing	0	263	298	1,121
Roasted nuts and peanut butter manufacturing	0	809	1,366	4,232
Other snack food manufacturing	0	835	1,229	5,360
Coffee and tea manufacturing	0	107	174	1,673
Flavoring syrup and concentrate manufacturing	0	825	3,605	10,093
Mayonnaise, dressing, and sauce manufacturing	0	710	1,064	4,741
Spice and extract manufacturing	0	93	125	576
All other food manufacturing	0	1,853	2,269	9,896
Bottled and canned soft drinks & water	0	2,399	4,060	20,613
Manufactured ice	0	149	36	271
Breweries	0	2,738	5,920	16,714
Wineries	0	73	117	640
Distilleries	0	116	813	1,905
Tobacco product manufacturing	0	5	255	501
Fiber, yarn, and thread mills	0	139	230	860
Broadwoven fabric mills	0	105	165	519
Narrow fabric mills and schiffli machine embroidery	0	69	78	177
Nonwoven fabric mills	0	317	572	1,672
Knit fabric mills	0	111	148	321
Textile and fabric finishing mills	0	346	436	1,211
Fabric coating mills	0	1,532	1,889	5,689
Carpet and rug mills	0	111	199	672
Curtain and linen mills	0	298	442	1,186
Textile bag and canvas mills	0	364	453	1,011
Rope, cordage, twine, tire cord and tire fabric mills	0	183	298	744
Other textile product mills	0	181	224	547
Hosiery and sock mills	0	23	30	69
Other apparel knitting mills	0	27	35	85
Cut and sew apparel contractors	0	399	431	827

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	748	1,177	2,723
Womens and girls cut and sew apparel manufacturing	0	81	158	633
Other cut and sew apparel manufacturing	0	73	110	279
Apparel accessories and other apparel manufacturing	0	113	173	392
Leather and hide tanning and finishing	0	22	42	83
Footwear manufacturing	0	1,224	1,560	2,820
Other leather and allied product manufacturing	0	136	146	267
Sawmills	0	106	126	711
Wood preservation	0	36	59	350
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	54	60	195
Reconstituted wood product manufacturing	0	4	5	51
Wood windows and door manufacturing	0	1,033	1,171	3,057
Cut stock, resawing lumber, and planing	0	22	26	115
Other millwork, including flooring	0	427	479	1,260
Wood container and pallet manufacturing	0	672	711	1,644
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	30	33	89
All other miscellaneous wood product manufacturing	0	273	296	944
Pulp mills	0	0	0	0
Paper mills	0	5,576	4,274	22,345
Paperboard mills	0	969	856	4,492
Paperboard container manufacturing	0	5,921	5,848	24,438
Paper bag and coated and treated paper manufacturing	0	3,993	3,653	14,752
Stationery product manufacturing	0	762	723	2,318
Sanitary paper product manufacturing	0	139	112	485

## APPENDIX

All other converted paper product manufacturing	0	1,141	1,079	2,422
Printing	0	18,822	27,974	46,032
Support activities for printing	0	2,365	3,411	4,483
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	215	581	1,605
Asphalt shingle and coating materials manufacturing	0	74	428	771
Petroleum lubricating oil and grease manufacturing	0	1,546	10,959	19,382
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	144	433	1,383
Synthetic dye and pigment manufacturing	0	532	1,350	5,339
Other basic inorganic chemical manufacturing	0	604	1,547	4,235
Other basic organic chemical manufacturing	0	445	1,018	6,611
Plastics material and resin manufacturing	0	3,064	5,644	32,534
Synthetic rubber manufacturing	0	48	87	575
Artificial and synthetic fibers and filaments manufacturing	0	34,468	57,338	219,733
Nitrogenous fertilizer manufacturing	0	138	389	1,198
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	23	48	164
Pesticide and other agricultural chemical manufacturing	0	12	44	302
Medicinal and botanical manufacturing	0	421	859	1,566
Pharmaceutical preparation manufacturing	0	12,998	59,827	116,691
In-vitro diagnostic substance manufacturing	0	2,427	4,112	8,653
Biological product (except diagnostic) manufacturing	0	1,790	5,108	7,856
Paint and coating manufacturing	0	911	2,103	6,739
Adhesive manufacturing	0	994	1,909	4,787
Soap and other detergent manufacturing	0	335	1,454	5,564

## APPENDIX

Polish and other sanitation good manufacturing	0	813	2,029	6,209
Surface active agent manufacturing	0	91	395	1,071
Toilet preparation manufacturing	0	76	252	1,041
Printing ink manufacturing	0	630	683	2,229
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	1,154	2,645	8,788
Photographic film and chemical manufacturing	0	329	893	2,763
Other miscellaneous chemical product manufacturing	0	672	1,167	3,630
Plastics packaging materials and unlaminated film and sheet manufacturing	0	2,498	4,012	11,810
Unlaminated plastics profile shape manufacturing	0	548	1,164	3,248
Plastics pipe and pipe fitting manufacturing	0	152	343	971
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	143	248	666
Polystyrene foam product manufacturing	0	737	1,190	3,395
Urethane and other foam product (except polystyrene) manufacturing	0	838	1,314	3,940
Plastics bottle manufacturing	0	216	352	1,334
Other plastics product manufacturing	0	7,294	10,644	27,859
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	30	45	106
Other rubber product manufacturing	0	1,507	2,213	7,131
Pottery, ceramics, and plumbing fixture manufacturing	0	230	281	647
Brick, tile, and other structural clay product manufacturing	0	355	574	1,202
Flat glass manufacturing	0	2	3	29
Other pressed and blown glass and glassware manufacturing	0	717	1,013	2,547
Glass container manufacturing	0	411	645	1,745
Glass product manufacturing made of purchased glass	0	319	501	1,460



## APPENDIX

Cement manufacturing	0	61	130	300
Ready-mix concrete manufacturing	0	424	659	1,940
Concrete block and brick manufacturing	0	167	280	714
Concrete pipe manufacturing	0	9	13	35
Other concrete product manufacturing	0	357	494	1,207
Lime manufacturing	0	5	12	37
Gypsum product manufacturing	0	16	37	166
Abrasive product manufacturing	0	826	2,260	3,786
Cut stone and stone product manufacturing	0	264	303	663
Ground or treated mineral and earth manufacturing	0	53	141	324
Mineral wool manufacturing	0	47	97	236
Miscellaneous nonmetallic mineral products manufacturing	0	22	47	129
Iron and steel mills and ferroalloy manufacturing	0	(41)	(22)	313
Iron, steel pipe and tube manufacturing from purchased steel	0	72	98	479
Rolled steel shape manufacturing	0	153	285	1,330
Steel wire drawing	0	721	642	2,403
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	99	156	710
Other aluminum rolling, drawing and extruding	0	17	22	139
Nonferrous metal (exc aluminum) smelting and refining	0	5	34	138
Copper rolling, drawing, extruding and alloying	0	513	661	4,351
Nonferrous metal, except copper and aluminum, shaping	0	22	28	143
Secondary processing of other nonferrous metals	0	31	61	327
Ferrous metal foundries	0	85	121	308
Nonferrous metal foundries	0	215	306	830
Custom roll forming	0	60	109	327
Crown and closure manufacturing and metal stamping	0	969	1,636	3,604

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Iron and steel forging	0	165	259	740
Nonferrous forging	0	362	510	1,112
Cutlery, utensil, pot, and pan manufacturing	0	3,612	15,889	22,214
Handtool manufacturing	0	2,903	5,707	8,460
Prefabricated metal buildings and components manufacturing	0	13	21	62
Fabricated structural metal manufacturing	0	268	467	1,071
Plate work manufacturing	0	241	256	650
Metal window and door manufacturing	0	114	207	455
Sheet metal work manufacturing	0	1,512	2,188	4,267
Ornamental and architectural metal work manufacturing	0	491	738	1,419
Power boiler and heat exchanger manufacturing	0	76	125	273
Metal tank (heavy gauge) manufacturing	0	76	103	242
Metal cans manufacturing	0	35	106	436
Metal barrels, drums and pails manufacturing	0	18	25	98
Hardware manufacturing	0	159	321	852
Spring and wire product manufacturing	0	11,340	17,663	47,447
Machine shops	0	8,515	10,581	17,989
Turned product and screw, nut, and bolt manufacturing	0	1,518	2,431	4,905
Metal heat treating	0	565	1,044	2,286
Metal coating and nonprecious engraving	0	2,322	5,039	8,913
Electroplating, anodizing, and coloring metal	0	2,279	2,704	5,300
Valve and fittings, other than plumbing, manufacturing	0	770	1,485	2,727
Plumbing fixture fitting and trim manufacturing	0	337	1,437	2,765
Ball and roller bearing manufacturing	0	42	96	222
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	11	15	32
Small arms, ordnance, and accessories manufacturing	0	742	2,420	4,111

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Fabricated pipe and pipe fitting manufacturing	0	63	79	150
Other fabricated metal manufacturing	0	871	1,313	2,708
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	77	108	495
Construction machinery manufacturing	0	9	14	49
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	169	181	432
Food product machinery manufacturing	0	3	3	10
Sawmill, woodworking, and paper machinery	0	161	172	298
Printing machinery and equipment manufacturing	0	49	53	107
All other industrial machinery manufacturing	0	42	46	113
Optical instrument and lens manufacturing	0	46	57	169
Photographic and photocopying equipment manufacturing	0	19	24	94
Other commercial service industry machinery manufacturing	0	115	172	431
Air purification and ventilation equipment manufacturing	0	24	30	79
Heating equipment (except warm air furnaces) manufacturing	0	395	494	1,209
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	267	385	1,141
Industrial mold manufacturing	0	100	108	208
Special tool, die, jig, and fixture manufacturing	0	111	123	226
Cutting tool and machine tool accessory manufacturing	0	103	109	247
Machine tool manufacturing	0	36	39	97

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	42	46	85
Turbine and turbine generator set units manufacturing	0	13	16	44
Speed changer, industrial high-speed drive, and gear manufacturing	0	392	497	1,482
Mechanical power transmission equipment manufacturing	0	359	416	1,078
Other engine equipment manufacturing	0	48	68	320
Pump and pumping equipment manufacturing	0	54	77	185
Air and gas compressor manufacturing	0	4	5	19
Elevator and moving stairway manufacturing	0	2	3	11
Conveyor and conveying equipment manufacturing	0	8	8	20
Overhead cranes, hoists, and monorail systems manufacturing	0	2	3	9
Industrial truck, trailer, and stacker manufacturing	0	1	1	8
Power-driven handtool manufacturing	0	45	79	248
Welding and soldering equipment manufacturing	0	74	89	229
Packaging machinery manufacturing	0	37	46	112
Industrial process furnace and oven manufacturing	0	49	52	131
Fluid power cylinder and actuator manufacturing	0	37	44	113
Fluid power pump and motor manufacturing	0	21	27	64
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	162	186	434
Electronic computer manufacturing	0	478	1,046	2,452
Computer storage device manufacturing	0	2,520	7,361	25,537
Computer terminals and other computer peripheral equipment manufacturing	0	153	299	806

## APPENDIX

Telephone apparatus manufacturing	0	324	607	1,379
Broadcast and wireless communications equipment manufacturing	0	44	66	154
Other communications equipment manufacturing	0	151	250	678
Audio and video equipment manufacturing	0	751	1,364	3,132
Printed circuit assembly (electronic assembly) manufacturing	0	844	1,325	3,555
Bare printed circuit board manufacturing	0	273	365	885
Semiconductor and related device manufacturing	0	4,709	8,388	21,170
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,431	2,021	3,224
Electronic connector manufacturing	0	2,634	3,983	7,275
Other electronic component manufacturing	0	686	802	2,407
Electromedical and electrotherapeutic apparatus manufacturing	0	429	905	1,622
Search, detection, and navigation instruments manufacturing	0	163	275	515
Automatic environmental control manufacturing	0	168	228	404
Industrial process variable instruments manufacturing	0	635	937	1,658
Totalizing fluid meter and counting device manufacturing	0	7	16	37
Electricity and signal testing instruments manufacturing	0	4,355	6,462	13,541
Analytical laboratory instrument manufacturing	0	54,313	101,826	160,271
Irradiation apparatus manufacturing	0	43	87	166
Watch, clock, and other measuring and controlling device manufacturing	0	340	601	1,182
Blank magnetic and optical recording media manufacturing	0	0	0	0

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Software and other prerecorded and record reproducing	0	1,029	1,522	2,068
Electric lamp bulb and part manufacturing	0	1,005	1,624	2,311
Lighting fixture manufacturing	0	425	603	1,602
Small electrical appliance manufacturing	0	103	195	456
Household cooking appliance manufacturing	0	200	456	1,161
Household refrigerator and home freezer manufacturing	0	198	539	1,339
Household laundry equipment manufacturing	0	345	721	2,456
Other major household appliance manufacturing	0	73	184	423
Power, distribution, and specialty transformer manufacturing	0	20	29	56
Motor and generator manufacturing	0	23	33	104
Switchgear and switchboard apparatus manufacturing	0	190	303	780
Relay and industrial control manufacturing	0	1,389	1,820	3,238
Storage battery manufacturing	0	177	264	828
Primary battery manufacturing	0	508	804	2,960
Fiber optic cable manufacturing	0	442	693	2,398
Other communication and energy wire manufacturing	0	224	377	1,313
Wiring device manufacturing	0	519	980	2,301
Carbon and graphite product manufacturing	0	214	297	760
All other miscellaneous electrical equipment and component manufacturing	0	103	116	258
Automobile manufacturing	0	9	68	230
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	30	54	127
Truck trailer manufacturing	0	0	0	1
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	69	81	261
Motor vehicle gasoline engine and engine parts manufacturing	0	13	24	85

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Motor vehicle electrical and electronic equipment manufacturing	0	383	707	1,773
Motor vehicle transmission and power train parts manufacturing	0	54	113	294
Motor vehicle seating and interior trim manufacturing	0	6	13	60
Motor vehicle metal stamping	0	60	111	260
Other motor vehicle parts manufacturing	0	255	565	1,750
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	58	148	325
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	327	431	1,350
Other aircraft parts and auxiliary equipment manufacturing	0	9	10	30
Guided missile and space vehicle manufacturing	0	184	196	444
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	1	1	2
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	27	30	87
Boat building	0	530	631	2,572
Motorcycle, bicycle, and parts manufacturing	0	52	70	354
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	90	137	836
Wood kitchen cabinet and countertop manufacturing	0	679	832	1,743
Upholstered household furniture manufacturing	0	42	53	230
Nonupholstered wood household furniture manufacturing	0	335	365	825
Other household nonupholstered furniture manufacturing	0	11	16	65
Institutional furniture manufacturing	0	11	12	39
Wood office furniture manufacturing	0	1	2	5

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Custom architectural woodwork and millwork	0	50	48	112
Office furniture, except wood, manufacturing	0	54	83	225
Showcase, partition, shelving, and locker manufacturing	0	77	97	244
Mattress manufacturing	0	126	223	819
Blind and shade manufacturing	0	6	6	23
Surgical and medical instrument manufacturing	0	2,093	4,837	8,212
Surgical appliance and supplies manufacturing	0	2,324	5,534	9,085
Dental equipment and supplies manufacturing	0	97	189	366
Ophthalmic goods manufacturing	0	467	1,189	2,258
Dental laboratories	0	683	679	991
Jewelry and silverware manufacturing	0	1,061	1,365	2,610
Sporting and athletic goods manufacturing	0	2,049	2,982	5,355
Doll, toy, and game manufacturing	0	1,040	1,702	3,298
Office supplies (except paper) manufacturing	0	207	264	503
Sign manufacturing	0	1,138	1,117	1,617
Gasket, packing, and sealing device manufacturing	0	606	798	1,474
Musical instrument manufacturing	0	713	717	886
Fasteners, buttons, needles, and pins manufacturing	0	144	172	265
Broom, brush, and mop manufacturing	0	329	606	1,141
Burial casket manufacturing	0	220	265	460
All other miscellaneous manufacturing	0	1,250	1,495	2,626
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4,823	11,534	25,502
Wholesale - Professional and commercial equipment and supplies	0	37,978	67,471	101,548
Wholesale - Household appliances and electrical and electronic goods	0	13,642	30,606	52,606
Wholesale - Machinery, equipment, and supplies	0	9,472	16,533	26,483
Wholesale - Other durable goods merchant wholesalers	0	23,679	37,583	64,325



## APPENDIX

Wholesale - Drugs and druggists' sundries	0	18,260	51,416	85,051
Wholesale - Grocery and related product wholesalers	0	21,175	28,519	52,120
Wholesale - Petroleum and petroleum products	0	2,168	31,859	34,985
Wholesale - Other nondurable goods merchant wholesalers	0	39,917	81,707	133,242
Wholesale - Wholesale electronic markets and agents and brokers	0	29,263	13,033	14,767
Retail - Motor vehicle and parts dealers	0	18,977	23,948	34,950
Retail - Furniture and home furnishings stores	0	11,992	14,681	22,737
Retail - Electronics and appliance stores	0	11,536	11,490	18,225
Retail - Building material and garden equipment and supplies stores	0	12,200	16,880	25,044
Retail - Food and beverage stores	1	44,927	53,552	90,333
Retail - Health and personal care stores	1	26,407	28,921	43,237
Retail - Gasoline stores	0	7,169	9,494	18,218
Retail - Clothing and clothing accessories stores	1	20,126	24,679	49,721
Retail - Sporting goods, hobby, musical instrument and book stores	0	11,286	13,529	19,943
Retail - General merchandise stores	1	21,872	26,955	46,412
Retail - Miscellaneous store retailers	1	20,036	20,886	31,085
Retail - Nonstore retailers	1	47,602	95,172	133,749
Air transportation	0	18,178	47,046	68,078
Rail transportation	0	6,523	9,093	23,781
Water transportation	0	2,602	3,318	15,053
Truck transportation	0	26,892	31,223	59,294
Transit and ground passenger transportation	1	47,113	53,903	71,020
Pipeline transportation	0	1,172	2,758	3,311
Scenic and sightseeing transportation and support activities for transportation	0	19,862	22,120	49,519
Couriers and messengers	0	15,907	20,676	38,636
Warehousing and storage	0	17,763	19,753	35,420

## APPENDIX

Newspaper publishers	0	6,962	10,534	13,146
Periodical publishers	0	12,194	17,442	22,873
Book publishers	0	6,678	19,022	28,077
Directory, mailing list, and other publishers	0	1,608	4,697	6,983
Greeting card publishing	0	355	1,285	1,901
Software publishers	2	814,243	1,624,520	1,754,669
Motion picture and video industries	0	12,793	24,703	41,353
Sound recording industries	0	1,200	5,059	7,320
Radio and television broadcasting	0	17,820	8,387	35,216
Cable and other subscription programming	0	4,743	23,406	67,513
Wired telecommunications carriers	0	21,423	38,761	74,647
Wireless telecommunications carriers (except satellite)	0	14,086	47,150	142,346
Satellite, telecommunications resellers, and all other telecommunications	0	14,748	13,695	23,577
Data processing, hosting, and related services	0	34,606	64,200	107,949
News syndicates, libraries, archives and all other information services	0	6,632	10,852	15,344
Internet publishing and broadcasting and web search portals	0	103,807	260,917	460,191
Nondepository credit intermediation and related activities	0	28,224	39,800	57,136
Securities and commodity contracts intermediation and brokerage	0	91,357	85,552	109,092
Monetary authorities and depository credit intermediation	1	123,150	330,349	455,894
Other financial investment activities	1	199,548	211,585	233,783
Direct life insurance carriers	0	29,354	49,959	63,933
Insurance carriers, except direct life	0	57,181	150,456	309,231
Insurance agencies, brokerages, and related activities	0	47,248	66,437	127,655
Funds, trusts, and other financial vehicles	0	21,180	12,897	72,810
Other real estate	4	139,575	473,027	889,031
Tenant-occupied housing	0	11,503	199,702	212,820

## APPENDIX

Owner-occupied dwellings	0	0	576,818	728,803
Automotive equipment rental and leasing	0	8,562	21,800	29,803
General and consumer goods rental except video tapes and discs	0	10,052	11,116	15,523
Video tape and disc rental	0	1,879	2,669	4,137
Commercial and industrial machinery and equipment rental and leasing	0	11,694	22,419	30,784
Lessors of nonfinancial intangible assets	0	1,469	32,680	38,310
Legal services	1	145,354	241,854	318,163
Accounting, tax preparation, bookkeeping, and payroll services	1	80,845	119,044	145,713
Architectural, engineering, and related services	1	72,139	91,690	142,343
Specialized design services	0	21,312	22,494	25,747
Custom computer programming services	0	38,794	43,089	54,066
Computer systems design services	0	39,418	40,513	49,161
Other computer related services, including facilities management	0	17,135	31,334	44,341
Management consulting services	14	2,067,522	2,065,197	2,647,428
Environmental and other technical consulting services	0	37,423	35,277	45,170
Scientific research and development services	12	2,125,868	2,887,592	4,287,905
Advertising, public relations, and related services	0	56,150	86,168	116,984
Photographic services	0	8,962	7,448	9,286
Veterinary services	0	6,200	10,029	13,827
Marketing research and all other miscellaneous professional, scientific, and technical services	2	223,776	212,538	264,358
Management of companies and enterprises	2	261,557	301,219	392,639
Office administrative services	0	33,288	13,794	28,604
Facilities support services	0	3,172	3,926	7,841
Employment services	2	128,782	191,429	261,936
Business support services	0	17,648	15,683	24,547
Travel arrangement and reservation services	0	16,946	22,062	40,072
Investigation and security services	0	21,367	21,871	28,808
Services to buildings	1	43,165	44,593	62,266

## APPENDIX

Landscape and horticultural services	0	25,443	26,548	37,724
Other support services	0	9,635	11,585	19,823
Waste management and remediation services	0	15,537	28,760	45,451
Elementary and secondary schools	1	41,835	34,477	39,949
Junior colleges, colleges, universities, and professional schools	2	126,078	158,352	201,207
Other educational services	2	57,270	52,143	95,029
Offices of physicians	1	147,310	172,422	239,356
Offices of dentists	0	35,858	44,580	64,296
Offices of other health practitioners	1	41,590	39,784	53,086
Outpatient care centers	1	40,204	42,184	72,558
Medical and diagnostic laboratories	0	10,888	16,723	24,764
Home health care services	1	49,075	33,040	45,977
Other ambulatory health care services	0	11,615	12,713	20,269
Hospitals	3	322,680	372,054	632,800
Nursing and community care facilities	1	45,237	50,334	79,926
Residential mental retardation, mental health, substance abuse and other facilities	1	24,831	26,131	37,571
Individual and family services	2	75,202	69,760	97,295
Child day care services	1	25,980	31,560	38,977
Community food, housing, and other relief services, including rehabilitation services	0	19,501	21,945	42,209
Performing arts companies	0	8,739	13,808	19,722
Commercial Sports Except Racing	0	17,501	18,503	23,549
Racing and Track Operation	0	2,093	2,843	4,158
Independent artists, writers, and performers	1	30,506	33,160	35,857
Promoters of performing arts and sports and agents for public figures	0	8,228	18,268	32,501
Museums, historical sites, zoos, and parks	0	5,261	6,443	10,044
Amusement parks and arcades	0	1,158	4,623	5,248
Gambling industries (except casino hotels)	0	7,162	11,680	18,780
Other amusement and recreation industries	0	13,018	13,836	21,343

## APPENDIX

Fitness and recreational sports centers	0	9,933	15,888	20,514
Bowling centers	0	1,067	1,575	2,433
Hotels and motels, including casino hotels	1	34,215	56,450	80,312
Other accommodations	0	21,392	27,605	34,471
Full-service restaurants	2	76,562	113,772	178,921
Limited-service restaurants	1	38,951	59,918	113,350
All other food and drinking places	2	65,786	83,691	116,327
Automotive repair and maintenance, except car washes	1	45,187	44,809	65,843
Car washes	0	20,372	25,707	38,215
Electronic and precision equipment repair and maintenance	0	19,320	27,026	37,322
Commercial and industrial machinery and equipment repair and maintenance	1	103,127	108,695	156,022
Personal and household goods repair and maintenance	0	17,227	11,540	14,318
Personal care services	1	32,267	19,849	26,262
Death care services	0	3,295	3,764	5,683
Dry-cleaning and laundry services	0	6,169	6,472	9,191
Other personal services	1	29,174	18,740	25,438
Religious organizations	1	49,950	19,111	73,121
Grantmaking, giving, and social advocacy organizations	0	26,013	66,025	94,543
Business and professional associations	0	12,821	17,339	25,265
Labor and civic organizations	1	15,934	34,272	63,437
Private households	0	8,638	8,638	8,638
Postal service	0	29,120	29,168	31,937
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	742	651	1,957
State government passenger transit	1	107,426	(93,728)	46,023
State government electric utilities	0	0	0	0
Other state government enterprises	0	3,091	1,601	3,716
Local government passenger transit	0	220	(268)	43
Local government electric utilities	0	3,358	6,769	13,043
Other local government enterprises	0	8,093	(746)	10,462

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	202,317	430,446	900,048

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 24. Michigan

**Table 415: Detailed NASA Impacts by Types of Impact, Michigan.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>610</i>	<i>42,087,449</i>	<i>62,369,442</i>	<i>119,680,504</i>
Oilseed farming	0	(611)	41,353	155,360
Grain farming	2	8,935	52,000	287,106
Vegetable and melon farming	1	5,081	11,784	49,351
Fruit farming	1	1,708	8,360	34,233
Tree nut farming	0	33	35	60
Greenhouse, nursery, and floriculture production	0	9,769	13,312	34,036
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	3,150	5,629	19,156
All other crop farming	0	1,507	2,083	5,755
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	(1,519)	6,738	54,519

## APPENDIX

Dairy cattle and milk production	0	781	6,763	77,358
Poultry and egg production	0	1,952	2,900	41,695
Animal production, except cattle and poultry and eggs	2	4,381	61,725	175,162
Forestry, forest products, and timber tract production	0	2,075	2,210	3,073
Commercial logging	0	7,200	7,331	13,919
Commercial fishing	0	273	846	932
Commercial hunting and trapping	0	862	1,690	2,392
Support activities for agriculture and forestry	1	46,790	40,004	49,005
Oil and gas extraction	1	4,169	11,757	237,350
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	1,386	32,577	47,166
Iron ore mining	0	6,540	29,486	12,762
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	3,457	20,481	27,737
Sand and gravel mining	0	4,031	11,756	17,237
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	149	275	522
Other chemical and fertilizer mineral mining	0	102	470	711
Other nonmetallic minerals	0	612	1,648	2,493
Drilling oil and gas wells	0	2	3	23
Support activities for oil and gas operations	0	269	268	1,143
Metal mining services	0	186	275	3,022
Other nonmetallic minerals services	0	10	18	264
Electric power generation - Hydroelectric	0	4,246	10,709	19,105
Electric power generation - Fossil fuel	0	73,305	231,849	616,172
Electric power generation - Nuclear	0	43,890	86,422	193,352
Electric power generation - Solar	0	625	689	1,400
Electric power generation - Wind	0	845	2,210	6,093

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Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	683	1,788	3,463
Electric power generation - All other	0	595	73	487
Electric power transmission and distribution	1	124,143	377,452	976,786
Natural gas distribution	0	42,112	98,246	231,438
Water, sewage and other systems	0	6,558	10,108	17,631
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	10	7	14
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	3	173,801	237,939	556,658
Maintenance and repair construction of residential structures	1	51,234	77,901	183,678
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	147	111	240
Dog and cat food manufacturing	0	1,052	4,270	14,589
Other animal food manufacturing	0	5,265	9,231	74,537
Flour milling	0	3,516	7,389	46,755
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0



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Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	530	3,116	26,273
Fats and oils refining and blending	0	91	190	1,721
Breakfast cereal manufacturing	0	37,812	101,531	284,283
Beet sugar manufacturing	0	6,234	13,302	55,314
Sugar cane mills and refining	0	107	259	1,305
Nonchocolate confectionery manufacturing	0	659	995	4,771
Chocolate and confectionery manufacturing from cacao beans	0	62	136	1,489
Confectionery manufacturing from purchased chocolate	0	1,519	2,144	12,099
Frozen fruits, juices and vegetables manufacturing	0	3,486	6,639	27,794
Frozen specialties manufacturing	0	6,626	10,328	39,371
Canned fruits and vegetables manufacturing	0	5,798	11,114	50,345
Canned specialties	0	494	1,266	5,285
Dehydrated food products manufacturing	0	1,900	3,638	12,059
Cheese manufacturing	0	1,852	2,735	26,815
Dry, condensed, and evaporated dairy product manufacturing	0	6,032	15,613	90,712
Fluid milk manufacturing	0	5,933	9,865	62,906
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	838	1,337	6,192
Frozen cakes and other pastries manufacturing	0	5,492	8,112	15,653
Poultry processing	0	6,397	8,576	34,906
Animal, except poultry, slaughtering	0	7,569	10,623	90,452
Meat processed from carcasses	0	20,061	21,544	164,705
Rendering and meat byproduct processing	0	429	499	2,419
Seafood product preparation and packaging	0	1,915	2,326	8,913
Bread and bakery product, except frozen, manufacturing	1	23,017	31,547	80,100
Cookie and cracker manufacturing	0	6,313	9,064	27,863
Dry pasta, mixes, and dough manufacturing	0	3,715	9,250	23,822
Tortilla manufacturing	0	790	976	4,043

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	2,142	4,019	14,742
Other snack food manufacturing	0	3,346	6,865	30,938
Coffee and tea manufacturing	0	1,281	2,468	14,044
Flavoring syrup and concentrate manufacturing	0	913	7,182	18,715
Mayonnaise, dressing, and sauce manufacturing	0	860	1,726	9,095
Spice and extract manufacturing	0	2,479	3,907	14,068
All other food manufacturing	0	3,101	4,173	22,095
Bottled and canned soft drinks & water	0	14,280	30,798	137,832
Manufactured ice	0	794	385	2,601
Breweries	0	6,990	19,796	73,483
Wineries	0	547	1,030	5,695
Distilleries	0	1,378	9,788	31,131
Tobacco product manufacturing	0	146	5,029	13,136
Fiber, yarn, and thread mills	0	442	900	4,415
Broadwoven fabric mills	0	316	629	1,189
Narrow fabric mills and schiffli machine embroidery	0	46	57	154
Nonwoven fabric mills	0	556	1,587	3,570
Knit fabric mills	0	28	48	115
Textile and fabric finishing mills	0	7,646	12,527	41,622
Fabric coating mills	0	214	371	1,299
Carpet and rug mills	0	2,242	5,928	15,886
Curtain and linen mills	0	250	507	1,342
Textile bag and canvas mills	0	1,885	2,984	6,654
Rope, cordage, twine, tire cord and tire fabric mills	0	167	424	1,263
Other textile product mills	0	1,371	2,095	5,209
Hosiery and sock mills	0	138	185	497
Other apparel knitting mills	0	77	131	364
Cut and sew apparel contractors	0	1,090	1,190	2,463
Mens and boys cut and sew apparel manufacturing	0	1,927	2,319	4,720
Womens and girls cut and sew apparel manufacturing	0	38	82	676
Other cut and sew apparel manufacturing	0	48	93	546
Apparel accessories and other apparel manufacturing	0	105	169	1,082
Leather and hide tanning and finishing	0	509	832	2,478

## APPENDIX

Footwear manufacturing	0	883	1,001	2,863
Other leather and allied product manufacturing	0	25	28	204
Sawmills	0	6,856	9,263	34,629
Wood preservation	0	473	1,108	5,033
Veneer and plywood manufacturing	0	1,594	2,231	7,812
Engineered wood member and truss manufacturing	0	928	1,195	3,432
Reconstituted wood product manufacturing	0	1,816	4,123	13,499
Wood windows and door manufacturing	0	7,231	9,316	25,468
Cut stock, resawing lumber, and planing	0	1,811	2,841	7,578
Other millwork, including flooring	0	4,154	5,459	14,935
Wood container and pallet manufacturing	0	4,438	5,018	12,493
Manufactured home (mobile home) manufacturing	0	2	4	8
Prefabricated wood building manufacturing	0	846	949	2,658
All other miscellaneous wood product manufacturing	0	2,961	3,348	10,076
Pulp mills	0	114	154	743
Paper mills	0	17,830	31,408	122,862
Paperboard mills	0	4,543	8,516	38,779
Paperboard container manufacturing	0	23,086	30,184	143,188
Paper bag and coated and treated paper manufacturing	0	5,733	8,306	28,543
Stationery product manufacturing	0	840	1,063	4,801
Sanitary paper product manufacturing	0	241	402	2,167
All other converted paper product manufacturing	0	2,978	3,796	12,278
Printing	2	110,750	168,464	329,670
Support activities for printing	0	5,683	8,632	12,812
Petroleum refineries	0	3,701	62,313	217,051
Asphalt paving mixture and block manufacturing	0	(173)	155	3,172
Asphalt shingle and coating materials manufacturing	0	587	4,017	9,170
Petroleum lubricating oil and grease manufacturing	0	8,855	49,971	119,048

## APPENDIX

All other petroleum and coal products manufacturing	0	900	6,618	18,589
Petrochemical manufacturing	0	32	122	1,588
Industrial gas manufacturing	0	2,686	4,563	20,812
Synthetic dye and pigment manufacturing	0	2,012	2,995	11,874
Other basic inorganic chemical manufacturing	0	3,909	5,904	24,440
Other basic organic chemical manufacturing	0	4,111	6,331	67,789
Plastics material and resin manufacturing	0	37,572	48,676	307,071
Synthetic rubber manufacturing	0	368	475	3,215
Artificial and synthetic fibers and filaments manufacturing	0	132	170	1,330
Nitrogenous fertilizer manufacturing	0	141	203	1,085
Phosphatic fertilizer manufacturing	0	171	298	1,536
Fertilizer mixing	0	137	169	806
Pesticide and other agricultural chemical manufacturing	0	5,800	11,699	61,646
Medicinal and botanical manufacturing	0	1,112	1,371	5,077
Pharmaceutical preparation manufacturing	0	24,325	56,948	237,485
In-vitro diagnostic substance manufacturing	0	459	558	1,259
Biological product (except diagnostic) manufacturing	0	811	1,292	2,934
Paint and coating manufacturing	0	10,711	14,454	55,116
Adhesive manufacturing	0	3,362	4,135	17,123
Soap and other detergent manufacturing	0	28,642	55,675	170,255
Polish and other sanitation good manufacturing	0	3,590	4,716	23,590
Surface active agent manufacturing	0	747	1,437	6,050
Toilet preparation manufacturing	0	392	603	3,149
Printing ink manufacturing	0	1,494	1,567	6,119
Explosives manufacturing	0	40	43	161
Custom compounding of purchased resins	0	11,128	15,385	72,703
Photographic film and chemical manufacturing	0	1,075	1,655	8,894
Other miscellaneous chemical product manufacturing	0	4,052	4,881	19,970

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	7,238	10,684	40,926
Unlaminated plastics profile shape manufacturing	0	7,848	14,819	46,880
Plastics pipe and pipe fitting manufacturing	0	2,518	4,739	15,952
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	4,181	6,730	20,039
Polystyrene foam product manufacturing	0	11,629	17,858	56,106
Urethane and other foam product (except polystyrene) manufacturing	0	6,470	9,392	36,559
Plastics bottle manufacturing	0	3,274	4,954	12,154
Other plastics product manufacturing	1	61,785	83,694	258,686
Tire manufacturing	0	1,477	1,869	8,081
Rubber and plastics hoses and belting manufacturing	0	4,650	6,736	18,701
Other rubber product manufacturing	0	20,442	27,889	85,446
Pottery, ceramics, and plumbing fixture manufacturing	0	742	786	1,365
Brick, tile, and other structural clay product manufacturing	0	2,814	3,665	7,458
Flat glass manufacturing	0	940	1,647	4,504
Other pressed and blown glass and glassware manufacturing	0	940	1,260	2,961
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	6,791	10,038	22,464
Cement manufacturing	0	2,440	4,965	13,408
Ready-mix concrete manufacturing	0	9,853	14,525	45,174
Concrete block and brick manufacturing	0	2,407	3,836	9,579
Concrete pipe manufacturing	0	565	835	2,039
Other concrete product manufacturing	0	3,098	3,978	9,604
Lime manufacturing	0	318	661	1,744
Gypsum product manufacturing	0	1,488	3,297	9,093
Abrasive product manufacturing	0	3,087	7,544	14,454
Cut stone and stone product manufacturing	1	54,357	60,542	120,781

## APPENDIX

Ground or treated mineral and earth manufacturing	0	4,263	10,410	18,692
Mineral wool manufacturing	0	427	864	2,250
Miscellaneous nonmetallic mineral products manufacturing	0	845	1,712	3,522
Iron and steel mills and ferroalloy manufacturing	0	19,539	32,615	141,536
Iron, steel pipe and tube manufacturing from purchased steel	0	2,091	3,106	9,783
Rolled steel shape manufacturing	0	1,306	2,717	10,002
Steel wire drawing	0	269	429	1,682
Alumina refining and primary aluminum production	0	1,835	3,928	31,043
Secondary smelting and alloying of aluminum	0	431	689	3,530
Aluminum sheet, plate, and foil manufacturing	0	159	351	1,442
Other aluminum rolling, drawing and extruding	0	3,266	4,605	19,071
Nonferrous metal (exc aluminum) smelting and refining	0	5	33	146
Copper rolling, drawing, extruding and alloying	0	3,204	4,568	36,692
Nonferrous metal, except copper and aluminum, shaping	0	316	444	2,251
Secondary processing of other nonferrous metals	0	362	1,250	5,480
Ferrous metal foundries	0	4,451	7,974	18,223
Nonferrous metal foundries	0	14,643	21,925	44,187
Custom roll forming	0	1,626	2,575	11,621
Crown and closure manufacturing and metal stamping	0	8,011	11,667	30,196
Iron and steel forging	0	11,998	16,492	44,591
Nonferrous forging	0	3,945	5,001	15,839
Cutlery, utensil, pot, and pan manufacturing	0	311	893	2,786
Handtool manufacturing	0	3,342	5,453	9,790
Prefabricated metal buildings and components manufacturing	0	490	698	1,960
Fabricated structural metal manufacturing	0	6,293	9,349	26,919
Plate work manufacturing	0	3,809	3,956	11,408
Metal window and door manufacturing	0	1,978	3,077	7,979

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Sheet metal work manufacturing	0	18,190	23,516	51,542
Ornamental and architectural metal work manufacturing	0	1,818	2,421	6,011
Power boiler and heat exchanger manufacturing	0	50	69	163
Metal tank (heavy gauge) manufacturing	0	317	389	1,203
Metal cans manufacturing	0	469	1,084	4,528
Metal barrels, drums and pails manufacturing	0	795	998	3,802
Hardware manufacturing	0	3,728	6,266	17,712
Spring and wire product manufacturing	0	3,483	4,803	13,443
Machine shops	1	46,906	54,353	102,605
Turned product and screw, nut, and bolt manufacturing	0	16,420	23,133	56,226
Metal heat treating	0	4,971	7,838	19,347
Metal coating and nonprecious engraving	0	9,965	17,781	39,802
Electroplating, anodizing, and coloring metal	0	10,367	11,630	24,742
Valve and fittings, other than plumbing, manufacturing	0	4,065	6,691	16,497
Plumbing fixture fitting and trim manufacturing	0	771	2,440	7,217
Ball and roller bearing manufacturing	0	904	1,703	3,694
Small arms ammunition manufacturing	0	970	1,674	3,316
Ammunition, except for small arms, manufacturing	0	9	11	22
Small arms, ordnance, and accessories manufacturing	0	83	170	472
Fabricated pipe and pipe fitting manufacturing	0	2,368	2,773	7,077
Other fabricated metal manufacturing	0	31,968	41,946	102,398
Farm machinery and equipment manufacturing	0	570	801	3,285
Lawn and garden equipment manufacturing	0	75	120	752
Construction machinery manufacturing	0	169	319	1,115
Mining machinery and equipment manufacturing	0	42	50	154

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Oil and gas field machinery and equipment manufacturing	0	10	12	36
Semiconductor machinery manufacturing	0	16	18	45
Food product machinery manufacturing	0	10	12	35
Sawmill, woodworking, and paper machinery	0	329	361	1,004
Printing machinery and equipment manufacturing	0	118	131	332
All other industrial machinery manufacturing	0	410	505	1,322
Optical instrument and lens manufacturing	0	21,156	32,800	90,479
Photographic and photocopying equipment manufacturing	0	26	37	131
Other commercial service industry machinery manufacturing	0	545	944	3,136
Air purification and ventilation equipment manufacturing	1	65,916	95,299	240,275
Heating equipment (except warm air furnaces) manufacturing	0	656	923	2,434
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	2,830	4,958	15,639
Industrial mold manufacturing	0	3,748	4,178	7,400
Special tool, die, jig, and fixture manufacturing	0	6,338	7,709	12,912
Cutting tool and machine tool accessory manufacturing	0	3,145	3,386	6,855
Machine tool manufacturing	0	1,006	1,109	2,728
Rolling mill and other metalworking machinery manufacturing	0	25,878	32,611	71,975
Turbine and turbine generator set units manufacturing	0	10	13	59
Speed changer, industrial high-speed drive, and gear manufacturing	0	3,480	4,871	13,660
Mechanical power transmission equipment manufacturing	0	1,716	2,371	5,653
Other engine equipment manufacturing	0	9,407	16,469	61,640
Pump and pumping equipment manufacturing	0	192	314	937



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Air and gas compressor manufacturing	0	62	93	322
Elevator and moving stairway manufacturing	0	15	22	60
Conveyor and conveying equipment manufacturing	0	1,519	1,582	3,735
Overhead cranes, hoists, and monorail systems manufacturing	0	26	45	138
Industrial truck, trailer, and stacker manufacturing	0	111	165	561
Power-driven handtool manufacturing	0	143	333	896
Welding and soldering equipment manufacturing	0	785	994	2,495
Packaging machinery manufacturing	0	124	176	451
Industrial process furnace and oven manufacturing	0	314	371	794
Fluid power cylinder and actuator manufacturing	0	2,830	3,736	9,346
Fluid power pump and motor manufacturing	0	633	923	2,887
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1,077	1,335	3,384
Electronic computer manufacturing	0	23,577	39,747	186,494
Computer storage device manufacturing	0	112	213	975
Computer terminals and other computer peripheral equipment manufacturing	1	88,432	139,022	617,568
Telephone apparatus manufacturing	0	27	41	276
Broadcast and wireless communications equipment manufacturing	0	34	46	225
Other communications equipment manufacturing	0	259	342	1,197
Audio and video equipment manufacturing	0	57	87	546
Printed circuit assembly (electronic assembly) manufacturing	0	26,883	33,002	121,467
Bare printed circuit board manufacturing	0	4,297	4,958	14,571

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Semiconductor and related device manufacturing	0	888	1,225	4,863
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	635	791	2,165
Electronic connector manufacturing	0	752	964	2,188
Other electronic component manufacturing	0	3,360	3,658	10,470
Electromedical and electrotherapeutic apparatus manufacturing	0	69	105	302
Search, detection, and navigation instruments manufacturing	0	117	146	347
Automatic environmental control manufacturing	0	2,111	2,569	7,599
Industrial process variable instruments manufacturing	0	1,147	1,419	3,435
Totalizing fluid meter and counting device manufacturing	0	304	485	1,535
Electricity and signal testing instruments manufacturing	0	4,121	5,108	16,942
Analytical laboratory instrument manufacturing	4	434,301	592,862	1,498,714
Irradiation apparatus manufacturing	0	3	5	15
Watch, clock, and other measuring and controlling device manufacturing	0	578	780	2,214
Blank magnetic and optical recording media manufacturing	0	5	27	458
Software and other prerecorded and record reproducing	0	233	299	837
Electric lamp bulb and part manufacturing	0	47	71	147
Lighting fixture manufacturing	0	732	1,031	3,174
Small electrical appliance manufacturing	0	2,092	3,620	6,839
Household cooking appliance manufacturing	0	5,799	11,102	20,692
Household refrigerator and home freezer manufacturing	0	6,520	14,512	26,298
Household laundry equipment manufacturing	0	14,069	24,801	61,241

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Other major household appliance manufacturing	0	2,175	4,532	7,867
Power, distribution, and specialty transformer manufacturing	0	110	154	443
Motor and generator manufacturing	0	1,591	2,292	6,674
Switchgear and switchboard apparatus manufacturing	0	659	1,020	3,405
Relay and industrial control manufacturing	0	4,395	5,563	13,161
Storage battery manufacturing	0	3,022	4,410	11,563
Primary battery manufacturing	0	17,811	34,601	90,144
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	17	31	314
Wiring device manufacturing	0	1,985	3,440	10,468
Carbon and graphite product manufacturing	0	1,247	1,691	5,232
All other miscellaneous electrical equipment and component manufacturing	0	296	335	1,092
Automobile manufacturing	0	9,320	41,972	162,706
Light truck and utility vehicle manufacturing	0	7,256	25,802	162,601
Heavy duty truck manufacturing	0	37	98	472
Motor vehicle body manufacturing	0	1,126	1,540	4,133
Truck trailer manufacturing	0	8	10	31
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	4,279	4,633	15,091
Motor vehicle gasoline engine and engine parts manufacturing	0	45,146	68,011	245,943
Motor vehicle electrical and electronic equipment manufacturing	0	34,772	47,998	153,423
Motor vehicle transmission and power train parts manufacturing	1	149,064	243,624	755,347
Motor vehicle seating and interior trim manufacturing	0	8,685	12,256	54,519
Motor vehicle metal stamping	2	192,126	265,529	780,599
Other motor vehicle parts manufacturing	1	59,773	98,013	379,278
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	21,848	36,494	108,298

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Aircraft manufacturing	0	21	34	113
Aircraft engine and engine parts manufacturing	0	489	891	2,642
Other aircraft parts and auxiliary equipment manufacturing	0	104	135	352
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	123	149	347
Railroad rolling stock manufacturing	0	14	14	44
Ship building and repairing	0	108	120	220
Boat building	0	15,306	18,813	53,292
Motorcycle, bicycle, and parts manufacturing	0	558	705	1,795
Military armored vehicle, tank, and tank component manufacturing	0	6,469	10,321	34,953
All other transportation equipment manufacturing	0	5,818	7,635	21,130
Wood kitchen cabinet and countertop manufacturing	0	2,446	3,464	7,443
Upholstered household furniture manufacturing	0	598	810	2,536
Nonupholstered wood household furniture manufacturing	0	833	963	2,811
Other household nonupholstered furniture manufacturing	0	770	1,177	3,398
Institutional furniture manufacturing	0	20,191	22,056	61,569
Wood office furniture manufacturing	0	188	277	575
Custom architectural woodwork and millwork	0	152	147	401
Office furniture, except wood, manufacturing	0	2,513	4,285	9,468
Showcase, partition, shelving, and locker manufacturing	0	2,459	3,451	8,218
Mattress manufacturing	0	721	1,519	4,870
Blind and shade manufacturing	0	162	170	722
Surgical and medical instrument manufacturing	0	2,098	3,370	9,585
Surgical appliance and supplies manufacturing	0	17,012	26,962	58,540

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Dental equipment and supplies manufacturing	0	142	200	549
Ophthalmic goods manufacturing	0	237	381	988
Dental laboratories	0	2,301	2,157	3,724
Jewelry and silverware manufacturing	0	2,103	2,963	6,952
Sporting and athletic goods manufacturing	0	2,339	2,857	8,238
Doll, toy, and game manufacturing	0	2,071	2,659	8,863
Office supplies (except paper) manufacturing	0	222	261	873
Sign manufacturing	0	5,932	4,621	10,183
Gasket, packing, and sealing device manufacturing	0	4,190	4,800	9,617
Musical instrument manufacturing	0	474	478	984
Fasteners, buttons, needles, and pins manufacturing	0	1,452	1,654	2,680
Broom, brush, and mop manufacturing	0	2,237	2,736	6,670
Burial casket manufacturing	0	339	377	797
All other miscellaneous manufacturing	0	13,665	15,550	32,590
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	29,292	72,712	134,717
Wholesale - Professional and commercial equipment and supplies	1	121,624	213,209	352,557
Wholesale - Household appliances and electrical and electronic goods	1	81,482	197,624	360,292
Wholesale - Machinery, equipment, and supplies	1	70,809	125,952	212,211
Wholesale - Other durable goods merchant wholesalers	1	106,039	169,982	313,010
Wholesale - Drugs and druggists' sundries	0	62,649	192,155	381,066
Wholesale - Grocery and related product wholesalers	1	92,188	130,063	244,681
Wholesale - Petroleum and petroleum products	0	19,775	237,948	280,991
Wholesale - Other nondurable goods merchant wholesalers	2	150,043	292,517	541,386
Wholesale - Wholesale electronic markets and agents and brokers	1	125,413	71,219	81,094
Retail - Motor vehicle and parts dealers	2	118,154	185,948	263,399

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Retail - Furniture and home furnishings stores	1	56,905	74,997	120,955
Retail - Electronics and appliance stores	1	75,145	77,263	125,624
Retail - Building material and garden equipment and supplies stores	2	70,197	132,561	191,989
Retail - Food and beverage stores	5	161,634	232,172	384,785
Retail - Health and personal care stores	3	135,159	165,421	249,795
Retail - Gasoline stores	2	46,142	93,184	181,518
Retail - Clothing and clothing accessories stores	3	66,647	110,375	227,273
Retail - Sporting goods, hobby, musical instrument and book stores	2	49,230	65,111	107,508
Retail - General merchandise stores	6	188,947	282,821	456,263
Retail - Miscellaneous store retailers	4	94,862	111,632	182,719
Retail - Nonstore retailers	4	79,320	237,899	503,372
Air transportation	1	144,332	286,129	436,537
Rail transportation	0	16,721	22,874	56,038
Water transportation	0	8,201	16,748	81,988
Truck transportation	3	195,643	238,437	526,883
Transit and ground passenger transportation	2	49,616	57,677	93,073
Pipeline transportation	0	29,050	61,716	82,704
Scenic and sightseeing transportation and support activities for transportation	3	177,506	201,879	439,653
Couriers and messengers	1	59,098	79,033	141,638
Warehousing and storage	2	117,181	133,866	252,633
Newspaper publishers	1	31,713	47,202	64,688
Periodical publishers	0	23,641	33,269	54,785
Book publishers	0	20,347	57,026	100,936
Directory, mailing list, and other publishers	0	2,434	5,678	12,088
Greeting card publishing	0	3,080	10,410	14,703
Software publishers	3	491,260	1,078,538	1,293,026
Motion picture and video industries	1	28,766	57,131	151,898
Sound recording industries	0	2,230	12,912	23,231
Radio and television broadcasting	1	87,663	56,301	252,796

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Cable and other subscription programming	0	3,217	19,017	67,890
Wired telecommunications carriers	1	102,885	254,629	495,882
Wireless telecommunications carriers (except satellite)	0	17,358	99,835	316,461
Satellite, telecommunications resellers, and all other telecommunications	0	28,366	37,190	98,567
Data processing, hosting, and related services	1	106,841	256,008	532,318
News syndicates, libraries, archives and all other information services	0	23,752	45,826	70,827
Internet publishing and broadcasting and web search portals	0	60,387	209,882	420,706
Nondepository credit intermediation and related activities	3	241,768	302,893	507,253
Securities and commodity contracts intermediation and brokerage	2	205,343	210,190	428,341
Monetary authorities and depository credit intermediation	6	540,600	1,025,618	2,051,038
Other financial investment activities	6	103,588	131,201	597,584
Direct life insurance carriers	0	41,975	91,511	138,311
Insurance carriers, except direct life	2	256,514	981,780	1,875,740
Insurance agencies, brokerages, and related activities	4	264,200	445,895	998,613
Funds, trusts, and other financial vehicles	1	43,905	76,036	349,486
Other real estate	38	1,075,347	2,346,752	6,655,741
Tenant-occupied housing	3	75,891	789,962	896,575
Owner-occupied dwellings	0	0	2,417,762	3,054,814
Automotive equipment rental and leasing	1	37,899	159,323	219,477
General and consumer goods rental except video tapes and discs	1	40,924	52,497	85,179
Video tape and disc rental	0	10,755	17,735	29,503
Commercial and industrial machinery and equipment rental and leasing	1	45,655	109,520	173,476
Lessors of nonfinancial intangible assets	0	2,939	223,662	257,387

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Legal services	10	891,246	1,396,618	2,071,747
Accounting, tax preparation, bookkeeping, and payroll services	4	329,525	427,199	599,896
Architectural, engineering, and related services	5	539,575	629,623	1,031,159
Specialized design services	1	71,058	74,387	85,622
Custom computer programming services	2	159,509	178,749	264,231
Computer systems design services	1	150,023	156,357	209,984
Other computer related services, including facilities management	1	126,808	161,154	310,916
Management consulting services	11	923,927	911,385	1,426,952
Environmental and other technical consulting services	2	115,231	99,452	153,525
Scientific research and development services	150	14,635,805	19,308,113	38,222,483
Advertising, public relations, and related services	3	294,693	401,951	656,598
Photographic services	1	44,399	22,297	39,673
Veterinary services	1	31,419	42,892	68,860
Marketing research and all other miscellaneous professional, scientific, and technical services	11	730,192	589,833	878,200
Management of companies and enterprises	13	1,907,524	2,136,108	2,981,577
Office administrative services	4	246,519	60,344	198,898
Facilities support services	0	16,762	21,174	59,197
Employment services	24	967,115	1,422,817	2,307,644
Business support services	4	210,276	173,837	298,189
Travel arrangement and reservation services	1	42,850	55,455	147,178
Investigation and security services	2	80,889	82,868	121,861
Services to buildings	8	211,832	221,024	367,079
Landscape and horticultural services	4	153,369	161,761	262,765
Other support services	1	69,463	86,193	166,830
Waste management and remediation services	1	80,493	149,618	254,782
Elementary and secondary schools	3	111,051	101,135	124,914
Junior colleges, colleges, universities, and professional schools	2	70,369	102,055	155,170
Other educational services	3	91,728	86,646	165,509
Offices of physicians	7	695,189	812,373	1,200,398
Offices of dentists	3	163,388	203,894	311,829



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Offices of other health practitioners	3	173,427	158,371	230,533
Outpatient care centers	2	137,002	142,729	257,625
Medical and diagnostic laboratories	0	23,209	34,194	56,459
Home health care services	5	225,700	166,986	230,950
Other ambulatory health care services	1	47,665	52,085	91,384
Hospitals	16	1,235,817	1,406,679	2,695,825
Nursing and community care facilities	5	197,176	213,252	379,496
Residential mental retardation, mental health, substance abuse and other facilities	2	87,098	90,624	145,659
Individual and family services	5	156,272	133,308	195,580
Child day care services	3	75,311	81,784	117,453
Community food, housing, and other relief services, including rehabilitation services	2	59,508	62,753	144,571
Performing arts companies	1	14,914	25,070	51,480
Commercial Sports Except Racing	1	69,308	75,953	110,113
Racing and Track Operation	0	2,289	4,166	9,408
Independent artists, writers, and performers	4	41,569	55,202	77,212
Promoters of performing arts and sports and agents for public figures	1	19,511	47,712	111,179
Museums, historical sites, zoos, and parks	0	12,063	14,896	27,980
Amusement parks and arcades	0	1,868	7,686	10,282
Gambling industries (except casino hotels)	1	27,575	69,200	108,410
Other amusement and recreation industries	2	36,861	47,685	94,409
Fitness and recreational sports centers	1	19,010	36,658	55,675
Bowling centers	0	5,587	9,078	18,047
Hotels and motels, including casino hotels	2	56,840	124,164	185,342
Other accommodations	0	18,095	24,275	32,678
Full-service restaurants	13	291,890	420,625	786,235
Limited-service restaurants	11	213,006	329,281	761,479
All other food and drinking places	9	243,116	327,649	516,329
Automotive repair and maintenance, except car washes	5	259,244	340,715	490,904
Car washes	3	138,763	227,608	327,916

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Electronic and precision equipment repair and maintenance	2	123,107	180,087	292,483
Commercial and industrial machinery and equipment repair and maintenance	2	133,730	166,130	250,290
Personal and household goods repair and maintenance	2	97,023	56,049	84,183
Personal care services	4	93,486	83,178	108,915
Death care services	0	10,066	13,759	21,708
Dry-cleaning and laundry services	1	28,228	32,999	46,121
Other personal services	4	119,233	94,647	132,335
Religious organizations	6	291,884	147,480	576,249
Grantmaking, giving, and social advocacy organizations	1	60,314	187,457	282,098
Business and professional associations	1	56,766	90,397	151,883
Labor and civic organizations	2	52,364	134,501	239,275
Private households	2	20,095	20,095	20,095
Postal service	1	129,066	129,192	142,697
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	1,618	(3,952)	991
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	25,233	(11,161)	25,069
Local government electric utilities	0	6,561	18,058	33,386
Other local government enterprises	2	94,996	191,649	438,672
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	20	2,704,692	4,141,775	6,401,804

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 416: Detailed M2M Program Impacts by Types of Impact, Michigan.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>29</i>	<i>2,205,673</i>	<i>3,472,119</i>	<i>6,574,643</i>
Oilseed farming	0	(26)	2,548	10,914
Grain farming	0	344	2,216	11,162
Vegetable and melon farming	0	256	623	2,464
Fruit farming	0	111	551	2,128
Tree nut farming	0	3	4	6
Greenhouse, nursery, and floriculture production	0	414	583	1,456
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	117	217	679
All other crop farming	0	58	83	223
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(66)	281	2,007
Dairy cattle and milk production	0	44	394	3,945
Poultry and egg production	0	79	120	1,688
Animal production, except cattle and poultry and eggs	0	118	1,842	5,361
Forestry, forest products, and timber tract production	0	90	96	127
Commercial logging	0	318	323	568
Commercial fishing	0	17	40	44
Commercial hunting and trapping	0	42	77	97
Support activities for agriculture and forestry	0	1,880	1,593	1,946
Oil and gas extraction	0	125	463	9,108
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	34	547	828
Iron ore mining	0	3,158	5,087	1,713
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,495	4,210	5,894
Sand and gravel mining	0	829	1,181	1,447
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	5	9	17
Other chemical and fertilizer mineral mining	0	11	35	48
Other nonmetallic minerals	0	42	62	87
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	7	8	32
Metal mining services	0	10	19	209
Other nonmetallic minerals services	0	1	1	17
Electric power generation - Hydroelectric	0	280	639	1,063
Electric power generation - Fossil fuel	0	3,578	10,828	27,516
Electric power generation - Nuclear	0	2,123	4,384	9,536
Electric power generation - Solar	0	26	27	53
Electric power generation - Wind	0	33	83	216
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	61	124	241
Electric power generation - All other	0	55	5	31
Electric power transmission and distribution	0	5,292	16,476	41,253
Natural gas distribution	0	2,124	5,123	10,625
Water, sewage and other systems	0	403	541	848
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	6,501	8,939	20,309
Maintenance and repair construction of residential structures	0	2,534	3,878	8,846
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	7	5	11
Dog and cat food manufacturing	0	45	189	620
Other animal food manufacturing	0	227	416	3,191
Flour milling	0	145	309	1,984
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	33	198	1,642
Fats and oils refining and blending	0	5	12	96
Breakfast cereal manufacturing	0	1,525	4,008	11,144
Beet sugar manufacturing	0	213	431	1,806
Sugar cane mills and refining	0	7	17	84
Nonchocolate confectionery manufacturing	0	39	58	256
Chocolate and confectionery manufacturing from cacao beans	0	6	13	136
Confectionery manufacturing from purchased chocolate	0	84	120	626
Frozen fruits, juices and vegetables manufacturing	0	211	405	1,584
Frozen specialties manufacturing	0	391	605	2,169
Canned fruits and vegetables manufacturing	0	398	765	3,410

## APPENDIX

Canned specialties	0	25	64	269
Dehydrated food products manufacturing	0	137	259	793
Cheese manufacturing	0	104	154	1,540
Dry, condensed, and evaporated dairy product manufacturing	0	395	1,051	5,441
Fluid milk manufacturing	0	304	518	3,165
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	44	73	300
Frozen cakes and other pastries manufacturing	0	291	425	800
Poultry processing	0	262	371	1,429
Animal, except poultry, slaughtering	0	300	428	3,563
Meat processed from carcasses	0	985	1,073	7,939
Rendering and meat byproduct processing	0	25	28	137
Seafood product preparation and packaging	0	81	102	350
Bread and bakery product, except frozen, manufacturing	0	1,181	1,622	4,035
Cookie and cracker manufacturing	0	347	530	1,480
Dry pasta, mixes, and dough manufacturing	0	213	518	1,370
Tortilla manufacturing	0	38	47	189
Roasted nuts and peanut butter manufacturing	0	128	267	854
Other snack food manufacturing	0	173	356	1,546
Coffee and tea manufacturing	0	72	141	757
Flavoring syrup and concentrate manufacturing	0	58	432	1,157
Mayonnaise, dressing, and sauce manufacturing	0	50	97	489
Spice and extract manufacturing	0	182	293	957
All other food manufacturing	0	195	264	1,318
Bottled and canned soft drinks & water	0	652	1,462	6,254
Manufactured ice	0	38	20	114
Breweries	0	343	1,005	3,591
Wineries	0	58	109	586
Distilleries	0	74	546	1,563
Tobacco product manufacturing	0	7	305	695
Fiber, yarn, and thread mills	0	14	31	134
Broadwoven fabric mills	0	10	21	39

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	3	4	9
Nonwoven fabric mills	0	62	190	384
Knit fabric mills	0	2	4	10
Textile and fabric finishing mills	0	28	45	149
Fabric coating mills	0	15	25	81
Carpet and rug mills	0	147	419	959
Curtain and linen mills	0	15	32	80
Textile bag and canvas mills	0	226	361	778
Rope, cordage, twine, tire cord and tire fabric mills	0	10	26	71
Other textile product mills	0	147	229	534
Hosiery and sock mills	0	7	10	23
Other apparel knitting mills	0	5	9	22
Cut and sew apparel contractors	0	71	77	151
Mens and boys cut and sew apparel manufacturing	0	143	174	307
Womens and girls cut and sew apparel manufacturing	0	4	8	59
Other cut and sew apparel manufacturing	0	4	7	39
Apparel accessories and other apparel manufacturing	0	8	14	76
Leather and hide tanning and finishing	0	24	41	117
Footwear manufacturing	0	50	58	157
Other leather and allied product manufacturing	0	2	2	14
Sawmills	0	264	373	1,321
Wood preservation	0	16	40	176
Veneer and plywood manufacturing	0	56	81	284
Engineered wood member and truss manufacturing	0	34	46	129
Reconstituted wood product manufacturing	0	63	150	493
Wood windows and door manufacturing	0	241	321	855
Cut stock, resawing lumber, and planing	0	80	135	336
Other millwork, including flooring	0	159	219	561
Wood container and pallet manufacturing	0	215	249	606
Manufactured home (mobile home) manufacturing	0	0	0	0

## APPENDIX

Prefabricated wood building manufacturing	0	37	42	115
All other miscellaneous wood product manufacturing	0	149	176	477
Pulp mills	0	4	6	27
Paper mills	0	739	1,137	4,867
Paperboard mills	0	228	391	1,902
Paperboard container manufacturing	0	1,748	2,200	10,388
Paper bag and coated and treated paper manufacturing	0	271	358	1,271
Stationery product manufacturing	0	47	55	226
Sanitary paper product manufacturing	0	10	16	89
All other converted paper product manufacturing	0	154	185	605
Printing	0	4,185	6,358	11,889
Support activities for printing	0	316	470	691
Petroleum refineries	0	194	2,946	10,452
Asphalt paving mixture and block manufacturing	0	(8)	6	123
Asphalt shingle and coating materials manufacturing	0	23	143	335
Petroleum lubricating oil and grease manufacturing	0	234	1,334	2,985
All other petroleum and coal products manufacturing	0	33	231	653
Petrochemical manufacturing	0	1	5	61
Industrial gas manufacturing	0	115	206	904
Synthetic dye and pigment manufacturing	0	170	262	1,123
Other basic inorganic chemical manufacturing	0	277	450	1,803
Other basic organic chemical manufacturing	0	184	286	3,178
Plastics material and resin manufacturing	0	2,616	3,462	22,747
Synthetic rubber manufacturing	0	24	31	222
Artificial and synthetic fibers and filaments manufacturing	0	9	11	88
Nitrogenous fertilizer manufacturing	0	7	11	57
Phosphatic fertilizer manufacturing	0	6	11	56
Fertilizer mixing	0	6	8	38



## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	240	495	2,587
Medicinal and botanical manufacturing	0	89	119	372
Pharmaceutical preparation manufacturing	0	1,975	4,896	18,387
In-vitro diagnostic substance manufacturing	0	60	73	164
Biological product (except diagnostic) manufacturing	0	80	134	280
Paint and coating manufacturing	0	655	947	3,510
Adhesive manufacturing	0	233	313	1,198
Soap and other detergent manufacturing	0	1,280	3,130	7,829
Polish and other sanitation good manufacturing	0	181	279	1,148
Surface active agent manufacturing	0	27	60	228
Toilet preparation manufacturing	0	24	43	203
Printing ink manufacturing	0	86	92	351
Explosives manufacturing	0	3	3	13
Custom compounding of purchased resins	0	1,366	2,258	11,223
Photographic film and chemical manufacturing	0	39	66	320
Other miscellaneous chemical product manufacturing	0	306	394	1,620
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,008	1,475	5,529
Unlaminated plastics profile shape manufacturing	0	1,332	2,480	7,775
Plastics pipe and pipe fitting manufacturing	0	464	909	2,926
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	170	272	805
Polystyrene foam product manufacturing	0	527	798	2,491
Urethane and other foam product (except polystyrene) manufacturing	0	334	478	1,851
Plastics bottle manufacturing	0	218	326	783
Other plastics product manufacturing	0	4,044	5,458	15,982
Tire manufacturing	0	43	56	255

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	196	276	751
Other rubber product manufacturing	0	716	969	3,058
Pottery, ceramics, and plumbing fixture manufacturing	0	107	108	193
Brick, tile, and other structural clay product manufacturing	0	366	454	958
Flat glass manufacturing	0	52	85	244
Other pressed and blown glass and glassware manufacturing	0	61	80	188
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	362	521	1,163
Cement manufacturing	0	114	220	600
Ready-mix concrete manufacturing	0	339	482	1,505
Concrete block and brick manufacturing	0	202	304	769
Concrete pipe manufacturing	0	23	32	81
Other concrete product manufacturing	0	239	295	719
Lime manufacturing	0	12	26	71
Gypsum product manufacturing	0	97	206	582
Abrasive product manufacturing	0	482	1,115	2,186
Cut stone and stone product manufacturing	1	38,809	43,391	87,483
Ground or treated mineral and earth manufacturing	0	780	1,837	3,407
Mineral wool manufacturing	0	20	37	98
Miscellaneous nonmetallic mineral products manufacturing	0	65	121	246
Iron and steel mills and ferroalloy manufacturing	0	1,436	2,063	9,348
Iron, steel pipe and tube manufacturing from purchased steel	0	182	239	755
Rolled steel shape manufacturing	0	82	157	642
Steel wire drawing	0	20	23	106
Alumina refining and primary aluminum production	0	327	632	4,745
Secondary smelting and alloying of aluminum	0	63	80	434
Aluminum sheet, plate, and foil manufacturing	0	13	26	119

## APPENDIX

Other aluminum rolling, drawing and extruding	0	382	461	2,062
Nonferrous metal (exc aluminum) smelting and refining	0	0	1	7
Copper rolling, drawing, extruding and alloying	0	579	769	5,973
Nonferrous metal, except copper and aluminum, shaping	0	61	78	435
Secondary processing of other nonferrous metals	0	43	87	501
Ferrous metal foundries	0	299	432	1,106
Nonferrous metal foundries	0	1,303	1,743	3,638
Custom roll forming	0	210	330	1,356
Crown and closure manufacturing and metal stamping	0	1,108	1,625	4,106
Iron and steel forging	0	3,719	5,137	13,315
Nonferrous forging	0	1,281	1,643	4,884
Cutlery, utensil, pot, and pan manufacturing	0	51	159	469
Handtool manufacturing	0	681	1,119	2,013
Prefabricated metal buildings and components manufacturing	0	24	34	92
Fabricated structural metal manufacturing	0	309	462	1,308
Plate work manufacturing	0	236	245	681
Metal window and door manufacturing	0	80	125	317
Sheet metal work manufacturing	0	3,058	3,974	8,396
Ornamental and architectural metal work manufacturing	0	72	96	227
Power boiler and heat exchanger manufacturing	0	4	6	14
Metal tank (heavy gauge) manufacturing	0	32	39	119
Metal cans manufacturing	0	29	69	284
Metal barrels, drums and pails manufacturing	0	80	101	357
Hardware manufacturing	0	334	564	1,548
Spring and wire product manufacturing	0	239	327	894
Machine shops	0	5,133	5,980	11,015
Turned product and screw, nut, and bolt manufacturing	0	3,313	4,664	10,838
Metal heat treating	0	938	1,477	3,647

## APPENDIX

Metal coating and nonprecious engraving	0	1,607	2,872	6,441
Electroplating, anodizing, and coloring metal	0	1,799	2,022	4,210
Valve and fittings, other than plumbing, manufacturing	0	346	566	1,379
Plumbing fixture fitting and trim manufacturing	0	103	336	939
Ball and roller bearing manufacturing	0	167	315	656
Small arms ammunition manufacturing	0	28	47	95
Ammunition, except for small arms, manufacturing	0	0	1	1
Small arms, ordnance, and accessories manufacturing	0	5	9	24
Fabricated pipe and pipe fitting manufacturing	0	91	107	274
Other fabricated metal manufacturing	0	552	725	1,694
Farm machinery and equipment manufacturing	0	23	36	127
Lawn and garden equipment manufacturing	0	4	6	33
Construction machinery manufacturing	0	19	39	127
Mining machinery and equipment manufacturing	0	2	2	6
Oil and gas field machinery and equipment manufacturing	0	0	0	1
Semiconductor machinery manufacturing	0	1	1	3
Food product machinery manufacturing	0	1	1	3
Sawmill, woodworking, and paper machinery	0	16	17	44
Printing machinery and equipment manufacturing	0	7	8	17
All other industrial machinery manufacturing	0	29	37	92
Optical instrument and lens manufacturing	0	3	5	13
Photographic and photocopying equipment manufacturing	0	6	9	30

## APPENDIX

Other commercial service industry machinery manufacturing	0	25	49	154
Air purification and ventilation equipment manufacturing	0	19,016	28,162	67,568
Heating equipment (except warm air furnaces) manufacturing	0	37	55	126
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	126	227	695
Industrial mold manufacturing	0	278	315	534
Special tool, die, jig, and fixture manufacturing	0	882	1,093	1,746
Cutting tool and machine tool accessory manufacturing	0	488	530	1,057
Machine tool manufacturing	0	106	118	273
Rolling mill and other metalworking machinery manufacturing	0	60	73	145
Turbine and turbine generator set units manufacturing	0	0	1	2
Speed changer, industrial high-speed drive, and gear manufacturing	0	149	215	545
Mechanical power transmission equipment manufacturing	0	66	92	218
Other engine equipment manufacturing	0	548	953	3,282
Pump and pumping equipment manufacturing	0	11	20	53
Air and gas compressor manufacturing	0	3	5	17
Elevator and moving stairway manufacturing	0	1	2	4
Conveyor and conveying equipment manufacturing	0	106	111	261
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	7
Industrial truck, trailer, and stacker manufacturing	0	7	10	35
Power-driven handtool manufacturing	0	18	43	104
Welding and soldering equipment manufacturing	0	36	46	100
Packaging machinery manufacturing	0	15	23	55

## APPENDIX

Industrial process furnace and oven manufacturing	0	56	66	138
Fluid power cylinder and actuator manufacturing	0	108	148	381
Fluid power pump and motor manufacturing	0	51	79	221
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	109	140	326
Electronic computer manufacturing	0	26	45	178
Computer storage device manufacturing	0	21	40	178
Computer terminals and other computer peripheral equipment manufacturing	0	27,251	42,726	191,197
Telephone apparatus manufacturing	0	1	2	15
Broadcast and wireless communications equipment manufacturing	0	7	9	44
Other communications equipment manufacturing	0	12	16	59
Audio and video equipment manufacturing	0	6	9	52
Printed circuit assembly (electronic assembly) manufacturing	0	7,095	8,700	31,027
Bare printed circuit board manufacturing	0	781	898	2,831
Semiconductor and related device manufacturing	0	123	166	632
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	147	180	474
Electronic connector manufacturing	0	93	118	272
Other electronic component manufacturing	0	761	827	2,272
Electromedical and electrotherapeutic apparatus manufacturing	0	6	8	23
Search, detection, and navigation instruments manufacturing	0	17	21	48
Automatic environmental control manufacturing	0	230	275	748

## APPENDIX

Industrial process variable instruments manufacturing	0	179	218	521
Totalizing fluid meter and counting device manufacturing	0	19	31	97
Electricity and signal testing instruments manufacturing	0	1,076	1,335	4,160
Analytical laboratory instrument manufacturing	1	95,288	134,399	304,509
Irradiation apparatus manufacturing	0	0	0	1
Watch, clock, and other measuring and controlling device manufacturing	0	190	249	657
Blank magnetic and optical recording media manufacturing	0	1	7	93
Software and other prerecorded and record reproducing	0	19	24	60
Electric lamp bulb and part manufacturing	0	3	4	9
Lighting fixture manufacturing	0	44	60	180
Small electrical appliance manufacturing	0	150	254	450
Household cooking appliance manufacturing	0	284	568	1,065
Household refrigerator and home freezer manufacturing	0	325	762	1,442
Household laundry equipment manufacturing	0	719	1,320	3,245
Other major household appliance manufacturing	0	112	245	425
Power, distribution, and specialty transformer manufacturing	0	16	22	61
Motor and generator manufacturing	0	204	283	853
Switchgear and switchboard apparatus manufacturing	0	79	121	404
Relay and industrial control manufacturing	0	868	1,099	2,474
Storage battery manufacturing	0	311	428	1,145
Primary battery manufacturing	0	1,588	2,535	7,413
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	3	5	48
Wiring device manufacturing	0	450	774	2,164

## APPENDIX

Carbon and graphite product manufacturing	0	66	89	290
All other miscellaneous electrical equipment and component manufacturing	0	55	63	214
Automobile manufacturing	0	507	1,987	8,314
Light truck and utility vehicle manufacturing	0	207	818	4,758
Heavy duty truck manufacturing	0	1	3	16
Motor vehicle body manufacturing	0	57	78	215
Truck trailer manufacturing	0	0	0	2
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	175	190	619
Motor vehicle gasoline engine and engine parts manufacturing	0	2,289	3,447	13,100
Motor vehicle electrical and electronic equipment manufacturing	0	1,516	2,073	6,086
Motor vehicle transmission and power train parts manufacturing	0	9,311	15,530	41,806
Motor vehicle seating and interior trim manufacturing	0	295	437	1,862
Motor vehicle metal stamping	0	6,201	8,686	24,980
Other motor vehicle parts manufacturing	0	3,633	5,412	23,739
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,119	2,019	5,588
Aircraft manufacturing	0	1	2	6
Aircraft engine and engine parts manufacturing	0	78	140	437
Other aircraft parts and auxiliary equipment manufacturing	0	6	9	22
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	9	11	25
Railroad rolling stock manufacturing	0	1	1	3
Ship building and repairing	0	6	7	12
Boat building	0	600	742	2,056
Motorcycle, bicycle, and parts manufacturing	0	43	52	121



## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	216	354	1,001
All other transportation equipment manufacturing	0	294	401	1,093
Wood kitchen cabinet and countertop manufacturing	0	199	258	569
Upholstered household furniture manufacturing	0	47	63	195
Nonupholstered wood household furniture manufacturing	0	46	51	144
Other household nonupholstered furniture manufacturing	0	47	71	193
Institutional furniture manufacturing	0	17	18	50
Wood office furniture manufacturing	0	11	15	31
Custom architectural woodwork and millwork	0	8	8	21
Office furniture, except wood, manufacturing	0	243	400	933
Showcase, partition, shelving, and locker manufacturing	0	186	240	590
Mattress manufacturing	0	36	66	232
Blind and shade manufacturing	0	7	7	31
Surgical and medical instrument manufacturing	0	118	185	495
Surgical appliance and supplies manufacturing	0	1,152	1,851	3,760
Dental equipment and supplies manufacturing	0	10	13	35
Ophthalmic goods manufacturing	0	14	23	59
Dental laboratories	0	152	142	241
Jewelry and silverware manufacturing	0	118	163	368
Sporting and athletic goods manufacturing	0	120	142	398
Doll, toy, and game manufacturing	0	139	166	495
Office supplies (except paper) manufacturing	0	15	18	54
Sign manufacturing	0	244	195	400
Gasket, packing, and sealing device manufacturing	0	182	205	401
Musical instrument manufacturing	0	52	53	83
Fasteners, buttons, needles, and pins manufacturing	0	95	108	157

## APPENDIX

Broom, brush, and mop manufacturing	0	135	189	376
Burial casket manufacturing	0	11	12	26
All other miscellaneous manufacturing	0	676	765	1,548
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,557	3,867	7,162
Wholesale - Professional and commercial equipment and supplies	0	10,116	17,767	28,665
Wholesale - Household appliances and electrical and electronic goods	0	8,523	20,579	36,883
Wholesale - Machinery, equipment, and supplies	0	3,696	6,601	11,067
Wholesale - Other durable goods merchant wholesalers	0	7,201	11,556	21,093
Wholesale - Drugs and druggists' sundries	0	3,007	9,074	17,577
Wholesale - Grocery and related product wholesalers	0	4,310	6,030	11,343
Wholesale - Petroleum and petroleum products	0	888	11,999	13,950
Wholesale - Other nondurable goods merchant wholesalers	0	7,950	16,014	29,045
Wholesale - Wholesale electronic markets and agents and brokers	0	7,726	4,172	4,749
Retail - Motor vehicle and parts dealers	0	5,386	8,525	11,976
Retail - Furniture and home furnishings stores	0	2,700	3,557	5,641
Retail - Electronics and appliance stores	0	3,526	3,640	5,804
Retail - Building material and garden equipment and supplies stores	0	3,268	6,173	8,833
Retail - Food and beverage stores	0	8,147	11,577	18,734
Retail - Health and personal care stores	0	6,199	7,633	11,486
Retail - Gasoline stores	0	2,478	4,655	8,558
Retail - Clothing and clothing accessories stores	0	3,268	5,370	10,732
Retail - Sporting goods, hobby, musical instrument and book stores	0	2,284	3,030	4,910

## APPENDIX

Retail - General merchandise stores	0	8,428	12,712	20,362
Retail - Miscellaneous store retailers	0	4,622	5,387	8,512
Retail - Nonstore retailers	0	4,022	12,204	24,600
Air transportation	0	6,923	14,072	21,136
Rail transportation	0	1,082	1,315	3,420
Water transportation	0	414	823	3,942
Truck transportation	0	13,185	15,705	33,744
Transit and ground passenger transportation	0	3,102	3,643	5,506
Pipeline transportation	0	932	2,140	2,929
Scenic and sightseeing transportation and support activities for transportation	0	7,095	8,170	17,795
Couriers and messengers	0	3,182	4,389	7,691
Warehousing and storage	0	7,995	9,111	17,054
Newspaper publishers	0	1,460	2,108	2,846
Periodical publishers	0	1,351	1,865	2,831
Book publishers	0	899	2,410	4,247
Directory, mailing list, and other publishers	0	97	230	489
Greeting card publishing	0	107	381	532
Software publishers	1	144,265	270,372	315,829
Motion picture and video industries	0	1,890	3,792	8,364
Sound recording industries	0	145	792	1,315
Radio and television broadcasting	0	6,273	4,411	13,344
Cable and other subscription programming	0	235	1,104	3,268
Wired telecommunications carriers	0	5,132	11,774	22,271
Wireless telecommunications carriers (except satellite)	0	1,141	5,377	16,529
Satellite, telecommunications resellers, and all other telecommunications	0	1,785	2,001	4,699
Data processing, hosting, and related services	0	5,317	11,967	23,739
News syndicates, libraries, archives and all other information services	0	1,332	2,560	3,724
Internet publishing and broadcasting and web search portals	0	4,686	15,527	26,874

## APPENDIX

Nondepository credit intermediation and related activities	0	13,047	16,565	26,113
Securities and commodity contracts intermediation and brokerage	0	10,405	10,467	19,960
Monetary authorities and depository credit intermediation	0	21,220	41,660	80,859
Other financial investment activities	0	6,679	8,224	29,874
Direct life insurance carriers	0	1,730	3,895	5,747
Insurance carriers, except direct life	0	11,415	44,918	82,600
Insurance agencies, brokerages, and related activities	0	14,334	24,285	52,729
Funds, trusts, and other financial vehicles	0	2,538	4,314	16,764
Other real estate	1	44,897	97,166	239,176
Tenant-occupied housing	0	4,247	41,686	46,629
Owner-occupied dwellings	0	0	126,041	159,251
Automotive equipment rental and leasing	0	2,332	8,009	10,553
General and consumer goods rental except video tapes and discs	0	2,135	2,566	3,886
Video tape and disc rental	0	531	844	1,369
Commercial and industrial machinery and equipment rental and leasing	0	2,586	5,318	8,162
Lessors of nonfinancial intangible assets	0	140	10,521	12,030
Legal services	0	31,397	51,175	74,051
Accounting, tax preparation, bookkeeping, and payroll services	0	15,730	20,471	28,042
Architectural, engineering, and related services	0	18,001	21,108	34,040
Specialized design services	0	3,491	3,661	4,129
Custom computer programming services	0	13,006	14,474	20,875
Computer systems design services	0	7,855	8,157	10,769
Other computer related services, including facilities management	0	6,539	8,003	14,740
Management consulting services	0	31,691	31,311	47,671
Environmental and other technical consulting services	0	5,164	4,495	6,832

## APPENDIX

Scientific research and development services	4	480,663	642,653	1,176,046
Advertising, public relations, and related services	0	14,407	19,549	30,457
Photographic services	0	1,942	1,025	1,724
Veterinary services	0	1,477	2,044	3,195
Marketing research and all other miscellaneous professional, scientific, and technical services	1	55,781	44,928	65,788
Management of companies and enterprises	1	95,052	107,453	145,293
Office administrative services	0	13,468	3,357	10,025
Facilities support services	0	832	1,052	2,779
Employment services	1	39,254	59,241	92,539
Business support services	0	8,169	6,888	11,441
Travel arrangement and reservation services	0	1,885	2,459	6,273
Investigation and security services	0	3,918	4,024	5,736
Services to buildings	0	9,306	9,737	15,397
Landscape and horticultural services	0	6,217	6,571	10,284
Other support services	0	3,275	4,073	7,823
Waste management and remediation services	0	3,389	6,341	10,647
Elementary and secondary schools	0	6,855	6,215	7,549
Junior colleges, colleges, universities, and professional schools	0	4,800	6,898	9,964
Other educational services	0	5,053	4,788	8,813
Offices of physicians	0	32,553	38,339	56,207
Offices of dentists	0	8,025	10,121	15,264
Offices of other health practitioners	0	8,140	7,493	10,882
Outpatient care centers	0	7,092	7,419	13,190
Medical and diagnostic laboratories	0	1,120	1,694	2,707
Home health care services	0	10,515	7,869	10,959
Other ambulatory health care services	0	2,323	2,554	4,408
Hospitals	1	64,684	73,323	137,128
Nursing and community care facilities	0	9,755	10,567	18,314
Residential mental retardation, mental health, substance abuse and other facilities	0	4,843	5,042	7,940

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Individual and family services	0	8,498	7,377	10,759
Child day care services	0	3,845	4,237	5,938
Community food, housing, and other relief services, including rehabilitation services	0	3,454	3,688	8,211
Performing arts companies	0	855	1,390	2,594
Commercial Sports Except Racing	0	3,265	3,566	5,067
Racing and Track Operation	0	122	212	460
Independent artists, writers, and performers	0	2,254	2,920	3,905
Promoters of performing arts and sports and agents for public figures	0	1,093	2,449	5,342
Museums, historical sites, zoos, and parks	0	652	796	1,449
Amusement parks and arcades	0	102	365	494
Gambling industries (except casino hotels)	0	1,442	3,412	5,279
Other amusement and recreation industries	0	1,721	2,134	4,213
Fitness and recreational sports centers	0	1,015	1,829	2,740
Bowling centers	0	269	421	828
Hotels and motels, including casino hotels	0	3,416	7,143	10,504
Other accommodations	0	1,300	1,716	2,261
Full-service restaurants	1	13,189	19,118	34,981
Limited-service restaurants	0	10,467	16,086	35,890
All other food and drinking places	0	11,504	15,254	23,372
Automotive repair and maintenance, except car washes	0	13,235	16,782	24,034
Car washes	0	6,811	11,135	15,923
Electronic and precision equipment repair and maintenance	0	2,150	3,151	4,920
Commercial and industrial machinery and equipment repair and maintenance	0	3,732	4,555	6,843
Personal and household goods repair and maintenance	0	4,430	2,296	3,449
Personal care services	0	4,984	4,058	5,372
Death care services	0	559	723	1,135
Dry-cleaning and laundry services	0	1,270	1,462	2,039
Other personal services	0	6,037	4,211	6,051
Religious organizations	0	16,945	6,664	30,699
Grantmaking, giving, and social advocacy organizations	0	4,029	10,744	16,167

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Business and professional associations	0	2,803	4,048	6,550
Labor and civic organizations	0	3,036	6,896	12,526
Private households	0	1,111	1,111	1,111
Postal service	0	6,177	6,183	6,816
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	88	(247)	54
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	1,338	(744)	904
Local government electric utilities	0	307	774	1,393
Other local government enterprises	0	4,353	8,133	18,469
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	212,129	468,707	980,051

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 25. Minnesota

**Table 417: Detailed NASA Impacts by Types of Impact, Minnesota.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>215</i>	<i>15,620,292</i>	<i>24,011,296</i>	<i>44,975,912</i>
Oilseed farming	0	47	61,078	248,369
Grain farming	1	3,926	27,798	174,032
Vegetable and melon farming	0	1,526	3,202	14,063
Fruit farming	0	134	358	1,324
Tree nut farming	0	6	6	15
Greenhouse, nursery, and floriculture production	0	2,162	3,255	11,825
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	1,047	2,080	9,937
All other crop farming	0	365	513	2,000
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	39	5,432	45,525
Dairy cattle and milk production	0	596	2,405	30,516
Poultry and egg production	0	1,363	2,170	43,499
Animal production, except cattle and poultry and eggs	0	2,104	20,730	73,095
Forestry, forest products, and timber tract production	0	790	869	1,213
Commercial logging	0	1,797	1,851	3,970
Commercial fishing	0	113	382	421
Commercial hunting and trapping	0	512	992	1,316
Support activities for agriculture and forestry	0	9,481	8,396	10,103
Oil and gas extraction	0	2,860	1,553	32,441
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	8,411	157,252	205,119
Iron ore mining	0	8,134	54,237	22,455
Gold ore mining	0	8	84	274
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	124	10,869	107
Other metal ore mining	0	(64)	14	459
Stone mining and quarrying	0	826	4,410	6,460
Sand and gravel mining	0	867	3,174	5,333



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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	52	446	962
Drilling oil and gas wells	0	0	0	3
Support activities for oil and gas operations	0	4	2	41
Metal mining services	0	75	85	1,059
Other nonmetallic minerals services	0	4	3	45
Electric power generation - Hydroelectric	0	3,336	9,094	17,010
Electric power generation - Fossil fuel	0	19,822	61,255	172,004
Electric power generation - Nuclear	0	19,108	37,597	92,714
Electric power generation - Solar	0	207	421	672
Electric power generation - Wind	0	2,166	13,216	33,794
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	1,316	3,861	8,766
Electric power generation - All other	0	2,705	255	2,285
Electric power transmission and distribution	0	50,887	152,413	411,986
Natural gas distribution	0	11,444	27,518	68,658
Water, sewage and other systems	0	646	1,474	4,481
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	60,857	77,222	175,089
Maintenance and repair construction of residential structures	0	20,629	28,704	66,317
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	64	39	89
Dog and cat food manufacturing	0	1,230	4,036	17,787
Other animal food manufacturing	0	4,791	7,280	48,336
Flour milling	0	1,854	3,386	20,033
Rice milling	0	104	170	1,111
Malt manufacturing	0	744	1,468	7,955
Wet corn milling	0	4,625	11,534	81,027
Soybean and other oilseed processing	0	895	4,325	37,461
Fats and oils refining and blending	0	179	342	4,115
Breakfast cereal manufacturing	0	13,490	32,218	89,710
Beet sugar manufacturing	0	2,501	4,807	19,400
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1,491	2,083	7,778
Chocolate and confectionery manufacturing from cacao beans	0	204	369	1,715
Confectionery manufacturing from purchased chocolate	0	748	854	3,460
Frozen fruits, juices and vegetables manufacturing	0	1,186	2,017	8,292
Frozen specialties manufacturing	0	3,887	5,581	23,235
Canned fruits and vegetables manufacturing	0	3,153	5,362	21,989
Canned specialties	0	537	1,236	6,489
Dehydrated food products manufacturing	0	335	430	1,454
Cheese manufacturing	0	3,322	4,619	42,071

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Dry, condensed, and evaporated dairy product manufacturing	0	1,318	3,002	24,338
Fluid milk manufacturing	0	2,497	3,816	23,612
Creamery butter manufacturing	0	268	1,045	7,776
Ice cream and frozen dessert manufacturing	0	750	1,088	3,802
Frozen cakes and other pastries manufacturing	0	3,007	4,251	7,918
Poultry processing	0	16,190	20,720	91,441
Animal, except poultry, slaughtering	0	6,526	8,627	67,850
Meat processed from carcasses	0	9,029	9,562	68,125
Rendering and meat byproduct processing	0	445	405	1,988
Seafood product preparation and packaging	0	3,442	3,721	13,086
Bread and bakery product, except frozen, manufacturing	0	13,156	16,235	37,791
Cookie and cracker manufacturing	0	226	242	511
Dry pasta, mixes, and dough manufacturing	0	703	1,454	4,992
Tortilla manufacturing	0	1,320	1,561	4,749
Roasted nuts and peanut butter manufacturing	0	1,332	2,129	7,989
Other snack food manufacturing	0	3,239	6,388	24,532
Coffee and tea manufacturing	0	581	779	3,377
Flavoring syrup and concentrate manufacturing	0	375	2,289	4,209
Mayonnaise, dressing, and sauce manufacturing	0	111	178	717
Spice and extract manufacturing	0	389	533	2,450
All other food manufacturing	0	6,784	8,434	30,017
Bottled and canned soft drinks & water	0	3,216	6,260	27,638
Manufactured ice	0	212	83	635
Breweries	0	3,702	9,542	36,498
Wineries	0	48	84	574
Distilleries	0	1,088	5,620	14,486
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	56	187	822
Broadwoven fabric mills	0	111	304	786
Narrow fabric mills and schiffli machine embroidery	0	29	41	131
Nonwoven fabric mills	0	179	745	1,577
Knit fabric mills	0	39	88	207

## APPENDIX

Textile and fabric finishing mills	0	31	69	312
Fabric coating mills	0	61	138	461
Carpet and rug mills	0	171	623	1,501
Curtain and linen mills	0	575	1,516	3,643
Textile bag and canvas mills	0	288	561	1,447
Rope, cordage, twine, tire cord and tire fabric mills	0	587	2,022	3,534
Other textile product mills	0	1,291	2,358	5,019
Hosiery and sock mills	0	25	39	100
Other apparel knitting mills	0	139	197	490
Cut and sew apparel contractors	0	55	76	283
Mens and boys cut and sew apparel manufacturing	0	100	152	556
Womens and girls cut and sew apparel manufacturing	0	35	67	493
Other cut and sew apparel manufacturing	0	187	281	787
Apparel accessories and other apparel manufacturing	0	79	119	469
Leather and hide tanning and finishing	0	182	427	899
Footwear manufacturing	0	624	761	1,795
Other leather and allied product manufacturing	0	29	32	107
Sawmills	0	1,408	1,612	4,846
Wood preservation	0	518	1,052	2,973
Veneer and plywood manufacturing	0	620	804	2,357
Engineered wood member and truss manufacturing	0	800	984	2,605
Reconstituted wood product manufacturing	0	423	908	2,688
Wood windows and door manufacturing	0	7,163	9,362	21,039
Cut stock, resawing lumber, and planing	0	207	215	457
Other millwork, including flooring	0	1,999	2,358	5,348
Wood container and pallet manufacturing	0	3,132	3,341	6,865
Manufactured home (mobile home) manufacturing	0	3	5	12
Prefabricated wood building manufacturing	0	478	522	1,227
All other miscellaneous wood product manufacturing	0	2,422	2,505	5,096

## APPENDIX

Pulp mills	0	32	41	116
Paper mills	0	8,438	21,475	63,164
Paperboard mills	0	2,579	6,790	22,395
Paperboard container manufacturing	0	10,355	16,126	61,798
Paper bag and coated and treated paper manufacturing	0	7,507	13,852	39,994
Stationery product manufacturing	0	1,315	1,875	5,426
Sanitary paper product manufacturing	0	372	1,162	2,969
All other converted paper product manufacturing	0	503	735	1,977
Printing	1	65,491	90,535	168,327
Support activities for printing	0	8,592	11,758	15,162
Petroleum refineries	0	10,561	115,071	449,361
Asphalt paving mixture and block manufacturing	0	105	153	571
Asphalt shingle and coating materials manufacturing	0	487	1,939	4,079
Petroleum lubricating oil and grease manufacturing	0	292	1,029	2,659
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	44	204	1,883
Industrial gas manufacturing	0	916	1,622	6,103
Synthetic dye and pigment manufacturing	0	34	34	90
Other basic inorganic chemical manufacturing	0	108	121	300
Other basic organic chemical manufacturing	0	3,284	4,910	36,569
Plastics material and resin manufacturing	0	1,718	2,352	17,796
Synthetic rubber manufacturing	0	490	554	2,064
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	100	157	598
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	76	101	348
Pesticide and other agricultural chemical manufacturing	0	105	241	1,410
Medicinal and botanical manufacturing	0	404	510	1,679

## APPENDIX

Pharmaceutical preparation manufacturing	0	2,020	5,136	19,030
In-vitro diagnostic substance manufacturing	0	1,747	2,266	6,042
Biological product (except diagnostic) manufacturing	0	318	534	1,521
Paint and coating manufacturing	0	2,688	2,965	9,397
Adhesive manufacturing	0	3,375	4,293	11,239
Soap and other detergent manufacturing	0	6,409	10,120	29,180
Polish and other sanitation good manufacturing	0	5,434	5,967	16,676
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	6,456	12,015	32,689
Printing ink manufacturing	0	1,942	2,007	5,657
Explosives manufacturing	0	77	82	220
Custom compounding of purchased resins	0	3,786	5,420	19,558
Photographic film and chemical manufacturing	0	5,546	8,631	24,804
Other miscellaneous chemical product manufacturing	0	7,863	9,409	28,133
Plastics packaging materials and unlaminated film and sheet manufacturing	0	5,352	8,213	29,822
Unlaminated plastics profile shape manufacturing	0	3,535	6,949	20,403
Plastics pipe and pipe fitting manufacturing	0	2,243	4,734	13,322
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	205	338	1,022
Polystyrene foam product manufacturing	0	864	1,331	4,560
Urethane and other foam product (except polystyrene) manufacturing	0	771	1,154	4,784
Plastics bottle manufacturing	0	164	245	1,103
Other plastics product manufacturing	0	24,500	34,187	104,007
Tire manufacturing	0	310	411	1,834
Rubber and plastics hoses and belting manufacturing	0	51	72	172
Other rubber product manufacturing	0	8,360	11,734	36,763

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	(915)	(865)	450
Brick, tile, and other structural clay product manufacturing	0	464	1,799	4,798
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	(233)	(118)	487
Glass container manufacturing	0	881	1,919	5,140
Glass product manufacturing made of purchased glass	0	4,540	9,291	21,085
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	1,920	4,535	15,802
Concrete block and brick manufacturing	0	761	1,860	5,273
Concrete pipe manufacturing	0	176	330	861
Other concrete product manufacturing	0	1,735	2,877	6,517
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	(1)	471	1,587
Abrasive product manufacturing	0	649	2,562	4,110
Cut stone and stone product manufacturing	0	844	1,146	2,979
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	(68)	22	306
Miscellaneous nonmetallic mineral products manufacturing	0	348	1,020	2,139
Iron and steel mills and ferroalloy manufacturing	0	20,523	32,975	141,189
Iron, steel pipe and tube manufacturing from purchased steel	0	1,073	1,634	7,311
Rolled steel shape manufacturing	0	912	1,850	7,879
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	(1)	5	108
Secondary smelting and alloying of aluminum	0	405	661	4,240
Aluminum sheet, plate, and foil manufacturing	0	146	302	1,680
Other aluminum rolling, drawing and extruding	0	457	634	2,466
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

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Copper rolling, drawing, extruding and alloying	0	15	23	198
Nonferrous metal, except copper and aluminum, shaping	0	681	879	2,805
Secondary processing of other nonferrous metals	0	8	46	248
Ferrous metal foundries	0	1,799	3,130	6,954
Nonferrous metal foundries	0	3,859	5,690	11,690
Custom roll forming	0	124	187	833
Crown and closure manufacturing and metal stamping	0	5,842	8,228	22,040
Iron and steel forging	0	2,441	3,282	9,992
Nonferrous forging	0	551	685	2,215
Cutlery, utensil, pot, and pan manufacturing	0	949	2,695	5,460
Handtool manufacturing	0	1,293	2,049	3,961
Prefabricated metal buildings and components manufacturing	0	260	359	933
Fabricated structural metal manufacturing	0	1,656	2,394	7,060
Plate work manufacturing	0	1,609	1,676	4,898
Metal window and door manufacturing	0	1,174	1,749	4,046
Sheet metal work manufacturing	0	15,425	19,544	44,712
Ornamental and architectural metal work manufacturing	0	2,207	2,861	6,845
Power boiler and heat exchanger manufacturing	0	151	205	535
Metal tank (heavy gauge) manufacturing	0	697	841	2,167
Metal cans manufacturing	0	1,120	2,442	11,763
Metal barrels, drums and pails manufacturing	0	340	418	1,568
Hardware manufacturing	0	727	1,180	3,882
Spring and wire product manufacturing	0	1,456	1,950	5,332
Machine shops	0	27,791	31,820	59,645
Turned product and screw, nut, and bolt manufacturing	0	5,975	8,158	19,789
Metal heat treating	0	897	1,364	3,457
Metal coating and nonprecious engraving	0	2,546	4,305	10,326
Electroplating, anodizing, and coloring metal	0	3,625	4,032	8,600



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Valve and fittings, other than plumbing, manufacturing	0	1,753	2,755	6,238
Plumbing fixture fitting and trim manufacturing	0	27	75	194
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	4,085	9,246	13,937
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	168	388	679
Fabricated pipe and pipe fitting manufacturing	0	880	1,014	2,429
Other fabricated metal manufacturing	0	3,006	3,873	10,300
Farm machinery and equipment manufacturing	0	556	819	3,201
Lawn and garden equipment manufacturing	0	1,073	1,968	6,899
Construction machinery manufacturing	0	9,973	19,975	55,841
Mining machinery and equipment manufacturing	0	48	59	152
Oil and gas field machinery and equipment manufacturing	0	6	7	26
Semiconductor machinery manufacturing	0	54	62	169
Food product machinery manufacturing	0	66	79	198
Sawmill, woodworking, and paper machinery	0	122	135	376
Printing machinery and equipment manufacturing	0	58	66	193
All other industrial machinery manufacturing	0	99	127	302
Optical instrument and lens manufacturing	0	5	8	25
Photographic and photocopying equipment manufacturing	0	84	125	358
Other commercial service industry machinery manufacturing	0	702	1,314	3,125
Air purification and ventilation equipment manufacturing	0	83	121	289

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Heating equipment (except warm air furnaces) manufacturing	0	741	1,119	3,367
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	10,867	21,480	56,055
Industrial mold manufacturing	0	1,264	1,440	2,434
Special tool, die, jig, and fixture manufacturing	0	407	519	893
Cutting tool and machine tool accessory manufacturing	0	338	369	732
Machine tool manufacturing	0	60	67	165
Rolling mill and other metalworking machinery manufacturing	0	20	25	58
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	25	36	148
Mechanical power transmission equipment manufacturing	0	357	532	1,170
Other engine equipment manufacturing	0	89	172	869
Pump and pumping equipment manufacturing	0	258	460	1,290
Air and gas compressor manufacturing	0	3,641	6,465	19,879
Elevator and moving stairway manufacturing	0	7	11	41
Conveyor and conveying equipment manufacturing	0	231	241	636
Overhead cranes, hoists, and monorail systems manufacturing	0	27	52	164
Industrial truck, trailer, and stacker manufacturing	0	92	145	508
Power-driven handtool manufacturing	0	27	69	202
Welding and soldering equipment manufacturing	0	63	83	216
Packaging machinery manufacturing	0	347	526	1,263
Industrial process furnace and oven manufacturing	0	28	34	63
Fluid power cylinder and actuator manufacturing	0	433	602	1,441

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Fluid power pump and motor manufacturing	0	555	863	2,047
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	374	485	1,232
Electronic computer manufacturing	1	126,758	256,841	772,452
Computer storage device manufacturing	0	1,645	4,246	16,929
Computer terminals and other computer peripheral equipment manufacturing	0	63,874	109,824	272,788
Telephone apparatus manufacturing	0	139	243	818
Broadcast and wireless communications equipment manufacturing	0	50	72	209
Other communications equipment manufacturing	0	201	316	869
Audio and video equipment manufacturing	0	20	37	207
Printed circuit assembly (electronic assembly) manufacturing	0	4,057	5,948	22,538
Bare printed circuit board manufacturing	0	3,009	3,812	9,320
Semiconductor and related device manufacturing	0	6,872	11,395	36,124
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	243	337	925
Electronic connector manufacturing	0	2,821	4,087	11,195
Other electronic component manufacturing	0	1,813	2,067	7,324
Electromedical and electrotherapeutic apparatus manufacturing	0	1,654	3,217	6,330
Search, detection, and navigation instruments manufacturing	0	8,352	12,690	28,927
Automatic environmental control manufacturing	0	4,329	5,532	8,557
Industrial process variable instruments manufacturing	0	1,538	2,169	5,029
Totalizing fluid meter and counting device manufacturing	0	211	420	759

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Electricity and signal testing instruments manufacturing	0	1,597	2,291	8,802
Analytical laboratory instrument manufacturing	1	148,030	249,157	518,582
Irradiation apparatus manufacturing	0	3	6	11
Watch, clock, and other measuring and controlling device manufacturing	0	221	366	793
Blank magnetic and optical recording media manufacturing	0	58	156	502
Software and other prerecorded and record reproducing	0	301	429	929
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	528	944	2,248
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	238	724	1,713
Household refrigerator and home freezer manufacturing	0	232	881	1,909
Household laundry equipment manufacturing	0	417	1,121	3,698
Other major household appliance manufacturing	0	81	282	627
Power, distribution, and specialty transformer manufacturing	0	35	61	185
Motor and generator manufacturing	0	3,219	5,936	12,965
Switchgear and switchboard apparatus manufacturing	0	323	647	1,477
Relay and industrial control manufacturing	0	2,917	4,399	9,714
Storage battery manufacturing	0	144	277	990
Primary battery manufacturing	0	112	223	1,028
Fiber optic cable manufacturing	0	296	561	2,111
Other communication and energy wire manufacturing	0	228	499	1,654
Wiring device manufacturing	0	1,812	4,578	10,010
Carbon and graphite product manufacturing	0	150	251	704
All other miscellaneous electrical equipment and component manufacturing	0	123	150	459

## APPENDIX

Automobile manufacturing	0	(3)	12	124
Light truck and utility vehicle manufacturing	0	(7)	13	269
Heavy duty truck manufacturing	0	63	218	806
Motor vehicle body manufacturing	0	135	216	656
Truck trailer manufacturing	0	42	63	204
Motor home manufacturing	0	53	132	456
Travel trailer and camper manufacturing	0	2,397	2,753	10,822
Motor vehicle gasoline engine and engine parts manufacturing	0	946	1,700	6,467
Motor vehicle electrical and electronic equipment manufacturing	0	778	1,345	6,429
Motor vehicle transmission and power train parts manufacturing	0	1,841	3,616	12,188
Motor vehicle seating and interior trim manufacturing	0	8	16	97
Motor vehicle metal stamping	0	255	412	1,855
Other motor vehicle parts manufacturing	0	1,658	3,434	11,764
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,350	2,781	8,811
Aircraft manufacturing	0	10	54	118
Aircraft engine and engine parts manufacturing	0	10	59	106
Other aircraft parts and auxiliary equipment manufacturing	0	20	63	128
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	11	35	114
Ship building and repairing	0	21	42	81
Boat building	0	3,569	7,827	20,422
Motorcycle, bicycle, and parts manufacturing	0	53	676	1,162
Military armored vehicle, tank, and tank component manufacturing	0	5	79	440
All other transportation equipment manufacturing	0	4,758	18,799	35,160

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	4,585	6,492	14,032
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	120	138	566
Other household nonupholstered furniture manufacturing	0	373	570	1,746
Institutional furniture manufacturing	0	60	65	169
Wood office furniture manufacturing	0	23	34	90
Custom architectural woodwork and millwork	0	42	41	106
Office furniture, except wood, manufacturing	0	262	449	903
Showcase, partition, shelving, and locker manufacturing	0	620	871	2,157
Mattress manufacturing	0	2,092	4,366	7,856
Blind and shade manufacturing	0	5	5	39
Surgical and medical instrument manufacturing	0	5,613	13,957	26,439
Surgical appliance and supplies manufacturing	0	3,058	7,619	14,573
Dental equipment and supplies manufacturing	0	24	51	137
Ophthalmic goods manufacturing	0	1,210	3,195	6,535
Dental laboratories	0	728	722	1,250
Jewelry and silverware manufacturing	0	1,393	2,066	4,721
Sporting and athletic goods manufacturing	0	2,583	4,109	10,019
Doll, toy, and game manufacturing	0	169	378	1,436
Office supplies (except paper) manufacturing	0	77	121	449
Sign manufacturing	0	2,832	2,663	5,467
Gasket, packing, and sealing device manufacturing	0	963	1,358	3,021
Musical instrument manufacturing	0	85	88	303
Fasteners, buttons, needles, and pins manufacturing	0	1	3	46
Broom, brush, and mop manufacturing	0	88	196	956
Burial casket manufacturing	0	192	245	529

## APPENDIX

All other miscellaneous manufacturing	0	12,877	16,479	40,063
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	62,818	127,939	264,273
Wholesale - Professional and commercial equipment and supplies	0	66,275	104,909	173,708
Wholesale - Household appliances and electrical and electronic goods	0	39,298	77,965	166,930
Wholesale - Machinery, equipment, and supplies	0	34,679	54,812	93,497
Wholesale - Other durable goods merchant wholesalers	1	58,420	83,567	152,270
Wholesale - Drugs and druggists' sundries	0	26,737	63,637	128,089
Wholesale - Grocery and related product wholesalers	0	42,592	54,323	94,479
Wholesale - Petroleum and petroleum products	0	5,986	71,925	84,484
Wholesale - Other nondurable goods merchant wholesalers	1	95,086	160,547	274,842
Wholesale - Wholesale electronic markets and agents and brokers	0	53,200	26,681	29,739
Retail - Motor vehicle and parts dealers	1	37,374	55,829	81,287
Retail - Furniture and home furnishings stores	0	19,984	26,458	42,563
Retail - Electronics and appliance stores	0	23,036	22,549	38,337
Retail - Building material and garden equipment and supplies stores	1	24,489	42,483	63,443
Retail - Food and beverage stores	2	64,399	86,626	145,270
Retail - Health and personal care stores	1	46,361	53,804	79,380
Retail - Gasoline stores	1	18,484	34,187	68,035
Retail - Clothing and clothing accessories stores	1	24,583	37,820	78,443
Retail - Sporting goods, hobby, musical instrument and book stores	1	17,159	22,717	37,131
Retail - General merchandise stores	2	66,038	93,231	154,418
Retail - Miscellaneous store retailers	1	31,332	35,912	58,802

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Retail - Nonstore retailers	1	57,345	139,518	246,881
Air transportation	1	58,611	117,255	187,009
Rail transportation	0	13,652	34,031	58,899
Water transportation	0	16,311	20,409	35,969
Truck transportation	1	92,747	105,082	214,897
Transit and ground passenger transportation	1	43,362	49,491	69,292
Pipeline transportation	0	15,525	25,193	30,849
Scenic and sightseeing transportation and support activities for transportation	1	47,557	53,995	114,586
Couriers and messengers	1	30,392	38,709	71,328
Warehousing and storage	1	32,072	35,385	69,134
Newspaper publishers	0	14,636	22,238	30,943
Periodical publishers	0	6,781	9,713	17,261
Book publishers	0	29,340	82,616	125,725
Directory, mailing list, and other publishers	0	2,660	7,637	12,980
Greeting card publishing	0	96	321	566
Software publishers	1	87,035	194,407	238,291
Motion picture and video industries	0	9,193	13,410	44,117
Sound recording industries	0	2,414	7,901	13,626
Radio and television broadcasting	0	36,778	26,391	106,377
Cable and other subscription programming	0	1,114	4,562	19,248
Wired telecommunications carriers	0	37,011	94,478	185,894
Wireless telecommunications carriers (except satellite)	0	10,786	59,432	129,296
Satellite, telecommunications resellers, and all other telecommunications	0	11,399	14,722	31,920
Data processing, hosting, and related services	0	59,755	145,985	254,942
News syndicates, libraries, archives and all other information services	0	7,794	15,960	24,406
Internet publishing and broadcasting and web search portals	0	13,303	47,748	114,769
Nondepository credit intermediation and related activities	1	61,989	81,625	131,961
Securities and commodity contracts intermediation and brokerage	1	156,602	158,118	295,126



## APPENDIX

Monetary authorities and depository credit intermediation	2	272,824	631,809	1,001,262
Other financial investment activities	2	89,792	113,920	281,108
Direct life insurance carriers	0	48,549	80,420	115,580
Insurance carriers, except direct life	1	134,991	336,519	667,765
Insurance agencies, brokerages, and related activities	1	93,227	128,919	293,160
Funds, trusts, and other financial vehicles	0	24,274	18,856	120,811
Other real estate	10	273,126	738,072	1,922,694
Tenant-occupied housing	1	22,100	253,636	291,710
Owner-occupied dwellings	0	0	845,180	1,067,875
Automotive equipment rental and leasing	0	10,122	26,779	39,735
General and consumer goods rental except video tapes and discs	0	17,231	22,706	33,048
Video tape and disc rental	0	4,494	6,901	10,709
Commercial and industrial machinery and equipment rental and leasing	0	37,292	61,872	96,814
Lessors of nonfinancial intangible assets	0	(16,288)	56,700	82,700
Legal services	3	305,193	509,964	698,463
Accounting, tax preparation, bookkeeping, and payroll services	1	100,988	138,605	186,933
Architectural, engineering, and related services	2	234,718	282,107	482,456
Specialized design services	0	21,097	22,371	27,606
Custom computer programming services	1	64,865	74,048	104,879
Computer systems design services	1	58,844	62,714	81,321
Other computer related services, including facilities management	0	40,307	67,916	111,282
Management consulting services	6	696,305	685,956	941,214
Environmental and other technical consulting services	1	56,789	50,862	75,759
Scientific research and development services	50	4,427,866	6,266,573	12,635,461
Advertising, public relations, and related services	1	131,925	191,340	295,088
Photographic services	0	18,649	9,839	16,385
Veterinary services	0	10,567	15,357	23,741

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	5	389,315	336,932	470,525
Management of companies and enterprises	5	740,000	831,760	1,140,495
Office administrative services	1	57,607	16,058	45,096
Facilities support services	0	2,623	3,217	8,589
Employment services	7	301,203	434,477	670,317
Business support services	1	61,434	51,686	82,677
Travel arrangement and reservation services	0	17,988	23,096	49,416
Investigation and security services	1	24,811	25,888	37,111
Services to buildings	2	64,896	69,118	105,693
Landscape and horticultural services	1	41,688	44,955	69,385
Other support services	1	26,849	33,491	60,657
Waste management and remediation services	0	23,492	46,205	76,288
Elementary and secondary schools	1	41,539	35,098	43,209
Junior colleges, colleges, universities, and professional schools	1	51,208	67,293	105,047
Other educational services	2	39,971	35,454	71,690
Offices of physicians	2	298,621	346,087	481,492
Offices of dentists	1	53,193	65,279	97,233
Offices of other health practitioners	1	58,059	52,881	75,459
Outpatient care centers	1	49,293	51,253	84,648
Medical and diagnostic laboratories	0	14,481	21,198	33,659
Home health care services	1	52,985	34,338	51,749
Other ambulatory health care services	0	22,833	24,828	37,922
Hospitals	5	448,312	513,079	940,841
Nursing and community care facilities	2	71,666	85,637	146,683
Residential mental retardation, mental health, substance abuse and other facilities	1	31,943	35,185	54,122
Individual and family services	3	99,523	87,264	128,606
Child day care services	1	35,879	40,010	54,221
Community food, housing, and other relief services, including rehabilitation services	1	23,619	25,565	57,842
Performing arts companies	0	9,197	15,673	30,640

## APPENDIX

Commercial Sports Except Racing	0	32,097	34,016	47,176
Racing and Track Operation	0	2,440	5,779	8,952
Independent artists, writers, and performers	2	17,293	21,631	31,755
Promoters of performing arts and sports and agents for public figures	0	6,872	17,589	45,548
Museums, historical sites, zoos, and parks	0	5,237	6,327	10,743
Amusement parks and arcades	0	2,333	7,590	9,076
Gambling industries (except casino hotels)	0	9,883	21,764	37,102
Other amusement and recreation industries	1	13,548	19,825	35,947
Fitness and recreational sports centers	1	11,197	19,347	28,390
Bowling centers	0	2,383	3,800	7,068
Hotels and motels, including casino hotels	0	14,444	27,798	45,451
Other accommodations	0	5,438	7,356	10,588
Full-service restaurants	4	108,003	163,059	283,406
Limited-service restaurants	3	71,369	117,759	254,799
All other food and drinking places	3	78,804	105,984	164,609
Automotive repair and maintenance, except car washes	1	81,926	93,515	139,620
Car washes	1	39,012	58,886	87,791
Electronic and precision equipment repair and maintenance	2	142,022	201,762	306,899
Commercial and industrial machinery and equipment repair and maintenance	1	56,105	65,353	98,257
Personal and household goods repair and maintenance	1	30,330	21,634	29,391
Personal care services	1	45,043	27,552	37,328
Death care services	0	3,597	4,480	7,289
Dry-cleaning and laundry services	0	10,814	11,715	15,877
Other personal services	1	44,218	35,487	46,778
Religious organizations	2	115,479	45,539	203,599
Grantmaking, giving, and social advocacy organizations	1	27,612	74,823	118,112
Business and professional associations	0	21,565	31,152	53,461
Labor and civic organizations	1	19,782	45,109	91,274
Private households	1	7,566	7,566	7,566
Postal service	1	49,435	49,481	54,743
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	951	(6,566)	387
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	42	50	95
Local government passenger transit	0	14,790	(5,083)	12,725
Local government electric utilities	0	3,689	10,568	22,757
Other local government enterprises	1	49,673	102,594	245,483
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	10	1,109,312	1,933,008	3,066,360

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 418: Detailed M2M Program Impacts by Types of Impact, Minnesota.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	7	676,857	1,146,855	2,308,717
Oilseed farming	0	1	2,497	11,468
Grain farming	0	102	798	4,547
Vegetable and melon farming	0	52	113	470
Fruit farming	0	6	16	55
Tree nut farming	0	0	0	1

## APPENDIX

Greenhouse, nursery, and floriculture production	0	49	76	272
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	26	53	233
All other crop farming	0	9	13	50
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1	155	1,137
Dairy cattle and milk production	0	23	94	1,044
Poultry and egg production	0	37	60	1,180
Animal production, except cattle and poultry and eggs	0	36	396	1,432
Forestry, forest products, and timber tract production	0	19	20	27
Commercial logging	0	47	48	95
Commercial fishing	0	5	12	13
Commercial hunting and trapping	0	17	30	35
Support activities for agriculture and forestry	0	242	212	254
Oil and gas extraction	0	71	51	1,022
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	145	1,887	2,577
Iron ore mining	0	419	541	195
Gold ore mining	0	0	1	4
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	1	(30)	1
Other metal ore mining	0	(1)	0	7
Stone mining and quarrying	0	33	90	134
Sand and gravel mining	0	36	68	95
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	2	8	17
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	1
Metal mining services	0	2	3	34

## APPENDIX

Other nonmetallic minerals services	0	0	0	1
Electric power generation - Hydroelectric	0	150	371	648
Electric power generation - Fossil fuel	0	663	1,961	5,263
Electric power generation - Nuclear	0	633	1,307	3,132
Electric power generation - Solar	0	6	11	17
Electric power generation - Wind	0	58	340	818
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	81	184	417
Electric power generation - All other	0	171	13	98
Electric power transmission and distribution	0	1,485	4,555	11,910
Natural gas distribution	0	372	925	2,037
Water, sewage and other systems	0	26	52	143
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	1,498	1,909	4,203

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Maintenance and repair construction of residential structures	0	679	950	2,124
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	2	1	3
Dog and cat food manufacturing	0	35	119	505
Other animal food manufacturing	0	137	218	1,379
Flour milling	0	51	94	565
Rice milling	0	5	8	51
Malt manufacturing	0	22	49	202
Wet corn milling	0	168	455	3,219
Soybean and other oilseed processing	0	37	182	1,554
Fats and oils refining and blending	0	7	14	160
Breakfast cereal manufacturing	0	363	848	2,345
Beet sugar manufacturing	0	57	103	420
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	59	81	278
Chocolate and confectionery manufacturing from cacao beans	0	13	24	104
Confectionery manufacturing from purchased chocolate	0	28	32	119
Frozen fruits, juices and vegetables manufacturing	0	48	82	314
Frozen specialties manufacturing	0	153	218	852
Canned fruits and vegetables manufacturing	0	144	245	990
Canned specialties	0	18	42	220
Dehydrated food products manufacturing	0	16	20	64
Cheese manufacturing	0	125	173	1,612
Dry, condensed, and evaporated dairy product manufacturing	0	57	134	969
Fluid milk manufacturing	0	85	133	791
Creamery butter manufacturing	0	11	42	304
Ice cream and frozen dessert manufacturing	0	26	39	122
Frozen cakes and other pastries manufacturing	0	106	149	270
Poultry processing	0	441	596	2,488
Animal, except poultry, slaughtering	0	171	230	1,767
Meat processed from carcasses	0	292	314	2,165

## APPENDIX

Rendering and meat byproduct processing	0	17	15	76
Seafood product preparation and packaging	0	96	108	339
Bread and bakery product, except frozen, manufacturing	0	451	557	1,270
Cookie and cracker manufacturing	0	8	9	18
Dry pasta, mixes, and dough manufacturing	0	27	54	191
Tortilla manufacturing	0	42	50	148
Roasted nuts and peanut butter manufacturing	0	53	94	307
Other snack food manufacturing	0	111	220	813
Coffee and tea manufacturing	0	22	30	122
Flavoring syrup and concentrate manufacturing	0	15	84	160
Mayonnaise, dressing, and sauce manufacturing	0	4	7	26
Spice and extract manufacturing	0	19	26	110
All other food manufacturing	0	284	355	1,189
Bottled and canned soft drinks & water	0	98	198	835
Manufactured ice	0	7	3	18
Breweries	0	121	323	1,189
Wineries	0	3	6	39
Distilleries	0	39	208	483
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	1	4	15
Broadwoven fabric mills	0	3	8	20
Narrow fabric mills and schiffli machine embroidery	0	1	1	4
Nonwoven fabric mills	0	7	30	58
Knit fabric mills	0	2	4	10
Textile and fabric finishing mills	0	2	4	18
Fabric coating mills	0	3	6	19
Carpet and rug mills	0	7	28	58
Curtain and linen mills	0	23	63	140
Textile bag and canvas mills	0	9	18	44
Rope, cordage, twine, tire cord and tire fabric mills	0	11	40	66
Other textile product mills	0	50	92	185
Hosiery and sock mills	0	1	1	3
Other apparel knitting mills	0	7	9	20
Cut and sew apparel contractors	0	2	3	11



## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	7	11	36
Womens and girls cut and sew apparel manufacturing	0	2	4	29
Other cut and sew apparel manufacturing	0	11	16	39
Apparel accessories and other apparel manufacturing	0	5	7	25
Leather and hide tanning and finishing	0	6	14	29
Footwear manufacturing	0	24	30	65
Other leather and allied product manufacturing	0	1	2	5
Sawmills	0	34	41	116
Wood preservation	0	12	26	70
Veneer and plywood manufacturing	0	14	18	54
Engineered wood member and truss manufacturing	0	19	24	63
Reconstituted wood product manufacturing	0	10	22	65
Wood windows and door manufacturing	0	136	184	403
Cut stock, resawing lumber, and planing	0	5	6	12
Other millwork, including flooring	0	44	54	115
Wood container and pallet manufacturing	0	118	129	259
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	14	16	36
All other miscellaneous wood product manufacturing	0	82	88	162
Pulp mills	0	1	1	3
Paper mills	0	229	509	1,640
Paperboard mills	0	66	163	565
Paperboard container manufacturing	0	402	604	2,304
Paper bag and coated and treated paper manufacturing	0	243	408	1,219
Stationery product manufacturing	0	52	69	179
Sanitary paper product manufacturing	0	11	30	80

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All other converted paper product manufacturing	0	18	24	66
Printing	0	2,282	3,146	5,613
Support activities for printing	0	312	418	534
Petroleum refineries	0	460	4,506	17,911
Asphalt paving mixture and block manufacturing	0	3	4	14
Asphalt shingle and coating materials manufacturing	0	13	46	98
Petroleum lubricating oil and grease manufacturing	0	8	27	67
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	1	6	53
Industrial gas manufacturing	0	29	54	196
Synthetic dye and pigment manufacturing	0	1	1	4
Other basic inorganic chemical manufacturing	0	3	4	9
Other basic organic chemical manufacturing	0	85	129	994
Plastics material and resin manufacturing	0	57	79	623
Synthetic rubber manufacturing	0	16	19	72
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	3	6	21
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	2	3	11
Pesticide and other agricultural chemical manufacturing	0	3	6	38
Medicinal and botanical manufacturing	0	21	29	81
Pharmaceutical preparation manufacturing	0	109	293	978
In-vitro diagnostic substance manufacturing	0	150	196	518
Biological product (except diagnostic) manufacturing	0	20	35	92
Paint and coating manufacturing	0	147	174	533
Adhesive manufacturing	0	140	194	469
Soap and other detergent manufacturing	0	177	347	826

## APPENDIX

Polish and other sanitation good manufacturing	0	189	243	559
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	264	560	1,383
Printing ink manufacturing	0	85	89	245
Explosives manufacturing	0	2	2	5
Custom compounding of purchased resins	0	261	444	1,681
Photographic film and chemical manufacturing	0	114	195	510
Other miscellaneous chemical product manufacturing	0	326	417	1,253
Plastics packaging materials and unlaminated film and sheet manufacturing	0	352	535	1,901
Unlaminated plastics profile shape manufacturing	0	58	112	324
Plastics pipe and pipe fitting manufacturing	0	44	94	263
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	15	25	74
Polystyrene foam product manufacturing	0	24	37	125
Urethane and other foam product (except polystyrene) manufacturing	0	26	38	158
Plastics bottle manufacturing	0	7	10	45
Other plastics product manufacturing	0	856	1,190	3,431
Tire manufacturing	0	7	10	46
Rubber and plastics hoses and belting manufacturing	0	2	3	7
Other rubber product manufacturing	0	172	239	772
Pottery, ceramics, and plumbing fixture manufacturing	0	(16)	(15)	8
Brick, tile, and other structural clay product manufacturing	0	7	25	70
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	(8)	(4)	16
Glass container manufacturing	0	30	61	170
Glass product manufacturing made of purchased glass	0	130	259	588

## APPENDIX

Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	38	86	298
Concrete block and brick manufacturing	0	13	29	84
Concrete pipe manufacturing	0	4	7	19
Other concrete product manufacturing	0	33	53	121
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	(0)	11	37
Abrasive product manufacturing	0	66	245	402
Cut stone and stone product manufacturing	0	20	27	70
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	(2)	1	7
Miscellaneous nonmetallic mineral products manufacturing	0	9	24	50
Iron and steel mills and ferroalloy manufacturing	0	67	96	433
Iron, steel pipe and tube manufacturing from purchased steel	0	40	54	240
Rolled steel shape manufacturing	0	25	47	220
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	(0)	0	7
Secondary smelting and alloying of aluminum	0	25	32	218
Aluminum sheet, plate, and foil manufacturing	0	6	10	64
Other aluminum rolling, drawing and extruding	0	28	33	138
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	1	1	10
Nonferrous metal, except copper and aluminum, shaping	0	25	30	103
Secondary processing of other nonferrous metals	0	0	1	7
Ferrous metal foundries	0	60	84	208
Nonferrous metal foundries	0	222	291	619
Custom roll forming	0	7	10	40
Crown and closure manufacturing and metal stamping	0	234	332	867

## APPENDIX

Iron and steel forging	0	49	66	194
Nonferrous forging	0	12	15	45
Cutlery, utensil, pot, and pan manufacturing	0	52	158	302
Handtool manufacturing	0	83	132	256
Prefabricated metal buildings and components manufacturing	0	6	8	21
Fabricated structural metal manufacturing	0	33	49	141
Plate work manufacturing	0	53	56	157
Metal window and door manufacturing	0	29	43	97
Sheet metal work manufacturing	0	1,395	1,777	3,918
Ornamental and architectural metal work manufacturing	0	52	68	156
Power boiler and heat exchanger manufacturing	0	7	10	26
Metal tank (heavy gauge) manufacturing	0	34	42	104
Metal cans manufacturing	0	34	75	355
Metal barrels, drums and pails manufacturing	0	8	10	36
Hardware manufacturing	0	24	39	126
Spring and wire product manufacturing	0	62	82	220
Machine shops	0	1,458	1,678	3,070
Turned product and screw, nut, and bolt manufacturing	0	578	789	1,830
Metal heat treating	0	90	137	347
Metal coating and nonprecious engraving	0	210	356	855
Electroplating, anodizing, and coloring metal	0	324	362	755
Valve and fittings, other than plumbing, manufacturing	0	97	151	339
Plumbing fixture fitting and trim manufacturing	0	1	1	4
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	77	174	265
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	6	14	22

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	19	22	53
Other fabricated metal manufacturing	0	98	126	319
Farm machinery and equipment manufacturing	0	14	22	75
Lawn and garden equipment manufacturing	0	30	54	172
Construction machinery manufacturing	0	11	23	60
Mining machinery and equipment manufacturing	0	1	1	3
Oil and gas field machinery and equipment manufacturing	0	0	0	1
Semiconductor machinery manufacturing	0	2	2	6
Food product machinery manufacturing	0	4	4	11
Sawmill, woodworking, and paper machinery	0	4	4	10
Printing machinery and equipment manufacturing	0	3	3	8
All other industrial machinery manufacturing	0	4	6	13
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	27	41	110
Other commercial service industry machinery manufacturing	0	26	55	123
Air purification and ventilation equipment manufacturing	0	3	5	12
Heating equipment (except warm air furnaces) manufacturing	0	25	40	105
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	64	128	328
Industrial mold manufacturing	0	46	54	87
Special tool, die, jig, and fixture manufacturing	0	25	33	54
Cutting tool and machine tool accessory manufacturing	0	24	26	51
Machine tool manufacturing	0	5	5	12

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	1	1	2
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	6	9	32
Mechanical power transmission equipment manufacturing	0	9	13	29
Other engine equipment manufacturing	0	4	7	32
Pump and pumping equipment manufacturing	0	18	36	89
Air and gas compressor manufacturing	0	1	1	4
Elevator and moving stairway manufacturing	0	0	1	2
Conveyor and conveying equipment manufacturing	0	10	10	27
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	5
Industrial truck, trailer, and stacker manufacturing	0	4	6	21
Power-driven handtool manufacturing	0	2	6	16
Welding and soldering equipment manufacturing	0	29	40	77
Packaging machinery manufacturing	0	22	35	81
Industrial process furnace and oven manufacturing	0	1	2	3
Fluid power cylinder and actuator manufacturing	0	13	19	47
Fluid power pump and motor manufacturing	0	33	55	114
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	28	38	87
Electronic computer manufacturing	1	166,875	347,405	820,790
Computer storage device manufacturing	0	1,353	3,464	13,449
Computer terminals and other computer peripheral equipment manufacturing	0	65	112	291

## APPENDIX

Telephone apparatus manufacturing	0	9	16	52
Broadcast and wireless communications equipment manufacturing	0	8	11	32
Other communications equipment manufacturing	0	8	12	35
Audio and video equipment manufacturing	0	1	2	13
Printed circuit assembly (electronic assembly) manufacturing	0	1,657	2,429	8,913
Bare printed circuit board manufacturing	0	240	302	793
Semiconductor and related device manufacturing	0	6,920	11,281	34,332
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	26	36	95
Electronic connector manufacturing	0	145	208	581
Other electronic component manufacturing	0	312	355	1,206
Electromedical and electrotherapeutic apparatus manufacturing	0	96	182	346
Search, detection, and navigation instruments manufacturing	0	10,182	15,864	34,793
Automatic environmental control manufacturing	0	378	475	676
Industrial process variable instruments manufacturing	0	155	216	494
Totalizing fluid meter and counting device manufacturing	0	8	17	30
Electricity and signal testing instruments manufacturing	0	211	302	1,092
Analytical laboratory instrument manufacturing	0	14,109	24,536	45,772
Irradiation apparatus manufacturing	0	1	1	2
Watch, clock, and other measuring and controlling device manufacturing	0	56	90	180
Blank magnetic and optical recording media manufacturing	0	11	28	70



## APPENDIX

Software and other prerecorded and record reproducing	0	26	38	71
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	18	30	71
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	8	25	59
Household refrigerator and home freezer manufacturing	0	8	31	70
Household laundry equipment manufacturing	0	14	40	131
Other major household appliance manufacturing	0	3	10	22
Power, distribution, and specialty transformer manufacturing	0	2	4	13
Motor and generator manufacturing	0	194	346	782
Switchgear and switchboard apparatus manufacturing	0	9	18	42
Relay and industrial control manufacturing	0	333	502	1,055
Storage battery manufacturing	0	14	25	92
Primary battery manufacturing	0	31	53	267
Fiber optic cable manufacturing	0	16	31	103
Other communication and energy wire manufacturing	0	8	17	55
Wiring device manufacturing	0	143	360	726
Carbon and graphite product manufacturing	0	2	4	11
All other miscellaneous electrical equipment and component manufacturing	0	18	22	72
Automobile manufacturing	0	(0)	0	4
Light truck and utility vehicle manufacturing	0	(0)	0	5
Heavy duty truck manufacturing	0	2	5	18
Motor vehicle body manufacturing	0	4	7	22
Truck trailer manufacturing	0	1	1	3
Motor home manufacturing	0	1	3	8
Travel trailer and camper manufacturing	0	66	75	297
Motor vehicle gasoline engine and engine parts manufacturing	0	33	59	236

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	22	37	163
Motor vehicle transmission and power train parts manufacturing	0	77	154	449
Motor vehicle seating and interior trim manufacturing	0	0	0	2
Motor vehicle metal stamping	0	3	5	22
Other motor vehicle parts manufacturing	0	72	136	528
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	50	111	327
Aircraft manufacturing	0	0	2	4
Aircraft engine and engine parts manufacturing	0	1	5	10
Other aircraft parts and auxiliary equipment manufacturing	0	1	3	5
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	1	4
Ship building and repairing	0	1	1	3
Boat building	0	93	206	525
Motorcycle, bicycle, and parts manufacturing	0	3	33	52
Military armored vehicle, tank, and tank component manufacturing	0	0	1	6
All other transportation equipment manufacturing	0	160	658	1,212
Wood kitchen cabinet and countertop manufacturing	0	123	160	355
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	4	5	19
Other household nonupholstered furniture manufacturing	0	18	27	80
Institutional furniture manufacturing	0	2	2	5
Wood office furniture manufacturing	0	1	1	3

## APPENDIX

Custom architectural woodwork and millwork	0	1	1	3
Office furniture, except wood, manufacturing	0	10	16	34
Showcase, partition, shelving, and locker manufacturing	0	26	33	85
Mattress manufacturing	0	69	127	250
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	212	511	913
Surgical appliance and supplies manufacturing	0	136	343	613
Dental equipment and supplies manufacturing	0	1	2	6
Ophthalmic goods manufacturing	0	48	128	263
Dental laboratories	0	32	32	54
Jewelry and silverware manufacturing	0	52	76	166
Sporting and athletic goods manufacturing	0	88	136	322
Doll, toy, and game manufacturing	0	8	16	54
Office supplies (except paper) manufacturing	0	3	5	19
Sign manufacturing	0	79	76	146
Gasket, packing, and sealing device manufacturing	0	25	35	77
Musical instrument manufacturing	0	8	8	21
Fasteners, buttons, needles, and pins manufacturing	0	0	0	2
Broom, brush, and mop manufacturing	0	4	9	36
Burial casket manufacturing	0	4	5	11
All other miscellaneous manufacturing	0	104	136	363
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	458	932	1,923
Wholesale - Professional and commercial equipment and supplies	0	5,235	8,304	13,403
Wholesale - Household appliances and electrical and electronic goods	0	6,483	12,803	26,911
Wholesale - Machinery, equipment, and supplies	0	1,221	1,938	3,289
Wholesale - Other durable goods merchant wholesalers	0	1,937	2,773	5,013

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	884	2,072	4,073
Wholesale - Grocery and related product wholesalers	0	1,328	1,680	2,922
Wholesale - Petroleum and petroleum products	0	225	3,016	3,489
Wholesale - Other nondurable goods merchant wholesalers	0	2,959	5,159	8,655
Wholesale - Wholesale electronic markets and agents and brokers	0	2,435	1,162	1,294
Retail - Motor vehicle and parts dealers	0	1,164	1,748	2,525
Retail - Furniture and home furnishings stores	0	634	839	1,327
Retail - Electronics and appliance stores	0	723	710	1,184
Retail - Building material and garden equipment and supplies stores	0	779	1,351	1,994
Retail - Food and beverage stores	0	2,181	2,902	4,752
Retail - Health and personal care stores	0	1,419	1,657	2,436
Retail - Gasoline stores	0	892	1,531	2,869
Retail - Clothing and clothing accessories stores	0	807	1,231	2,479
Retail - Sporting goods, hobby, musical instrument and book stores	0	532	707	1,134
Retail - General merchandise stores	0	1,983	2,821	4,639
Retail - Miscellaneous store retailers	0	1,021	1,159	1,832
Retail - Nonstore retailers	0	1,974	4,860	8,193
Air transportation	0	1,780	3,651	5,734
Rail transportation	0	498	1,102	2,025
Water transportation	0	488	593	1,026
Truck transportation	0	14,517	16,006	31,759
Transit and ground passenger transportation	0	1,655	1,907	2,504
Pipeline transportation	0	376	655	819
Scenic and sightseeing transportation and support activities for transportation	0	1,443	1,659	3,522
Couriers and messengers	0	1,430	1,880	3,387
Warehousing and storage	0	2,165	2,381	4,618

## APPENDIX

Newspaper publishers	0	457	674	923
Periodical publishers	0	248	348	570
Book publishers	0	590	1,593	2,410
Directory, mailing list, and other publishers	0	69	200	339
Greeting card publishing	0	2	8	14
Software publishers	0	4,456	8,970	10,696
Motion picture and video industries	0	396	584	1,595
Sound recording industries	0	107	330	525
Radio and television broadcasting	0	1,789	1,406	3,815
Cable and other subscription programming	0	55	179	627
Wired telecommunications carriers	0	1,250	2,958	5,652
Wireless telecommunications carriers (except satellite)	0	464	2,093	4,420
Satellite, telecommunications resellers, and all other telecommunications	0	474	520	996
Data processing, hosting, and related services	0	1,895	4,349	7,249
News syndicates, libraries, archives and all other information services	0	280	571	822
Internet publishing and broadcasting and web search portals	0	638	2,185	4,541
Nondepository credit intermediation and related activities	0	2,185	2,916	4,437
Securities and commodity contracts intermediation and brokerage	0	5,244	5,204	9,091
Monetary authorities and depository credit intermediation	0	6,635	15,933	24,491
Other financial investment activities	0	3,824	4,716	9,282
Direct life insurance carriers	0	1,321	2,260	3,170
Insurance carriers, except direct life	0	3,829	9,809	18,744
Insurance agencies, brokerages, and related activities	0	2,549	3,546	7,820
Funds, trusts, and other financial vehicles	0	924	705	3,819
Other real estate	0	6,832	18,291	41,369
Tenant-occupied housing	0	825	8,933	10,125

## APPENDIX

Owner-occupied dwellings	0	0	29,395	37,140
Automotive equipment rental and leasing	0	417	904	1,283
General and consumer goods rental except video tapes and discs	0	651	803	1,090
Video tape and disc rental	0	148	219	332
Commercial and industrial machinery and equipment rental and leasing	0	712	1,023	1,555
Lessors of nonfinancial intangible assets	0	(452)	1,554	2,253
Legal services	0	6,786	11,790	15,756
Accounting, tax preparation, bookkeeping, and payroll services	0	3,747	5,166	6,792
Architectural, engineering, and related services	0	2,711	3,275	5,513
Specialized design services	0	581	617	747
Custom computer programming services	0	3,308	3,750	5,183
Computer systems design services	0	2,044	2,171	2,767
Other computer related services, including facilities management	0	1,339	2,173	3,400
Management consulting services	0	10,050	9,916	13,245
Environmental and other technical consulting services	0	1,484	1,341	1,966
Scientific research and development services	1	74,510	106,871	199,206
Advertising, public relations, and related services	0	4,401	6,351	9,340
Photographic services	0	511	283	446
Veterinary services	0	330	487	732
Marketing research and all other miscellaneous professional, scientific, and technical services	0	5,331	4,608	6,356
Management of companies and enterprises	0	44,068	50,019	66,423
Office administrative services	0	1,782	505	1,289
Facilities support services	0	75	92	233
Employment services	0	7,012	10,371	15,418
Business support services	0	1,508	1,294	2,004
Travel arrangement and reservation services	0	522	676	1,390
Investigation and security services	0	741	775	1,078
Services to buildings	0	1,788	1,909	2,781

## APPENDIX

Landscape and horticultural services	0	1,110	1,200	1,783
Other support services	0	775	969	1,742
Waste management and remediation services	0	635	1,257	2,046
Elementary and secondary schools	0	1,709	1,438	1,741
Junior colleges, colleges, universities, and professional schools	0	2,327	3,030	4,494
Other educational services	0	1,229	1,092	2,131
Offices of physicians	0	9,329	10,897	15,042
Offices of dentists	0	1,743	2,162	3,176
Offices of other health practitioners	0	1,818	1,669	2,377
Outpatient care centers	0	1,703	1,777	2,892
Medical and diagnostic laboratories	0	466	701	1,077
Home health care services	0	1,647	1,080	1,639
Other ambulatory health care services	0	742	812	1,220
Hospitals	0	15,654	17,841	31,926
Nursing and community care facilities	0	2,367	2,832	4,725
Residential mental retardation, mental health, substance abuse and other facilities	0	1,185	1,306	1,968
Individual and family services	0	3,610	3,221	4,719
Child day care services	0	1,222	1,383	1,828
Community food, housing, and other relief services, including rehabilitation services	0	915	1,002	2,191
Performing arts companies	0	356	586	1,041
Commercial Sports Except Racing	0	1,001	1,058	1,438
Racing and Track Operation	0	87	196	292
Independent artists, writers, and performers	0	642	783	1,099
Promoters of performing arts and sports and agents for public figures	0	264	618	1,498
Museums, historical sites, zoos, and parks	0	189	225	371
Amusement parks and arcades	0	85	243	293
Gambling industries (except casino hotels)	0	345	716	1,205
Other amusement and recreation industries	0	422	592	1,070

## APPENDIX

Fitness and recreational sports centers	0	396	639	925
Bowling centers	0	76	118	216
Hotels and motels, including casino hotels	0	543	1,000	1,611
Other accommodations	0	252	335	473
Full-service restaurants	0	3,267	4,961	8,441
Limited-service restaurants	0	2,357	3,866	8,070
All other food and drinking places	0	2,374	3,141	4,745
Automotive repair and maintenance, except car washes	0	3,037	3,338	4,952
Car washes	0	1,264	1,901	2,814
Electronic and precision equipment repair and maintenance	0	10,669	15,182	21,746
Commercial and industrial machinery and equipment repair and maintenance	0	17,214	19,701	29,393
Personal and household goods repair and maintenance	0	925	593	805
Personal care services	0	1,602	897	1,228
Death care services	0	133	157	254
Dry-cleaning and laundry services	0	344	367	496
Other personal services	0	1,477	1,042	1,412
Religious organizations	0	4,472	1,373	7,236
Grantmaking, giving, and social advocacy organizations	0	1,230	2,860	4,515
Business and professional associations	0	704	923	1,525
Labor and civic organizations	0	765	1,543	3,187
Private households	0	279	279	279
Postal service	0	1,789	1,791	1,978
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	34	(269)	14
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	1	1	1
Local government passenger transit	0	481	(206)	284
Local government electric utilities	0	119	312	654
Other local government enterprises	0	1,508	2,883	6,848



## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	49,298	103,711	216,857

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 26. Mississippi

**Table 419: Detailed NASA Impacts by Types of Impact, Mississippi.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	3,633	190,086,333	284,427,027	570,465,546
Oilseed farming	2	237,033	455,646	1,038,875
Grain farming	2	52,952	91,560	481,625
Vegetable and melon farming	2	34,723	48,527	212,433
Fruit farming	1	6,313	9,454	34,898
Tree nut farming	0	5,200	5,414	14,890
Greenhouse, nursery, and floriculture production	0	8,600	10,812	43,272
Tobacco farming	0	0	0	0
Cotton farming	1	16,493	21,004	81,189
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	7	22,978	26,121	108,271
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	2	12,645	28,840	153,671

## APPENDIX

Dairy cattle and milk production	0	1,488	2,776	26,929
Poultry and egg production	3	41,306	56,125	1,260,620
Animal production, except cattle and poultry and eggs	5	93,587	213,679	480,934
Forestry, forest products, and timber tract production	0	5,641	5,675	8,073
Commercial logging	1	40,799	39,809	70,042
Commercial fishing	0	17,147	31,534	44,204
Commercial hunting and trapping	0	17,549	13,904	16,165
Support activities for agriculture and forestry	4	148,640	124,203	151,728
Oil and gas extraction	4	91,768	128,938	1,070,320
Coal mining	0	34,781	78,708	137,749
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	489	1,480	8,211
Sand and gravel mining	0	7,990	12,364	29,895
Other clay, ceramic, refractory minerals mining	0	3,030	4,456	8,843
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	25	52	230
Drilling oil and gas wells	0	42	51	222
Support activities for oil and gas operations	0	2,353	2,748	10,695
Metal mining services	0	811	1,268	11,609
Other nonmetallic minerals services	0	116	175	1,523
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	6	820,690	3,170,158	8,211,707
Electric power generation - Nuclear	4	787,059	1,774,909	3,988,005
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	20	2,270,186	8,675,339	24,344,982
Natural gas distribution	1	60,699	208,000	693,672
Water, sewage and other systems	2	58,481	150,939	381,937
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	3	123,896	72,409	192,002
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	7	332,489	425,092	1,271,141
Maintenance and repair construction of residential structures	5	224,226	321,900	949,028
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	442	292	833
Dog and cat food manufacturing	0	4,801	20,293	83,599
Other animal food manufacturing	0	15,583	27,304	235,808
Flour milling	0	0	0	0
Rice milling	0	2,210	3,933	26,612
Malt manufacturing	0	0	0	0

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Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	1,644	9,495	85,695
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	148	166	752
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	864	928	6,070
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	13,200	20,293	110,552
Canned fruits and vegetables manufacturing	0	278	311	1,593
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	2,201	3,766	17,686
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	20,713	34,736	300,580
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	232	251	1,164
Frozen cakes and other pastries manufacturing	0	10,257	16,127	31,661
Poultry processing	7	281,456	381,290	2,036,182
Animal, except poultry, slaughtering	0	5,159	6,668	76,072
Meat processed from carcasses	1	32,668	36,736	366,718
Rendering and meat byproduct processing	0	4,378	4,037	23,260
Seafood product preparation and packaging	1	37,902	48,105	311,065
Bread and bakery product, except frozen, manufacturing	1	48,961	64,831	171,427
Cookie and cracker manufacturing	0	12,033	17,032	73,276
Dry pasta, mixes, and dough manufacturing	0	699	1,646	7,084
Tortilla manufacturing	0	0	0	0

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	4,183	5,235	32,026
Other snack food manufacturing	0	6,590	12,733	69,641
Coffee and tea manufacturing	0	416	455	3,040
Flavoring syrup and concentrate manufacturing	0	7,109	55,530	103,895
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	3,314	5,158	29,098
All other food manufacturing	0	5,406	6,955	35,132
Bottled and canned soft drinks & water	0	22,293	48,635	259,247
Manufactured ice	0	3,964	1,889	12,169
Breweries	0	1,214	4,455	19,076
Wineries	0	21	45	265
Distilleries	0	868	7,743	19,373
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	193	663	3,182
Broadwoven fabric mills	0	4,351	12,219	23,960
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	15,005	66,125	112,327
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	315	699	2,234
Fabric coating mills	0	402	958	4,258
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	2,380	6,732	14,942
Textile bag and canvas mills	0	185	384	993
Rope, cordage, twine, tire cord and tire fabric mills	0	343	1,286	2,320
Other textile product mills	0	4,376	8,476	20,188
Hosiery and sock mills	0	439	589	1,448
Other apparel knitting mills	0	295	449	1,124
Cut and sew apparel contractors	0	640	720	1,951
Mens and boys cut and sew apparel manufacturing	0	3,639	5,290	16,143
Womens and girls cut and sew apparel manufacturing	0	444	847	2,722
Other cut and sew apparel manufacturing	0	378	604	1,852
Apparel accessories and other apparel manufacturing	0	2,004	2,880	6,753
Leather and hide tanning and finishing	0	162	383	2,145

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	400	438	1,611
Sawmills	1	34,042	64,112	183,961
Wood preservation	0	1,989	10,189	26,988
Veneer and plywood manufacturing	0	13,416	25,974	68,156
Engineered wood member and truss manufacturing	0	500	870	3,114
Reconstituted wood product manufacturing	0	6,843	26,728	70,523
Wood windows and door manufacturing	0	2,323	4,179	14,388
Cut stock, resawing lumber, and planing	0	5,745	14,342	32,450
Other millwork, including flooring	0	3,021	5,830	16,400
Wood container and pallet manufacturing	0	18,832	26,246	66,574
Manufactured home (mobile home) manufacturing	0	28	67	180
Prefabricated wood building manufacturing	0	2,487	3,257	11,703
All other miscellaneous wood product manufacturing	0	12,978	20,314	48,542
Pulp mills	0	2,342	3,707	10,807
Paper mills	1	75,336	178,109	734,572
Paperboard mills	0	7,973	18,912	49,670
Paperboard container manufacturing	1	76,940	115,016	462,618
Paper bag and coated and treated paper manufacturing	0	4,190	7,496	29,970
Stationery product manufacturing	0	3,426	4,959	25,462
Sanitary paper product manufacturing	0	15,550	47,273	200,331
All other converted paper product manufacturing	0	474	712	3,838
Printing	3	116,807	285,007	575,723
Support activities for printing	0	840	2,122	3,364
Petroleum refineries	1	140,516	954,385	5,456,221
Asphalt paving mixture and block manufacturing	0	4,902	7,801	41,476
Asphalt shingle and coating materials manufacturing	0	3,587	10,099	29,949
Petroleum lubricating oil and grease manufacturing	0	1,396	4,785	20,986

## APPENDIX

All other petroleum and coal products manufacturing	0	3,311	9,014	35,142
Petrochemical manufacturing	0	3,877	21,172	115,987
Industrial gas manufacturing	0	9,900	19,653	92,297
Synthetic dye and pigment manufacturing	0	8,204	13,694	44,470
Other basic inorganic chemical manufacturing	0	1,202	2,028	8,146
Other basic organic chemical manufacturing	0	1,902	3,364	42,234
Plastics material and resin manufacturing	0	10,543	14,762	94,260
Synthetic rubber manufacturing	0	571	772	3,591
Artificial and synthetic fibers and filaments manufacturing	0	147	211	2,211
Nitrogenous fertilizer manufacturing	0	6,021	11,060	46,159
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	16	23	200
Pesticide and other agricultural chemical manufacturing	0	16,537	41,166	258,632
Medicinal and botanical manufacturing	0	17	24	169
Pharmaceutical preparation manufacturing	0	11,263	33,150	165,190
In-vitro diagnostic substance manufacturing	0	51	70	363
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	5,836	9,106	49,010
Adhesive manufacturing	0	334	464	3,345
Soap and other detergent manufacturing	0	9,148	22,635	138,517
Polish and other sanitation good manufacturing	0	3,070	4,970	40,892
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	4,336	9,971	47,270
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	8,883	12,750	49,839
Photographic film and chemical manufacturing	0	4,511	7,718	28,532
Other miscellaneous chemical product manufacturing	0	7,712	10,165	47,033

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	9,802	22,845	73,253
Unlaminated plastics profile shape manufacturing	0	1,361	4,565	10,302
Plastics pipe and pipe fitting manufacturing	0	503	1,917	4,507
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,297	3,553	7,942
Polystyrene foam product manufacturing	0	6,173	14,915	49,805
Urethane and other foam product (except polystyrene) manufacturing	0	16,771	37,636	151,939
Plastics bottle manufacturing	0	166	387	1,244
Other plastics product manufacturing	1	30,413	60,927	187,777
Tire manufacturing	1	52,957	90,588	335,161
Rubber and plastics hoses and belting manufacturing	0	1,195	2,806	7,023
Other rubber product manufacturing	0	5,486	10,786	31,523
Pottery, ceramics, and plumbing fixture manufacturing	0	1,217	1,425	3,691
Brick, tile, and other structural clay product manufacturing	0	3,910	7,317	18,524
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	318	351	1,010
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	2,746	4,980	14,139
Cement manufacturing	0	127	350	1,111
Ready-mix concrete manufacturing	0	17,931	33,800	113,959
Concrete block and brick manufacturing	0	3,781	7,428	20,886
Concrete pipe manufacturing	0	1,346	2,507	7,154
Other concrete product manufacturing	0	9,706	15,278	37,924
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	323	1,056	3,323
Abrasive product manufacturing	0	215	657	1,560
Cut stone and stone product manufacturing	0	6,552	7,737	17,142



## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	3,587	10,233	22,724
Miscellaneous nonmetallic mineral products manufacturing	0	64	169	513
Iron and steel mills and ferroalloy manufacturing	0	21,341	53,288	191,920
Iron, steel pipe and tube manufacturing from purchased steel	0	(581)	442	7,953
Rolled steel shape manufacturing	0	1,006	4,273	19,813
Steel wire drawing	0	(2,403)	(2,127)	429
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	131	984	4,674
Other aluminum rolling, drawing and extruding	0	(389)	(254)	1,356
Nonferrous metal (exc aluminum) smelting and refining	0	324	2,844	6,608
Copper rolling, drawing, extruding and alloying	0	6,259	11,186	85,776
Nonferrous metal, except copper and aluminum, shaping	0	(69)	17	790
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	1,454	5,114	11,104
Nonferrous metal foundries	0	(1,806)	(1,801)	237
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	1,054	1,236	5,820
Iron and steel forging	0	397	479	2,075
Nonferrous forging	0	807	935	3,874
Cutlery, utensil, pot, and pan manufacturing	0	704	1,377	4,917
Handtool manufacturing	0	410	507	1,312
Prefabricated metal buildings and components manufacturing	0	1,945	2,350	7,082
Fabricated structural metal manufacturing	0	8,078	10,222	34,048
Plate work manufacturing	0	3,975	4,090	12,805
Metal window and door manufacturing	0	6,382	8,393	23,460

## APPENDIX

Sheet metal work manufacturing	0	10,316	11,893	34,934
Ornamental and architectural metal work manufacturing	0	2,556	2,903	7,423
Power boiler and heat exchanger manufacturing	0	139	169	443
Metal tank (heavy gauge) manufacturing	0	1,330	1,492	4,151
Metal cans manufacturing	0	1,392	2,424	12,982
Metal barrels, drums and pails manufacturing	0	711	803	3,152
Hardware manufacturing	0	6,134	8,556	35,404
Spring and wire product manufacturing	0	3,222	3,889	12,330
Machine shops	0	19,078	20,493	39,968
Turned product and screw, nut, and bolt manufacturing	0	928	1,120	3,369
Metal heat treating	0	729	932	2,790
Metal coating and nonprecious engraving	0	7,604	10,761	22,941
Electroplating, anodizing, and coloring metal	0	1,564	1,657	3,260
Valve and fittings, other than plumbing, manufacturing	0	801	1,077	3,238
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	2,882	4,350	12,355
Small arms ammunition manufacturing	1	37,120	68,623	156,710
Ammunition, except for small arms, manufacturing	0	39	43	99
Small arms, ordnance, and accessories manufacturing	0	382	402	840
Fabricated pipe and pipe fitting manufacturing	0	884	960	2,530
Other fabricated metal manufacturing	0	2,603	2,976	9,257
Farm machinery and equipment manufacturing	0	19,879	29,679	140,938
Lawn and garden equipment manufacturing	0	2,107	4,023	19,722
Construction machinery manufacturing	0	231	486	1,486
Mining machinery and equipment manufacturing	0	0	0	0

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	384	468	1,993
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	15	18	58
Sawmill, woodworking, and paper machinery	0	438	489	1,625
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	19	25	80
Optical instrument and lens manufacturing	0	10	16	64
Photographic and photocopying equipment manufacturing	0	7	11	128
Other commercial service industry machinery manufacturing	0	1,291	2,501	7,922
Air purification and ventilation equipment manufacturing	0	59	88	311
Heating equipment (except warm air furnaces) manufacturing	0	75	117	479
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	15,326	30,585	105,586
Industrial mold manufacturing	0	71	82	218
Special tool, die, jig, and fixture manufacturing	0	437	570	1,358
Cutting tool and machine tool accessory manufacturing	0	36	40	163
Machine tool manufacturing	0	227	258	867
Rolling mill and other metalworking machinery manufacturing	0	50	64	177
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	444	676	1,885
Mechanical power transmission equipment manufacturing	0	187	287	722
Other engine equipment manufacturing	0	14,160	29,563	147,137
Pump and pumping equipment manufacturing	0	33	60	271

## APPENDIX

Air and gas compressor manufacturing	0	14	23	109
Elevator and moving stairway manufacturing	0	74	121	468
Conveyor and conveying equipment manufacturing	0	398	417	1,314
Overhead cranes, hoists, and monorail systems manufacturing	0	23	47	171
Industrial truck, trailer, and stacker manufacturing	0	1,702	2,750	8,449
Power-driven handtool manufacturing	0	2,971	8,174	23,544
Welding and soldering equipment manufacturing	0	12	16	61
Packaging machinery manufacturing	0	2	4	17
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	1,041	1,485	5,114
Fluid power pump and motor manufacturing	0	1,719	2,737	8,666
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	300	397	1,355
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	324	494	2,734
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	190	244	1,224
Other communications equipment manufacturing	0	18	28	317
Audio and video equipment manufacturing	0	33	52	531
Printed circuit assembly (electronic assembly) manufacturing	1	31,032	38,902	203,252
Bare printed circuit board manufacturing	0	272	319	1,231

## APPENDIX

Semiconductor and related device manufacturing	0	18,017	26,534	213,300
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	730	920	3,453
Electronic connector manufacturing	0	15,405	19,700	75,656
Other electronic component manufacturing	0	6,831	7,606	33,644
Electromedical and electrotherapeutic apparatus manufacturing	0	12	19	60
Search, detection, and navigation instruments manufacturing	0	84	106	290
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	121	151	456
Totalizing fluid meter and counting device manufacturing	0	24	39	176
Electricity and signal testing instruments manufacturing	0	18	23	160
Analytical laboratory instrument manufacturing	0	8,183	11,169	29,228
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	4,386	7,415	21,142
Small electrical appliance manufacturing	0	1,560	3,760	10,218
Household cooking appliance manufacturing	0	175	475	2,022
Household refrigerator and home freezer manufacturing	0	151	495	1,717
Household laundry equipment manufacturing	0	296	722	4,635

## APPENDIX

Other major household appliance manufacturing	0	65	186	873
Power, distribution, and specialty transformer manufacturing	0	8,102	13,435	39,322
Motor and generator manufacturing	0	4,616	8,102	24,880
Switchgear and switchboard apparatus manufacturing	0	3,022	5,702	14,522
Relay and industrial control manufacturing	0	661	960	2,493
Storage battery manufacturing	0	1,311	2,375	8,330
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	1,157	2,378	9,945
Wiring device manufacturing	0	1,239	2,892	7,915
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	31,504	82,001	556,405
Light truck and utility vehicle manufacturing	0	29,751	62,658	688,484
Heavy duty truck manufacturing	0	764	1,473	12,557
Motor vehicle body manufacturing	0	4,216	5,057	21,821
Truck trailer manufacturing	0	34	38	192
Motor home manufacturing	1	40,651	60,513	266,181
Travel trailer and camper manufacturing	0	14,678	15,518	77,806
Motor vehicle gasoline engine and engine parts manufacturing	0	15,312	19,338	104,448
Motor vehicle electrical and electronic equipment manufacturing	0	21,528	25,598	171,918
Motor vehicle transmission and power train parts manufacturing	0	20,552	27,195	139,804
Motor vehicle seating and interior trim manufacturing	0	14,195	16,715	122,683
Motor vehicle metal stamping	0	13,438	16,028	73,308
Other motor vehicle parts manufacturing	1	70,394	90,948	517,464
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	6,156	7,774	36,262

## APPENDIX

Aircraft manufacturing	0	1	2	12
Aircraft engine and engine parts manufacturing	0	2	5	15
Other aircraft parts and auxiliary equipment manufacturing	0	1,491	2,388	5,406
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	1,195	1,630	3,750
Railroad rolling stock manufacturing	0	136	214	1,010
Ship building and repairing	0	5,890	7,428	17,119
Boat building	0	24,696	34,218	112,574
Motorcycle, bicycle, and parts manufacturing	0	320	943	2,477
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	5,674	7,498	16,322
Upholstered household furniture manufacturing	2	93,195	129,079	412,205
Nonupholstered wood household furniture manufacturing	0	2,156	2,484	6,634
Other household nonupholstered furniture manufacturing	0	107	161	451
Institutional furniture manufacturing	0	527	578	1,891
Wood office furniture manufacturing	0	96	139	423
Custom architectural woodwork and millwork	0	238	233	646
Office furniture, except wood, manufacturing	0	7,436	13,221	40,422
Showcase, partition, shelving, and locker manufacturing	0	3,672	5,081	16,958
Mattress manufacturing	0	4,737	9,717	32,858
Blind and shade manufacturing	0	693	728	2,929
Surgical and medical instrument manufacturing	0	1,416	2,892	8,417
Surgical appliance and supplies manufacturing	0	1,736	3,538	10,367

## APPENDIX

Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	90	188	441
Dental laboratories	0	1,490	1,440	2,887
Jewelry and silverware manufacturing	0	1,603	2,853	9,655
Sporting and athletic goods manufacturing	0	3,592	5,051	14,400
Doll, toy, and game manufacturing	0	1,842	3,027	9,656
Office supplies (except paper) manufacturing	0	1,094	1,500	5,796
Sign manufacturing	0	15,445	13,268	42,122
Gasket, packing, and sealing device manufacturing	0	84	108	460
Musical instrument manufacturing	0	92	100	590
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	5,302	8,251	31,628
Burial casket manufacturing	0	2,596	3,103	6,657
All other miscellaneous manufacturing	0	2,742	3,433	14,671
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	73,958	193,190	415,803
Wholesale - Professional and commercial equipment and supplies	4	358,706	666,207	1,239,013
Wholesale - Household appliances and electrical and electronic goods	8	520,421	1,333,506	3,189,361
Wholesale - Machinery, equipment, and supplies	3	195,372	381,381	693,125
Wholesale - Other durable goods merchant wholesalers	4	274,141	460,163	970,758
Wholesale - Drugs and druggists' sundries	2	237,070	748,560	1,446,629
Wholesale - Grocery and related product wholesalers	8	472,895	683,571	1,397,408
Wholesale - Petroleum and petroleum products	1	60,945	980,351	1,128,738
Wholesale - Other nondurable goods merchant wholesalers	7	392,798	899,124	1,794,276
Wholesale - Wholesale electronic markets and agents and brokers	5	339,241	201,094	239,332
Retail - Motor vehicle and parts dealers	11	576,872	995,370	1,443,119



## APPENDIX

Retail - Furniture and home furnishings stores	7	219,358	324,697	575,535
Retail - Electronics and appliance stores	6	297,527	356,987	573,089
Retail - Building material and garden equipment and supplies stores	8	306,066	649,523	943,437
Retail - Food and beverage stores	28	734,853	1,129,986	1,938,256
Retail - Health and personal care stores	17	724,273	922,128	1,398,534
Retail - Gasoline stores	11	309,350	606,056	1,147,812
Retail - Clothing and clothing accessories stores	19	369,994	707,909	1,541,566
Retail - Sporting goods, hobby, musical instrument and book stores	10	188,047	277,841	502,196
Retail - General merchandise stores	36	1,006,589	1,582,221	2,562,881
Retail - Miscellaneous store retailers	22	388,183	535,507	945,713
Retail - Nonstore retailers	15	238,055	934,815	2,071,924
Air transportation	1	115,877	203,571	315,367
Rail transportation	1	169,749	462,827	770,473
Water transportation	0	37,217	58,750	243,596
Truck transportation	22	996,581	1,307,881	3,256,173
Transit and ground passenger transportation	12	205,023	270,870	447,950
Pipeline transportation	1	178,896	374,789	533,886
Scenic and sightseeing transportation and support activities for transportation	7	375,056	442,100	1,030,683
Couriers and messengers	11	412,175	561,001	1,064,567
Warehousing and storage	16	750,786	863,791	1,794,421
Newspaper publishers	4	144,179	263,244	366,356
Periodical publishers	1	72,810	119,701	226,897
Book publishers	0	8,198	29,492	59,531
Directory, mailing list, and other publishers	0	18,472	63,952	101,888
Greeting card publishing	0	0	0	0
Software publishers	1	54,115	167,962	206,797
Motion picture and video industries	2	63,574	115,648	381,186
Sound recording industries	0	16,314	61,532	95,084
Radio and television broadcasting	4	223,890	110,263	1,169,120

## APPENDIX

Cable and other subscription programming	0	1,310	8,289	37,726
Wired telecommunications carriers	5	426,842	953,227	2,282,239
Wireless telecommunications carriers (except satellite)	2	218,976	942,475	3,299,198
Satellite, telecommunications resellers, and all other telecommunications	0	19,692	30,618	118,635
Data processing, hosting, and related services	3	165,316	539,837	1,263,234
News syndicates, libraries, archives and all other information services	0	16,775	29,123	49,407
Internet publishing and broadcasting and web search portals	1	81,570	227,693	669,984
Nondepository credit intermediation and related activities	13	581,176	861,979	1,924,294
Securities and commodity contracts intermediation and brokerage	6	351,700	354,911	1,151,653
Monetary authorities and depository credit intermediation	39	2,767,309	7,865,751	13,804,488
Other financial investment activities	18	169,967	203,911	1,793,456
Direct life insurance carriers	2	237,714	753,696	1,003,923
Insurance carriers, except direct life	4	357,401	2,023,099	3,335,725
Insurance agencies, brokerages, and related activities	16	710,395	1,360,805	3,531,128
Funds, trusts, and other financial vehicles	6	160,317	235,101	1,943,949
Other real estate	67	867,209	3,029,007	10,678,315
Tenant-occupied housing	16	190,636	3,322,024	3,947,558
Owner-occupied dwellings	0	0	11,929,278	15,072,504
Automotive equipment rental and leasing	3	134,114	697,764	982,997
General and consumer goods rental except video tapes and discs	4	173,652	279,302	463,063
Video tape and disc rental	1	31,883	58,666	98,169
Commercial and industrial machinery and equipment rental and leasing	3	179,623	592,612	900,467
Lessors of nonfinancial intangible assets	0	4,884	239,767	325,312

## APPENDIX

Legal services	22	1,387,506	2,204,806	3,685,070
Accounting, tax preparation, bookkeeping, and payroll services	29	1,479,677	1,748,318	2,872,390
Architectural, engineering, and related services	5	348,045	387,630	793,385
Specialized design services	4	171,165	180,476	246,695
Custom computer programming services	3	177,608	216,738	349,254
Computer systems design services	6	417,449	434,049	643,539
Other computer related services, including facilities management	1	63,794	131,327	257,078
Management consulting services	823	44,054,156	43,811,005	82,788,711
Environmental and other technical consulting services	10	562,158	486,950	826,621
Scientific research and development services	16	952,609	1,281,816	3,347,630
Advertising, public relations, and related services	8	336,732	433,524	1,031,991
Photographic services	5	215,445	100,773	202,564
Veterinary services	2	73,035	92,774	165,042
Marketing research and all other miscellaneous professional, scientific, and technical services	76	3,908,689	3,428,328	5,427,435
Management of companies and enterprises	45	3,983,597	4,757,910	7,609,137
Office administrative services	12	393,125	152,686	618,191
Facilities support services	5	179,107	238,276	620,924
Employment services	103	3,168,068	4,886,539	8,599,310
Business support services	24	695,445	592,135	1,286,236
Travel arrangement and reservation services	2	47,327	61,945	259,994
Investigation and security services	16	357,581	368,164	650,856
Services to buildings	37	561,249	593,416	1,265,338
Landscape and horticultural services	19	337,489	364,024	810,983
Other support services	6	166,328	212,161	512,473
Waste management and remediation services	4	219,132	433,358	804,819
Elementary and secondary schools	8	246,199	219,876	293,989
Junior colleges, colleges, universities, and professional schools	8	253,165	355,334	567,836
Other educational services	11	267,589	245,571	504,621
Offices of physicians	39	3,685,957	4,421,100	6,728,881
Offices of dentists	11	675,248	868,310	1,346,162

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Offices of other health practitioners	18	1,022,804	960,398	1,347,810
Outpatient care centers	8	434,237	456,670	922,294
Medical and diagnostic laboratories	3	152,437	222,987	404,945
Home health care services	20	1,221,364	1,015,117	1,275,502
Other ambulatory health care services	5	244,189	270,636	466,612
Hospitals	59	3,793,948	4,479,376	9,353,357
Nursing and community care facilities	26	997,043	1,061,084	1,921,795
Residential mental retardation, mental health, substance abuse and other facilities	6	198,818	206,273	342,889
Individual and family services	28	695,586	623,285	984,434
Child day care services	15	322,753	368,381	538,897
Community food, housing, and other relief services, including rehabilitation services	6	141,219	155,429	465,987
Performing arts companies	3	33,087	65,451	204,597
Commercial Sports Except Racing	3	28,163	54,350	190,537
Racing and Track Operation	0	6,217	11,309	32,633
Independent artists, writers, and performers	10	51,661	95,766	155,504
Promoters of performing arts and sports and agents for public figures	2	20,093	64,005	234,447
Museums, historical sites, zoos, and parks	1	21,050	26,525	52,545
Amusement parks and arcades	0	7,125	23,388	33,199
Gambling industries (except casino hotels)	4	103,807	251,215	440,768
Other amusement and recreation industries	4	91,119	133,420	229,778
Fitness and recreational sports centers	4	74,189	125,185	193,732
Bowling centers	1	9,864	16,568	29,550
Hotels and motels, including casino hotels	5	159,779	288,062	500,458
Other accommodations	1	21,971	29,245	44,026
Full-service restaurants	70	1,340,081	2,096,641	3,999,900
Limited-service restaurants	62	987,721	1,697,300	4,144,679
All other food and drinking places	50	1,182,665	1,761,657	2,784,602
Automotive repair and maintenance, except car washes	18	736,421	1,098,463	1,657,351
Car washes	9	388,837	675,660	1,013,231

## APPENDIX

Electronic and precision equipment repair and maintenance	805	35,890,484	55,503,859	104,694,123
Commercial and industrial machinery and equipment repair and maintenance	7	420,874	564,912	931,223
Personal and household goods repair and maintenance	7	234,606	296,993	398,540
Personal care services	16	287,218	318,445	434,631
Death care services	1	30,833	53,485	84,008
Dry-cleaning and laundry services	8	225,672	282,837	427,307
Other personal services	13	225,392	270,367	380,731
Religious organizations	21	758,438	757,893	2,143,681
Grantmaking, giving, and social advocacy organizations	3	119,282	774,732	1,047,660
Business and professional associations	4	136,539	337,275	669,926
Labor and civic organizations	5	88,599	378,376	626,664
Private households	9	111,397	111,397	111,397
Postal service	12	912,443	913,344	1,020,753
Federal electric utilities	1	136,975	266,078	972,328
Other federal government enterprises	9	364,705	(270,637)	731,658
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	1	116,822	146,916	267,425
Local government passenger transit	1	92,056	(17,878)	111,618
Local government electric utilities	2	130,571	393,633	923,803
Other local government enterprises	8	388,973	893,846	2,101,399
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

## APPENDIX

* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	252	37,748,467	52,000,052	107,855,977

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 420: Detailed M2M Program Impacts by Types of Impact, Mississippi.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>493</i>	<i>28,031,155</i>	<i>40,411,323</i>	<i>77,075,626</i>
Oilseed farming	0	31,112	86,626	222,900
Grain farming	0	6,706	12,917	61,530
Vegetable and melon farming	0	5,270	7,719	31,896
Fruit farming	0	1,240	1,878	6,541
Tree nut farming	0	1,604	1,664	4,519
Greenhouse, nursery, and floriculture production	0	1,057	1,373	5,368
Tobacco farming	0	0	0	0
Cotton farming	0	1,873	2,383	9,137
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	2,815	3,333	13,414
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1,819	3,993	18,642
Dairy cattle and milk production	0	262	504	4,274
Poultry and egg production	0	5,085	7,047	155,164
Animal production, except cattle and poultry and eggs	1	9,041	23,089	53,420
Forestry, forest products, and timber tract production	0	897	900	1,223
Commercial logging	0	5,559	5,406	8,775
Commercial fishing	0	3,200	4,438	6,289
Commercial hunting and trapping	0	2,644	1,957	2,013
Support activities for agriculture and forestry	0	21,129	17,562	21,325
Oil and gas extraction	0	6,893	12,529	102,484
Coal mining	0	1,262	2,445	4,803
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	99	161	913
Sand and gravel mining	0	1,874	1,588	3,262
Other clay, ceramic, refractory minerals mining	0	316	367	729
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	5	7	29
Drilling oil and gas wells	0	4	5	22
Support activities for oil and gas operations	0	177	215	831
Metal mining services	0	59	116	1,051
Other nonmetallic minerals services	0	9	16	139
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	44,872	164,777	411,539
Electric power generation - Nuclear	0	41,999	97,535	214,221
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	1	109,069	422,080	1,154,467
Natural gas distribution	0	9,805	34,739	102,156
Water, sewage and other systems	0	9,398	21,222	48,176
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	41,642	53,464	155,273
Maintenance and repair construction of residential structures	1	33,287	48,085	137,169
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	61	39	111
Dog and cat food manufacturing	0	618	2,709	10,705
Other animal food manufacturing	0	2,319	4,255	34,955
Flour milling	0	0	0	0
Rice milling	0	418	712	4,964
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	321	1,878	16,711
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	26	29	121
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	144	156	943
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	2,306	3,518	18,030
Canned fruits and vegetables manufacturing	0	56	63	316



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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	463	783	3,395
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	3,186	5,473	45,345
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	37	41	169
Frozen cakes and other pastries manufacturing	0	1,622	2,519	4,830
Poultry processing	1	34,606	49,518	250,234
Animal, except poultry, slaughtering	0	618	813	9,068
Meat processed from carcasses	0	4,937	5,634	54,454
Rendering and meat byproduct processing	0	783	713	4,092
Seafood product preparation and packaging	0	4,853	6,402	36,889
Bread and bakery product, except frozen, manufacturing	0	7,499	9,947	25,775
Cookie and cracker manufacturing	0	1,994	3,001	11,720
Dry pasta, mixes, and dough manufacturing	0	120	277	1,225
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	759	1,059	5,639
Other snack food manufacturing	0	1,034	2,010	10,580
Coffee and tea manufacturing	0	68	75	477
Flavoring syrup and concentrate manufacturing	0	1,534	11,362	21,732
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	735	1,169	5,984
All other food manufacturing	0	1,026	1,326	6,312
Bottled and canned soft drinks & water	0	3,084	6,998	35,646
Manufactured ice	0	573	301	1,610
Breweries	0	176	666	2,746
Wineries	0	7	14	84
Distilleries	0	140	1,304	2,933
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	26	99	424
Broadwoven fabric mills	0	543	1,681	3,219

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	2,770	13,014	20,002
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	91	201	617
Fabric coating mills	0	82	190	773
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	423	1,249	2,591
Textile bag and canvas mills	0	28	59	146
Rope, cordage, twine, tire cord and tire fabric mills	0	35	137	230
Other textile product mills	0	706	1,393	3,125
Hosiery and sock mills	0	66	95	204
Other apparel knitting mills	0	65	95	219
Cut and sew apparel contractors	0	142	159	412
Mens and boys cut and sew apparel manufacturing	0	822	1,211	3,190
Womens and girls cut and sew apparel manufacturing	0	132	250	707
Other cut and sew apparel manufacturing	0	92	145	396
Apparel accessories and other apparel manufacturing	0	485	699	1,429
Leather and hide tanning and finishing	0	23	55	299
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	88	96	325
Sawmills	0	4,128	8,131	22,131
Wood preservation	0	207	1,154	2,934
Veneer and plywood manufacturing	0	1,471	2,939	7,690
Engineered wood member and truss manufacturing	0	59	106	370
Reconstituted wood product manufacturing	0	728	3,002	7,887
Wood windows and door manufacturing	0	259	483	1,618
Cut stock, resawing lumber, and planing	0	768	2,065	4,368
Other millwork, including flooring	0	372	754	1,983
Wood container and pallet manufacturing	0	2,621	3,758	9,304
Manufactured home (mobile home) manufacturing	0	3	7	18

## APPENDIX

Prefabricated wood building manufacturing	0	285	379	1,344
All other miscellaneous wood product manufacturing	0	1,864	3,054	6,565
Pulp mills	0	246	374	1,121
Paper mills	0	8,645	17,847	80,542
Paperboard mills	0	1,045	2,276	6,365
Paperboard container manufacturing	0	12,643	18,237	73,077
Paper bag and coated and treated paper manufacturing	0	576	941	3,886
Stationery product manufacturing	0	579	780	3,621
Sanitary paper product manufacturing	0	1,952	5,353	23,905
All other converted paper product manufacturing	0	70	100	542
Printing	0	13,486	32,863	63,453
Support activities for printing	0	212	523	821
Petroleum refineries	0	19,838	121,474	707,766
Asphalt paving mixture and block manufacturing	0	649	988	4,855
Asphalt shingle and coating materials manufacturing	0	437	1,120	3,403
Petroleum lubricating oil and grease manufacturing	0	216	691	2,975
All other petroleum and coal products manufacturing	0	271	702	2,751
Petrochemical manufacturing	0	412	2,238	12,298
Industrial gas manufacturing	0	1,229	2,578	11,640
Synthetic dye and pigment manufacturing	0	1,249	2,139	7,488
Other basic inorganic chemical manufacturing	0	156	281	1,092
Other basic organic chemical manufacturing	0	233	417	5,420
Plastics material and resin manufacturing	0	1,373	1,962	13,120
Synthetic rubber manufacturing	0	69	94	456
Artificial and synthetic fibers and filaments manufacturing	0	31	43	453
Nitrogenous fertilizer manufacturing	0	1,027	2,019	7,903
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	2	4	30

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	2,412	6,134	38,292
Medicinal and botanical manufacturing	0	4	7	38
Pharmaceutical preparation manufacturing	0	2,763	8,607	38,641
In-vitro diagnostic substance manufacturing	0	20	27	140
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	813	1,360	7,092
Adhesive manufacturing	0	57	85	570
Soap and other detergent manufacturing	0	1,166	3,598	18,115
Polish and other sanitation good manufacturing	0	501	947	6,426
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	821	2,155	9,269
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	1,365	2,111	8,204
Photographic film and chemical manufacturing	0	531	1,001	3,357
Other miscellaneous chemical product manufacturing	0	1,018	1,423	6,650
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,757	4,050	12,723
Unlaminated plastics profile shape manufacturing	0	192	634	1,412
Plastics pipe and pipe fitting manufacturing	0	75	284	673
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	180	491	1,089
Polystyrene foam product manufacturing	0	856	2,039	6,765
Urethane and other foam product (except polystyrene) manufacturing	0	2,599	5,744	23,054
Plastics bottle manufacturing	0	31	71	223
Other plastics product manufacturing	0	4,628	9,239	26,993
Tire manufacturing	0	4,710	8,193	32,090

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	154	354	870
Other rubber product manufacturing	0	764	1,493	4,485
Pottery, ceramics, and plumbing fixture manufacturing	0	149	167	458
Brick, tile, and other structural clay product manufacturing	0	414	740	1,963
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	55	60	172
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	397	699	1,985
Cement manufacturing	0	14	36	117
Ready-mix concrete manufacturing	0	2,021	3,685	12,359
Concrete block and brick manufacturing	0	457	857	2,425
Concrete pipe manufacturing	0	125	227	666
Other concrete product manufacturing	0	1,077	1,654	4,127
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	46	145	464
Abrasive product manufacturing	0	41	120	291
Cut stone and stone product manufacturing	0	815	954	2,084
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	500	1,354	3,022
Miscellaneous nonmetallic mineral products manufacturing	0	7	18	53
Iron and steel mills and ferroalloy manufacturing	0	2,755	6,189	23,638
Iron, steel pipe and tube manufacturing from purchased steel	0	(90)	61	1,098
Rolled steel shape manufacturing	0	111	436	2,235
Steel wire drawing	0	(419)	(297)	66
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	16	110	583

## APPENDIX

Other aluminum rolling, drawing and extruding	0	(74)	(43)	241
Nonferrous metal (exc aluminum) smelting and refining	0	30	225	570
Copper rolling, drawing, extruding and alloying	0	1,001	1,692	12,617
Nonferrous metal, except copper and aluminum, shaping	0	(14)	3	165
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	187	547	1,315
Nonferrous metal foundries	0	(338)	(304)	41
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	163	193	888
Iron and steel forging	0	71	86	365
Nonferrous forging	0	169	197	771
Cutlery, utensil, pot, and pan manufacturing	0	130	272	918
Handtool manufacturing	0	87	108	279
Prefabricated metal buildings and components manufacturing	0	158	192	572
Fabricated structural metal manufacturing	0	1,272	1,618	5,297
Plate work manufacturing	0	532	549	1,658
Metal window and door manufacturing	0	826	1,088	2,979
Sheet metal work manufacturing	0	1,364	1,579	4,479
Ornamental and architectural metal work manufacturing	0	318	362	887
Power boiler and heat exchanger manufacturing	0	22	28	74
Metal tank (heavy gauge) manufacturing	0	186	209	570
Metal cans manufacturing	0	199	353	1,859
Metal barrels, drums and pails manufacturing	0	110	124	449
Hardware manufacturing	0	898	1,256	5,056
Spring and wire product manufacturing	0	591	710	2,194
Machine shops	0	2,858	3,079	5,874
Turned product and screw, nut, and bolt manufacturing	0	182	219	633
Metal heat treating	0	139	178	532

## APPENDIX

Metal coating and nonprecious engraving	0	1,197	1,696	3,619
Electroplating, anodizing, and coloring metal	0	302	320	619
Valve and fittings, other than plumbing, manufacturing	0	127	169	506
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	781	1,178	3,220
Small arms ammunition manufacturing	0	3,213	5,902	13,624
Ammunition, except for small arms, manufacturing	0	5	6	13
Small arms, ordnance, and accessories manufacturing	0	61	63	123
Fabricated pipe and pipe fitting manufacturing	0	103	112	297
Other fabricated metal manufacturing	0	389	446	1,317
Farm machinery and equipment manufacturing	0	121	195	797
Lawn and garden equipment manufacturing	0	354	666	2,988
Construction machinery manufacturing	0	39	86	252
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	37	45	190
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	3	4	13
Sawmill, woodworking, and paper machinery	0	78	88	269
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	4	5	15
Optical instrument and lens manufacturing	0	3	4	16
Photographic and photocopying equipment manufacturing	0	2	3	37

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Other commercial service industry machinery manufacturing	0	158	333	1,004
Air purification and ventilation equipment manufacturing	0	8	13	44
Heating equipment (except warm air furnaces) manufacturing	0	14	22	79
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,824	3,749	12,579
Industrial mold manufacturing	0	11	13	32
Special tool, die, jig, and fixture manufacturing	0	92	122	277
Cutting tool and machine tool accessory manufacturing	0	6	7	28
Machine tool manufacturing	0	49	56	180
Rolling mill and other metalworking machinery manufacturing	0	8	10	27
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	80	126	314
Mechanical power transmission equipment manufacturing	0	25	39	98
Other engine equipment manufacturing	0	2,179	4,445	20,801
Pump and pumping equipment manufacturing	0	5	10	43
Air and gas compressor manufacturing	0	2	3	16
Elevator and moving stairway manufacturing	0	12	21	76
Conveyor and conveying equipment manufacturing	0	47	49	153
Overhead cranes, hoists, and monorail systems manufacturing	0	2	5	19
Industrial truck, trailer, and stacker manufacturing	0	207	342	1,047
Power-driven handtool manufacturing	0	1,083	3,011	7,719
Welding and soldering equipment manufacturing	0	2	3	10
Packaging machinery manufacturing	0	1	1	4



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Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	96	141	503
Fluid power pump and motor manufacturing	0	312	518	1,499
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	50	68	216
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	69	102	537
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	43	54	263
Other communications equipment manufacturing	0	3	4	46
Audio and video equipment manufacturing	0	9	14	130
Printed circuit assembly (electronic assembly) manufacturing	0	6,619	8,309	42,111
Bare printed circuit board manufacturing	0	37	44	181
Semiconductor and related device manufacturing	0	4,104	5,962	46,116
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	120	149	540
Electronic connector manufacturing	0	2,705	3,435	13,440
Other electronic component manufacturing	0	1,270	1,411	5,991
Electromedical and electrotherapeutic apparatus manufacturing	0	3	4	14
Search, detection, and navigation instruments manufacturing	0	16	20	54
Automatic environmental control manufacturing	0	0	0	0

## APPENDIX

Industrial process variable instruments manufacturing	0	21	26	78
Totalizing fluid meter and counting device manufacturing	0	3	5	22
Electricity and signal testing instruments manufacturing	0	6	8	51
Analytical laboratory instrument manufacturing	0	3,249	4,581	10,745
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	1,162	1,902	5,294
Small electrical appliance manufacturing	0	311	735	1,881
Household cooking appliance manufacturing	0	26	73	314
Household refrigerator and home freezer manufacturing	0	23	78	284
Household laundry equipment manufacturing	0	45	115	735
Other major household appliance manufacturing	0	10	30	140
Power, distribution, and specialty transformer manufacturing	0	3,209	5,365	15,110
Motor and generator manufacturing	0	740	1,253	3,988
Switchgear and switchboard apparatus manufacturing	0	1,341	2,512	6,413
Relay and industrial control manufacturing	0	148	215	534
Storage battery manufacturing	0	260	447	1,590
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	221	440	1,780
Wiring device manufacturing	0	241	561	1,422

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Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	5,043	11,392	83,534
Light truck and utility vehicle manufacturing	0	2,545	5,966	60,552
Heavy duty truck manufacturing	0	72	140	1,122
Motor vehicle body manufacturing	0	580	701	3,119
Truck trailer manufacturing	0	4	4	20
Motor home manufacturing	0	3,463	5,402	22,201
Travel trailer and camper manufacturing	0	1,797	1,906	9,574
Motor vehicle gasoline engine and engine parts manufacturing	0	2,149	2,723	15,546
Motor vehicle electrical and electronic equipment manufacturing	0	2,624	3,090	19,055
Motor vehicle transmission and power train parts manufacturing	0	4,205	5,688	25,255
Motor vehicle seating and interior trim manufacturing	0	1,358	1,692	11,872
Motor vehicle metal stamping	0	1,223	1,477	6,614
Other motor vehicle parts manufacturing	0	8,032	9,468	60,787
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	888	1,220	5,348
Aircraft manufacturing	0	0	0	2
Aircraft engine and engine parts manufacturing	0	1	1	4
Other aircraft parts and auxiliary equipment manufacturing	0	20	31	72
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	137	189	409
Railroad rolling stock manufacturing	0	17	28	120
Ship building and repairing	0	1,044	1,345	2,995
Boat building	0	2,907	4,056	13,053
Motorcycle, bicycle, and parts manufacturing	0	74	208	498

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Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	805	972	2,172
Upholstered household furniture manufacturing	0	21,877	30,142	95,003
Nonupholstered wood household furniture manufacturing	0	345	384	992
Other household nonupholstered furniture manufacturing	0	19	29	76
Institutional furniture manufacturing	0	74	80	259
Wood office furniture manufacturing	0	3	4	13
Custom architectural woodwork and millwork	0	32	31	83
Office furniture, except wood, manufacturing	0	96	161	525
Showcase, partition, shelving, and locker manufacturing	0	492	629	2,175
Mattress manufacturing	0	702	1,276	4,706
Blind and shade manufacturing	0	84	87	382
Surgical and medical instrument manufacturing	0	230	458	1,256
Surgical appliance and supplies manufacturing	0	359	742	2,033
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	16	34	79
Dental laboratories	0	294	285	561
Jewelry and silverware manufacturing	0	268	470	1,529
Sporting and athletic goods manufacturing	0	551	753	2,086
Doll, toy, and game manufacturing	0	360	554	1,579
Office supplies (except paper) manufacturing	0	216	298	1,052
Sign manufacturing	0	1,703	1,498	4,437
Gasket, packing, and sealing device manufacturing	0	11	14	59
Musical instrument manufacturing	0	30	32	147
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0

## APPENDIX

Broom, brush, and mop manufacturing	0	967	1,724	5,383
Burial casket manufacturing	0	257	307	645
All other miscellaneous manufacturing	0	406	506	2,087
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	10,873	28,402	61,122
Wholesale - Professional and commercial equipment and supplies	1	51,916	96,570	175,590
Wholesale - Household appliances and electrical and electronic goods	1	70,459	181,254	426,205
Wholesale - Machinery, equipment, and supplies	0	23,878	46,773	84,644
Wholesale - Other durable goods merchant wholesalers	1	37,464	62,968	131,838
Wholesale - Drugs and druggists' sundries	0	34,423	106,894	201,812
Wholesale - Grocery and related product wholesalers	1	65,520	93,908	191,988
Wholesale - Petroleum and petroleum products	0	7,454	135,339	153,366
Wholesale - Other nondurable goods merchant wholesalers	1	54,622	129,112	252,491
Wholesale - Wholesale electronic markets and agents and brokers	1	46,367	26,049	31,004
Retail - Motor vehicle and parts dealers	2	78,629	136,450	196,199
Retail - Furniture and home furnishings stores	1	31,215	46,186	80,505
Retail - Electronics and appliance stores	1	41,877	50,441	79,410
Retail - Building material and garden equipment and supplies stores	1	42,425	90,024	129,240
Retail - Food and beverage stores	4	110,985	168,836	282,761
Retail - Health and personal care stores	2	99,584	127,562	192,790
Retail - Gasoline stores	1	48,064	87,535	156,405
Retail - Clothing and clothing accessories stores	3	54,440	103,335	218,423
Retail - Sporting goods, hobby, musical instrument and book stores	1	26,170	38,779	68,795

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Retail - General merchandise stores	5	134,119	212,418	341,638
Retail - Miscellaneous store retailers	3	56,719	77,507	132,135
Retail - Nonstore retailers	2	36,084	143,362	302,662
Air transportation	0	15,119	27,230	41,549
Rail transportation	0	19,059	45,907	81,457
Water transportation	0	6,756	10,314	41,972
Truck transportation	3	152,236	195,164	472,175
Transit and ground passenger transportation	2	30,337	40,248	62,646
Pipeline transportation	0	11,213	25,858	37,645
Scenic and sightseeing transportation and support activities for transportation	1	47,166	56,248	131,049
Couriers and messengers	1	57,081	80,383	148,978
Warehousing and storage	2	108,921	125,060	257,566
Newspaper publishers	0	18,243	32,347	44,353
Periodical publishers	0	11,744	18,937	33,095
Book publishers	0	1,167	3,983	8,036
Directory, mailing list, and other publishers	0	1,633	5,744	9,108
Greeting card publishing	0	0	0	0
Software publishers	0	8,223	25,221	30,304
Motion picture and video industries	0	12,868	23,660	64,557
Sound recording industries	0	3,017	10,748	15,311
Radio and television broadcasting	0	43,567	23,458	168,597
Cable and other subscription programming	0	264	1,330	5,027
Wired telecommunications carriers	1	59,719	124,087	288,846
Wireless telecommunications carriers (except satellite)	0	39,020	136,880	464,750
Satellite, telecommunications resellers, and all other telecommunications	0	3,200	4,347	15,120
Data processing, hosting, and related services	0	21,448	65,815	147,016
News syndicates, libraries, archives and all other information services	0	2,317	4,008	6,390
Internet publishing and broadcasting and web search portals	0	19,197	51,006	129,310

## APPENDIX

Nondepository credit intermediation and related activities	2	86,365	129,693	272,648
Securities and commodity contracts intermediation and brokerage	1	50,655	50,241	152,567
Monetary authorities and depository credit intermediation	4	308,099	905,061	1,542,507
Other financial investment activities	2	32,809	38,269	268,436
Direct life insurance carriers	0	29,089	95,268	123,844
Insurance carriers, except direct life	0	46,691	271,811	431,366
Insurance agencies, brokerages, and related activities	2	77,845	150,194	377,010
Funds, trusts, and other financial vehicles	1	27,374	39,435	275,552
Other real estate	8	131,099	454,234	1,393,274
Tenant-occupied housing	2	31,903	524,176	613,882
Owner-occupied dwellings	0	0	1,867,240	2,359,235
Automotive equipment rental and leasing	0	21,800	93,783	126,913
General and consumer goods rental except video tapes and discs	0	25,895	39,127	60,826
Video tape and disc rental	0	4,716	8,372	13,662
Commercial and industrial machinery and equipment rental and leasing	0	26,301	74,657	110,112
Lessors of nonfinancial intangible assets	0	597	28,926	39,000
Legal services	3	175,956	290,709	474,216
Accounting, tax preparation, bookkeeping, and payroll services	3	180,740	214,252	343,408
Architectural, engineering, and related services	1	38,997	43,691	88,029
Specialized design services	0	19,928	21,060	28,248
Custom computer programming services	0	22,273	26,996	42,483
Computer systems design services	1	57,232	59,299	86,443
Other computer related services, including facilities management	0	9,363	18,534	34,641
Management consulting services	76	4,351,915	4,335,803	7,967,389
Environmental and other technical consulting services	1	78,764	68,816	114,999

## APPENDIX

Scientific research and development services	1	72,574	98,798	239,366
Advertising, public relations, and related services	1	44,287	56,738	128,958
Photographic services	1	26,942	13,272	25,252
Veterinary services	0	10,537	13,574	23,508
Marketing research and all other miscellaneous professional, scientific, and technical services	64	3,409,385	2,977,774	4,641,352
Management of companies and enterprises	5	525,372	633,371	981,350
Office administrative services	2	65,944	26,088	95,544
Facilities support services	1	22,979	30,487	74,602
Employment services	13	420,199	665,080	1,126,771
Business support services	2	69,680	60,484	127,272
Travel arrangement and reservation services	0	5,538	7,307	29,445
Investigation and security services	2	48,334	49,888	85,494
Services to buildings	5	79,415	84,197	170,987
Landscape and horticultural services	2	38,063	41,142	88,289
Other support services	1	18,923	24,191	57,995
Waste management and remediation services	0	28,180	56,082	102,715
Elementary and secondary schools	1	45,980	40,880	53,757
Junior colleges, colleges, universities, and professional schools	1	51,822	72,079	109,432
Other educational services	2	43,551	40,090	79,405
Offices of physicians	5	517,822	625,986	945,273
Offices of dentists	2	99,438	129,229	197,564
Offices of other health practitioners	2	143,954	136,260	190,783
Outpatient care centers	1	67,433	71,202	141,646
Medical and diagnostic laboratories	0	22,062	33,135	58,239
Home health care services	3	170,613	143,428	181,468
Other ambulatory health care services	1	35,688	39,793	67,500
Hospitals	9	596,293	701,115	1,428,649
Nursing and community care facilities	4	147,313	157,016	276,974
Residential mental retardation, mental health, substance abuse and other facilities	1	33,126	34,387	56,001



## APPENDIX

Individual and family services	5	113,690	103,668	162,769
Child day care services	2	49,611	57,464	82,026
Community food, housing, and other relief services, including rehabilitation services	1	24,636	27,453	79,542
Performing arts companies	0	5,434	10,410	29,507
Commercial Sports Except Racing	0	3,676	7,074	24,278
Racing and Track Operation	0	998	1,726	4,791
Independent artists, writers, and performers	1	8,157	14,751	22,900
Promoters of performing arts and sports and agents for public figures	0	3,235	9,448	32,379
Museums, historical sites, zoos, and parks	0	3,415	4,254	8,168
Amusement parks and arcades	0	1,160	3,322	4,765
Gambling industries (except casino hotels)	1	16,244	37,055	64,204
Other amusement and recreation industries	1	12,265	17,242	29,580
Fitness and recreational sports centers	1	11,584	18,278	27,895
Bowling centers	0	1,427	2,311	4,075
Hotels and motels, including casino hotels	1	26,797	46,265	79,170
Other accommodations	0	4,694	6,147	9,051
Full-service restaurants	9	178,028	280,196	523,281
Limited-service restaurants	8	143,811	245,685	578,856
All other food and drinking places	6	166,136	243,551	374,088
Automotive repair and maintenance, except car washes	3	109,594	157,044	235,506
Car washes	1	56,110	97,132	144,582
Electronic and precision equipment repair and maintenance	99	5,161,142	7,990,091	14,181,821
Commercial and industrial machinery and equipment repair and maintenance	1	53,376	70,392	115,479
Personal and household goods repair and maintenance	1	32,597	36,879	49,530
Personal care services	2	45,923	46,596	64,300
Death care services	0	5,129	8,412	13,145
Dry-cleaning and laundry services	1	29,811	36,748	55,489
Other personal services	2	35,975	37,829	54,821
Religious organizations	4	132,237	102,858	342,988
Grantmaking, giving, and social advocacy organizations	1	23,935	133,368	180,340

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Business and professional associations	0	19,537	43,754	83,769
Labor and civic organizations	1	15,432	58,284	98,556
Private households	1	18,546	18,546	18,546
Postal service	1	110,627	110,743	123,503
Federal electric utilities	0	5,123	10,270	36,691
Other federal government enterprises	0	5,273	(5,000)	9,315
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	7,737	9,480	16,229
Local government passenger transit	0	11,269	(2,707)	9,577
Local government electric utilities	0	9,511	26,366	60,338
Other local government enterprises	1	54,077	115,052	268,363
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	40	6,039,845	8,250,938	17,252,439

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 27. Missouri

**Table 421: Detailed NASA Impacts by Types of Impact, Missouri.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>734</i>	<i>46,573,182</i>	<i>66,168,728</i>	<i>127,001,292</i>
Oilseed farming	1	46,554	116,901	343,657
Grain farming	1	16,703	40,312	214,363
Vegetable and melon farming	0	1,413	2,113	8,395
Fruit farming	0	785	1,298	4,407
Tree nut farming	0	769	801	1,739
Greenhouse, nursery, and floriculture production	0	2,953	3,799	12,952
Tobacco farming	0	17	15	49
Cotton farming	0	1,754	2,283	7,641
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	3,647	3,712	15,350
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	2	4,575	14,553	90,276
Dairy cattle and milk production	0	644	1,308	13,943
Poultry and egg production	0	2,967	4,178	77,034
Animal production, except cattle and poultry and eggs	2	19,118	54,189	146,208
Forestry, forest products, and timber tract production	0	1,169	1,236	1,667
Commercial logging	0	10,383	10,466	17,125
Commercial fishing	0	(646)	125	289
Commercial hunting and trapping	0	48	210	1,243
Support activities for agriculture and forestry	1	28,523	22,282	28,431
Oil and gas extraction	0	5,110	1,990	104,443
Coal mining	0	3,316	5,963	9,015
Copper, nickel, lead, and zinc mining	0	64,581	290,665	496,452
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	2,179	12,220	32,214
Sand and gravel mining	0	765	1,845	4,774

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Other clay, ceramic, refractory minerals mining	0	(424)	(82)	1,108
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	172	292	554
Other nonmetallic minerals	0	577	847	1,852
Drilling oil and gas wells	0	1	1	8
Support activities for oil and gas operations	0	19	15	193
Metal mining services	0	148	167	1,813
Other nonmetallic minerals services	0	9	7	158
Electric power generation - Hydroelectric	0	1,601	5,113	7,842
Electric power generation - Fossil fuel	0	57,600	221,544	579,019
Electric power generation - Nuclear	0	43,600	97,102	207,911
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	682	4,922	6,902
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	813	270	1,392
Electric power transmission and distribution	1	111,924	420,939	1,169,013
Natural gas distribution	0	47,734	137,016	293,015
Water, sewage and other systems	0	14,705	30,782	65,803
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	4	225,265	80,992	248,825
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	3	183,678	216,299	573,542
Maintenance and repair construction of residential structures	1	57,592	73,820	200,018
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	266	133	382
Dog and cat food manufacturing	0	26,008	98,370	293,415
Other animal food manufacturing	0	6,650	10,614	81,180
Flour milling	0	2,271	4,403	31,067
Rice milling	0	130	221	2,455
Malt manufacturing	0	482	1,036	9,100
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	935	4,729	48,186
Fats and oils refining and blending	0	329	615	6,658
Breakfast cereal manufacturing	0	6,823	17,470	83,565
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	319	380	1,416
Chocolate and confectionery manufacturing from cacao beans	0	94	165	739
Confectionery manufacturing from purchased chocolate	0	2,796	3,429	14,085
Frozen fruits, juices and vegetables manufacturing	0	1,960	3,382	14,750
Frozen specialties manufacturing	0	10,299	14,711	60,711
Canned fruits and vegetables manufacturing	0	2,888	4,721	14,804
Canned specialties	0	198	208	621
Dehydrated food products manufacturing	0	203	260	1,015
Cheese manufacturing	0	12,747	18,630	186,768

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Dry, condensed, and evaporated dairy product manufacturing	0	4,389	10,491	71,492
Fluid milk manufacturing	0	6,402	10,117	67,604
Creamery butter manufacturing	0	407	1,628	10,965
Ice cream and frozen dessert manufacturing	0	2,431	3,831	19,114
Frozen cakes and other pastries manufacturing	0	3,291	4,546	9,589
Poultry processing	0	19,284	25,424	127,268
Animal, except poultry, slaughtering	0	13,103	17,831	150,174
Meat processed from carcasses	0	18,799	20,279	151,496
Rendering and meat byproduct processing	0	465	454	2,476
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	18,720	21,934	50,950
Cookie and cracker manufacturing	0	2,879	3,855	15,833
Dry pasta, mixes, and dough manufacturing	0	2,146	4,752	19,441
Tortilla manufacturing	0	546	547	810
Roasted nuts and peanut butter manufacturing	0	1,013	1,137	6,382
Other snack food manufacturing	0	1,398	1,967	11,642
Coffee and tea manufacturing	0	2,282	2,927	11,329
Flavoring syrup and concentrate manufacturing	0	3,023	14,522	43,746
Mayonnaise, dressing, and sauce manufacturing	0	1,903	3,278	12,417
Spice and extract manufacturing	0	1,696	2,292	9,763
All other food manufacturing	0	4,330	5,308	20,874
Bottled and canned soft drinks & water	0	7,288	14,616	68,168
Manufactured ice	0	1,190	532	3,034
Breweries	0	22,429	55,176	123,029
Wineries	0	497	862	4,908
Distilleries	0	3,536	19,907	43,038
Tobacco product manufacturing	0	303	6,941	11,792
Fiber, yarn, and thread mills	0	60	99	797
Broadwoven fabric mills	0	24	35	229
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	419	836	2,063
Knit fabric mills	0	14	19	50

## APPENDIX

Textile and fabric finishing mills	0	7,841	10,607	47,452
Fabric coating mills	0	657	910	2,703
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	266	422	1,716
Textile bag and canvas mills	0	1,482	1,966	5,291
Rope, cordage, twine, tire cord and tire fabric mills	0	237	431	1,137
Other textile product mills	0	1,549	2,021	5,607
Hosiery and sock mills	0	37	58	161
Other apparel knitting mills	0	691	820	2,303
Cut and sew apparel contractors	0	385	426	1,062
Mens and boys cut and sew apparel manufacturing	0	210	273	1,172
Womens and girls cut and sew apparel manufacturing	0	55	93	761
Other cut and sew apparel manufacturing	0	934	1,147	2,781
Apparel accessories and other apparel manufacturing	0	171	221	872
Leather and hide tanning and finishing	0	549	884	2,530
Footwear manufacturing	0	807	932	3,275
Other leather and allied product manufacturing	0	163	174	579
Sawmills	0	12,934	14,842	57,942
Wood preservation	0	618	1,069	4,655
Veneer and plywood manufacturing	0	19	22	70
Engineered wood member and truss manufacturing	0	1,389	1,591	4,896
Reconstituted wood product manufacturing	0	376	689	3,195
Wood windows and door manufacturing	0	4,096	4,626	12,489
Cut stock, resawing lumber, and planing	0	5,862	7,527	21,684
Other millwork, including flooring	0	5,504	6,488	18,421
Wood container and pallet manufacturing	0	8,535	9,100	21,956
Manufactured home (mobile home) manufacturing	0	1	1	2
Prefabricated wood building manufacturing	0	1,624	1,733	4,253
All other miscellaneous wood product manufacturing	0	6,515	6,802	18,236

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Pulp mills	0	0	0	0
Paper mills	0	5,035	22,818	64,531
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	18,495	41,743	143,014
Paper bag and coated and treated paper manufacturing	0	4,021	12,420	33,680
Stationery product manufacturing	0	896	1,893	6,706
Sanitary paper product manufacturing	0	1,698	10,538	18,702
All other converted paper product manufacturing	0	6,379	13,865	30,395
Printing	2	94,675	177,321	322,148
Support activities for printing	0	4,034	7,518	10,354
Petroleum refineries	0	295	15,285	105,542
Asphalt paving mixture and block manufacturing	0	1,593	3,579	14,696
Asphalt shingle and coating materials manufacturing	0	1,043	4,871	10,547
Petroleum lubricating oil and grease manufacturing	0	3,038	18,175	36,353
All other petroleum and coal products manufacturing	0	722	3,499	8,284
Petrochemical manufacturing	0	739	5,239	24,078
Industrial gas manufacturing	0	1,696	3,715	12,534
Synthetic dye and pigment manufacturing	0	2,596	5,301	16,331
Other basic inorganic chemical manufacturing	0	2,390	4,599	17,711
Other basic organic chemical manufacturing	0	9,431	17,240	143,076
Plastics material and resin manufacturing	0	3,883	5,679	40,383
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	984	1,780	5,014
Phosphatic fertilizer manufacturing	0	86	156	473
Fertilizer mixing	0	805	835	1,865
Pesticide and other agricultural chemical manufacturing	0	6,290	17,275	71,157
Medicinal and botanical manufacturing	0	2,560	4,065	11,519



## APPENDIX

Pharmaceutical preparation manufacturing	0	14,074	43,586	131,974
In-vitro diagnostic substance manufacturing	0	284	371	831
Biological product (except diagnostic) manufacturing	0	4,391	9,937	23,045
Paint and coating manufacturing	0	8,155	10,813	32,908
Adhesive manufacturing	0	3,775	5,678	20,663
Soap and other detergent manufacturing	0	28,909	66,664	195,114
Polish and other sanitation good manufacturing	0	29,888	47,753	147,400
Surface active agent manufacturing	0	789	1,813	4,184
Toilet preparation manufacturing	0	7,428	15,438	41,755
Printing ink manufacturing	0	1,336	1,373	3,682
Explosives manufacturing	0	738	832	2,616
Custom compounding of purchased resins	0	588	881	1,962
Photographic film and chemical manufacturing	0	3,344	5,410	16,840
Other miscellaneous chemical product manufacturing	0	5,587	7,077	23,628
Plastics packaging materials and unlaminated film and sheet manufacturing	0	6,302	10,466	38,152
Unlaminated plastics profile shape manufacturing	0	2,403	5,319	14,683
Plastics pipe and pipe fitting manufacturing	0	395	938	2,964
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	136	246	732
Polystyrene foam product manufacturing	0	1,617	2,739	9,617
Urethane and other foam product (except polystyrene) manufacturing	0	1,997	3,261	13,753
Plastics bottle manufacturing	0	1,933	3,256	14,271
Other plastics product manufacturing	0	26,663	39,841	132,972
Tire manufacturing	0	1,176	1,657	8,644
Rubber and plastics hoses and belting manufacturing	0	4,285	6,907	18,398
Other rubber product manufacturing	0	7,188	10,801	38,030

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	100	140	437
Brick, tile, and other structural clay product manufacturing	0	2,047	3,642	9,002
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	1,504	2,247	6,312
Glass container manufacturing	0	1,845	3,158	9,075
Glass product manufacturing made of purchased glass	0	793	1,356	3,959
Cement manufacturing	0	2,337	5,464	16,864
Ready-mix concrete manufacturing	0	8,512	14,378	60,935
Concrete block and brick manufacturing	0	2,773	5,008	13,433
Concrete pipe manufacturing	0	492	788	2,321
Other concrete product manufacturing	0	3,936	5,715	16,599
Lime manufacturing	0	1,217	2,881	7,645
Gypsum product manufacturing	0	792	2,013	5,929
Abrasive product manufacturing	0	835	2,542	5,210
Cut stone and stone product manufacturing	0	2,564	3,019	7,130
Ground or treated mineral and earth manufacturing	0	1,353	3,850	9,266
Mineral wool manufacturing	0	132	318	1,007
Miscellaneous nonmetallic mineral products manufacturing	0	337	828	2,504
Iron and steel mills and ferroalloy manufacturing	0	2,372	4,299	30,581
Iron, steel pipe and tube manufacturing from purchased steel	0	601	895	3,745
Rolled steel shape manufacturing	0	641	1,288	4,797
Steel wire drawing	0	1,121	1,643	6,943
Alumina refining and primary aluminum production	0	392	818	5,427
Secondary smelting and alloying of aluminum	0	586	967	6,520
Aluminum sheet, plate, and foil manufacturing	0	748	1,407	6,726
Other aluminum rolling, drawing and extruding	0	1,037	1,462	7,289
Nonferrous metal (exc aluminum) smelting and refining	0	30	123	370

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	3,370	4,590	24,277
Nonferrous metal, except copper and aluminum, shaping	0	34	46	173
Secondary processing of other nonferrous metals	0	164	549	2,630
Ferrous metal foundries	0	434	760	1,875
Nonferrous metal foundries	0	3,967	5,894	13,044
Custom roll forming	0	96	143	865
Crown and closure manufacturing and metal stamping	0	2,359	3,438	9,273
Iron and steel forging	0	537	749	2,747
Nonferrous forging	0	261	333	1,314
Cutlery, utensil, pot, and pan manufacturing	0	124	249	875
Handtool manufacturing	1	92,007	150,826	317,732
Prefabricated metal buildings and components manufacturing	0	1,609	2,299	7,577
Fabricated structural metal manufacturing	0	9,848	14,769	46,061
Plate work manufacturing	0	1,683	1,745	5,365
Metal window and door manufacturing	0	4,816	7,651	20,490
Sheet metal work manufacturing	0	4,751	6,186	14,756
Ornamental and architectural metal work manufacturing	0	2,392	3,078	7,792
Power boiler and heat exchanger manufacturing	0	83	118	305
Metal tank (heavy gauge) manufacturing	0	1,918	2,382	7,004
Metal cans manufacturing	0	8,455	20,150	91,677
Metal barrels, drums and pails manufacturing	0	924	1,170	4,985
Hardware manufacturing	0	362	608	1,866
Spring and wire product manufacturing	0	3,466	4,848	15,113
Machine shops	0	20,811	23,888	47,519
Turned product and screw, nut, and bolt manufacturing	0	1,862	2,625	7,765
Metal heat treating	0	1,777	2,836	6,591
Metal coating and nonprecious engraving	0	1,657	2,854	6,257
Electroplating, anodizing, and coloring metal	0	3,868	4,354	9,952

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	4,099	6,870	18,046
Plumbing fixture fitting and trim manufacturing	0	950	3,163	11,500
Ball and roller bearing manufacturing	0	937	1,810	3,909
Small arms ammunition manufacturing	0	7,639	19,145	32,560
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	185	414	932
Fabricated pipe and pipe fitting manufacturing	0	1,684	1,960	4,944
Other fabricated metal manufacturing	2	141,485	189,172	458,352
Farm machinery and equipment manufacturing	0	362	496	2,500
Lawn and garden equipment manufacturing	0	598	1,050	6,244
Construction machinery manufacturing	0	12	22	81
Mining machinery and equipment manufacturing	0	116	139	413
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	4,331	5,424	16,322
Sawmill, woodworking, and paper machinery	0	147	160	531
Printing machinery and equipment manufacturing	0	412	458	1,080
All other industrial machinery manufacturing	0	36	44	141
Optical instrument and lens manufacturing	0	19	28	85
Photographic and photocopying equipment manufacturing	0	7	9	61
Other commercial service industry machinery manufacturing	0	1,063	1,885	5,757
Air purification and ventilation equipment manufacturing	0	2,502	3,614	10,676

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	687	968	2,548
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	7,839	14,070	46,996
Industrial mold manufacturing	0	684	764	1,468
Special tool, die, jig, and fixture manufacturing	0	1,043	1,274	2,231
Cutting tool and machine tool accessory manufacturing	0	42	45	133
Machine tool manufacturing	0	347	382	1,099
Rolling mill and other metalworking machinery manufacturing	0	40	47	114
Turbine and turbine generator set units manufacturing	0	55	72	275
Speed changer, industrial high-speed drive, and gear manufacturing	0	925	1,305	4,393
Mechanical power transmission equipment manufacturing	0	192	269	719
Other engine equipment manufacturing	0	3,814	6,971	44,098
Pump and pumping equipment manufacturing	0	147	245	660
Air and gas compressor manufacturing	0	48	73	262
Elevator and moving stairway manufacturing	0	82	121	370
Conveyor and conveying equipment manufacturing	0	187	194	482
Overhead cranes, hoists, and monorail systems manufacturing	0	16	27	94
Industrial truck, trailer, and stacker manufacturing	0	45	67	246
Power-driven handtool manufacturing	0	40	92	231
Welding and soldering equipment manufacturing	0	200	252	572
Packaging machinery manufacturing	0	94	132	352
Industrial process furnace and oven manufacturing	0	108	127	326
Fluid power cylinder and actuator manufacturing	0	61	71	270

## APPENDIX

Fluid power pump and motor manufacturing	0	3	5	19
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	467	587	1,848
Electronic computer manufacturing	0	685	3,271	9,038
Computer storage device manufacturing	0	9	62	227
Computer terminals and other computer peripheral equipment manufacturing	0	35	120	295
Telephone apparatus manufacturing	0	33	123	578
Broadcast and wireless communications equipment manufacturing	0	(2)	1	26
Other communications equipment manufacturing	0	898	2,402	5,434
Audio and video equipment manufacturing	0	11	66	308
Printed circuit assembly (electronic assembly) manufacturing	0	184	502	1,692
Bare printed circuit board manufacturing	0	83	160	401
Semiconductor and related device manufacturing	0	1,602	4,933	12,400
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	9	24	71
Electronic connector manufacturing	0	7,160	16,552	35,972
Other electronic component manufacturing	0	8,176	10,913	25,643
Electromedical and electrotherapeutic apparatus manufacturing	0	1	10	25
Search, detection, and navigation instruments manufacturing	0	8	24	36
Automatic environmental control manufacturing	0	5,700	10,317	20,422
Industrial process variable instruments manufacturing	0	71	163	359
Totalizing fluid meter and counting device manufacturing	0	(3)	2	27

## APPENDIX

Electricity and signal testing instruments manufacturing	0	75	207	814
Analytical laboratory instrument manufacturing	0	44,169	136,084	225,738
Irradiation apparatus manufacturing	0	3	14	30
Watch, clock, and other measuring and controlling device manufacturing	0	712	2,527	5,198
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	257	622	1,220
Electric lamp bulb and part manufacturing	0	159	349	730
Lighting fixture manufacturing	0	6,648	12,782	29,507
Small electrical appliance manufacturing	0	340	983	2,362
Household cooking appliance manufacturing	0	101	285	907
Household refrigerator and home freezer manufacturing	0	93	311	828
Household laundry equipment manufacturing	0	144	376	1,597
Other major household appliance manufacturing	0	39	111	313
Power, distribution, and specialty transformer manufacturing	0	1,702	3,192	7,432
Motor and generator manufacturing	0	1,840	3,691	8,721
Switchgear and switchboard apparatus manufacturing	0	2,686	5,904	13,880
Relay and industrial control manufacturing	0	340	538	1,394
Storage battery manufacturing	0	4,867	10,169	27,255
Primary battery manufacturing	0	3,188	16,067	22,734
Fiber optic cable manufacturing	0	1,138	2,350	10,850
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	3,697	10,517	24,630
Carbon and graphite product manufacturing	0	147	250	794
All other miscellaneous electrical equipment and component manufacturing	0	3,801	4,716	14,489

## APPENDIX

Automobile manufacturing	0	626	1,624	12,910
Light truck and utility vehicle manufacturing	0	12,668	26,386	245,044
Heavy duty truck manufacturing	0	4	7	39
Motor vehicle body manufacturing	0	199	238	1,133
Truck trailer manufacturing	0	22	24	111
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	4,802	5,069	25,814
Motor vehicle gasoline engine and engine parts manufacturing	0	2,153	2,739	20,064
Motor vehicle electrical and electronic equipment manufacturing	0	5,223	6,307	37,881
Motor vehicle transmission and power train parts manufacturing	0	4,960	6,589	38,583
Motor vehicle seating and interior trim manufacturing	0	2,958	3,451	23,501
Motor vehicle metal stamping	0	4,671	5,559	28,024
Other motor vehicle parts manufacturing	0	9,037	11,645	68,378
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3,257	4,270	21,027
Aircraft manufacturing	0	1,429	1,130	5,343
Aircraft engine and engine parts manufacturing	0	148	141	868
Other aircraft parts and auxiliary equipment manufacturing	2	172,657	172,505	571,732
Guided missile and space vehicle manufacturing	0	106	102	253
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	26	25	58
Railroad rolling stock manufacturing	0	98	90	674
Ship building and repairing	0	282	276	918
Boat building	0	8,456	8,805	47,368
Motorcycle, bicycle, and parts manufacturing	0	2,205	1,269	10,527
Military armored vehicle, tank, and tank component manufacturing	0	3,810	3,055	18,522
All other transportation equipment manufacturing	0	2,786	2,722	18,321



## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	5,200	7,565	17,187
Upholstered household furniture manufacturing	0	1,652	2,300	7,341
Nonupholstered wood household furniture manufacturing	0	712	826	2,139
Other household nonupholstered furniture manufacturing	0	102	161	563
Institutional furniture manufacturing	0	2,287	2,541	8,692
Wood office furniture manufacturing	0	349	514	1,885
Custom architectural woodwork and millwork	0	103	100	346
Office furniture, except wood, manufacturing	0	7,409	12,958	37,138
Showcase, partition, shelving, and locker manufacturing	0	1,381	1,990	5,131
Mattress manufacturing	0	106	235	1,016
Blind and shade manufacturing	0	3	3	33
Surgical and medical instrument manufacturing	0	953	2,331	5,457
Surgical appliance and supplies manufacturing	0	1,583	3,782	8,682
Dental equipment and supplies manufacturing	0	96	198	439
Ophthalmic goods manufacturing	0	893	2,333	4,490
Dental laboratories	0	1,621	1,614	2,711
Jewelry and silverware manufacturing	0	1,346	1,888	4,666
Sporting and athletic goods manufacturing	0	2,360	3,483	9,216
Doll, toy, and game manufacturing	0	1,346	2,055	6,550
Office supplies (except paper) manufacturing	1	79,150	106,302	257,937
Sign manufacturing	0	8,177	7,969	15,014
Gasket, packing, and sealing device manufacturing	0	2,244	3,069	6,749
Musical instrument manufacturing	0	510	518	1,007
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	884	1,367	4,085
Burial casket manufacturing	0	389	467	886

## APPENDIX

All other miscellaneous manufacturing	0	5,435	6,443	14,101
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	27,809	72,202	147,633
Wholesale - Professional and commercial equipment and supplies	1	147,891	267,354	450,839
Wholesale - Household appliances and electrical and electronic goods	1	57,932	146,705	301,920
Wholesale - Machinery, equipment, and supplies	1	90,136	166,327	281,851
Wholesale - Other durable goods merchant wholesalers	2	145,526	239,135	462,645
Wholesale - Drugs and druggists' sundries	1	73,872	236,456	463,776
Wholesale - Grocery and related product wholesalers	1	97,860	139,527	262,485
Wholesale - Petroleum and petroleum products	0	22,181	255,135	303,010
Wholesale - Other nondurable goods merchant wholesalers	3	219,603	446,464	817,058
Wholesale - Wholesale electronic markets and agents and brokers	3	366,196	225,891	253,638
Retail - Motor vehicle and parts dealers	3	130,130	193,738	296,357
Retail - Furniture and home furnishings stores	2	59,230	74,114	127,574
Retail - Electronics and appliance stores	1	67,476	67,988	118,286
Retail - Building material and garden equipment and supplies stores	2	83,468	145,319	223,086
Retail - Food and beverage stores	6	159,230	219,279	391,777
Retail - Health and personal care stores	3	139,882	165,817	261,211
Retail - Gasoline stores	3	65,245	112,764	236,107
Retail - Clothing and clothing accessories stores	3	70,375	104,266	234,636
Retail - Sporting goods, hobby, musical instrument and book stores	2	51,574	64,650	113,246
Retail - General merchandise stores	8	223,669	296,806	507,118
Retail - Miscellaneous store retailers	5	88,652	102,798	191,581

## APPENDIX

Retail - Nonstore retailers	5	139,591	423,805	774,006
Air transportation	1	86,435	232,300	339,731
Rail transportation	0	43,342	106,143	189,873
Water transportation	0	10,923	19,501	69,124
Truck transportation	5	329,808	410,050	891,477
Transit and ground passenger transportation	4	91,118	119,811	173,768
Pipeline transportation	0	16,697	39,318	52,119
Scenic and sightseeing transportation and support activities for transportation	3	193,175	227,368	509,370
Couriers and messengers	2	86,852	125,123	229,276
Warehousing and storage	2	130,238	155,389	302,014
Newspaper publishers	1	33,262	58,069	82,399
Periodical publishers	0	33,880	54,151	85,755
Book publishers	0	4,381	16,097	36,386
Directory, mailing list, and other publishers	1	31,989	115,870	180,050
Greeting card publishing	0	3,498	14,773	18,380
Software publishers	1	66,852	187,603	230,734
Motion picture and video industries	1	27,351	57,317	152,384
Sound recording industries	0	3,632	17,443	29,069
Radio and television broadcasting	1	130,868	95,960	339,098
Cable and other subscription programming	0	33,376	226,664	803,763
Wired telecommunications carriers	1	153,928	351,667	709,935
Wireless telecommunications carriers (except satellite)	0	14,401	169,670	605,237
Satellite, telecommunications resellers, and all other telecommunications	0	10,762	20,034	96,320
Data processing, hosting, and related services	2	264,109	642,309	1,051,113
News syndicates, libraries, archives and all other information services	0	10,332	21,050	37,187
Internet publishing and broadcasting and web search portals	0	27,297	98,720	321,712
Nondepository credit intermediation and related activities	3	207,073	306,197	543,321
Securities and commodity contracts intermediation and brokerage	4	544,147	489,865	1,003,551

## APPENDIX

Monetary authorities and depository credit intermediation	9	755,457	2,234,829	3,560,811
Other financial investment activities	5	283,594	285,777	706,010
Direct life insurance carriers	1	89,220	178,217	262,454
Insurance carriers, except direct life	3	254,903	852,681	1,851,278
Insurance agencies, brokerages, and related activities	7	549,394	830,666	1,789,108
Funds, trusts, and other financial vehicles	1	35,778	35,557	395,976
Other real estate	33	514,404	1,589,963	5,356,640
Tenant-occupied housing	3	43,542	663,005	779,514
Owner-occupied dwellings	0	0	2,509,317	3,170,493
Automotive equipment rental and leasing	1	62,850	245,428	322,518
General and consumer goods rental except video tapes and discs	1	71,445	85,036	127,379
Video tape and disc rental	0	12,149	19,199	31,525
Commercial and industrial machinery and equipment rental and leasing	6	832,415	1,651,938	2,392,489
Lessors of nonfinancial intangible assets	0	6,373	222,985	267,155
Legal services	9	863,326	1,549,154	2,155,601
Accounting, tax preparation, bookkeeping, and payroll services	6	505,716	614,088	856,801
Architectural, engineering, and related services	4	416,434	465,679	813,172
Specialized design services	2	123,870	130,122	156,053
Custom computer programming services	1	110,942	131,856	192,624
Computer systems design services	3	296,144	314,485	422,597
Other computer related services, including facilities management	1	107,572	232,591	365,467
Management consulting services	89	7,871,140	7,747,012	11,829,222
Environmental and other technical consulting services	2	119,453	100,477	151,528
Scientific research and development services	119	9,766,151	13,175,019	28,193,640
Advertising, public relations, and related services	3	305,398	386,025	648,876
Photographic services	1	77,728	33,398	56,073
Veterinary services	1	35,142	44,345	74,906

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	8	645,725	541,816	749,825
Management of companies and enterprises	14	1,775,514	2,051,181	2,935,158
Office administrative services	4	255,399	111,181	245,211
Facilities support services	19	541,788	752,873	2,355,151
Employment services	22	823,471	1,374,472	2,186,048
Business support services	6	324,360	283,857	459,756
Travel arrangement and reservation services	1	70,367	100,793	231,330
Investigation and security services	3	121,729	125,442	186,352
Services to buildings	8	208,521	219,628	372,240
Landscape and horticultural services	8	233,780	250,499	432,258
Other support services	2	111,692	150,803	268,723
Waste management and remediation services	1	75,146	141,577	255,941
Elementary and secondary schools	2	69,129	57,937	71,501
Junior colleges, colleges, universities, and professional schools	4	202,766	261,536	382,907
Other educational services	3	73,042	66,151	140,359
Offices of physicians	7	806,173	960,339	1,348,853
Offices of dentists	2	150,512	192,324	288,814
Offices of other health practitioners	3	184,283	173,005	246,606
Outpatient care centers	2	138,513	146,331	285,215
Medical and diagnostic laboratories	1	40,637	62,752	103,897
Home health care services	4	169,781	126,656	178,425
Other ambulatory health care services	1	55,368	61,360	103,829
Hospitals	18	1,341,140	1,609,140	3,088,077
Nursing and community care facilities	6	198,437	236,619	427,959
Residential mental retardation, mental health, substance abuse and other facilities	2	85,561	93,009	147,955
Individual and family services	10	221,345	215,213	340,701
Child day care services	3	77,572	101,193	138,019
Community food, housing, and other relief services, including rehabilitation services	2	50,190	58,436	136,211
Performing arts companies	1	23,254	50,294	88,783

## APPENDIX

Commercial Sports Except Racing	1	105,114	122,199	163,261
Racing and Track Operation	0	4,294	7,385	14,842
Independent artists, writers, and performers	3	44,071	71,240	91,026
Promoters of performing arts and sports and agents for public figures	1	20,326	75,795	142,275
Museums, historical sites, zoos, and parks	0	14,115	19,799	33,013
Amusement parks and arcades	0	9,730	19,215	27,836
Gambling industries (except casino hotels)	1	48,352	112,114	181,690
Other amusement and recreation industries	2	39,604	48,720	92,098
Fitness and recreational sports centers	2	26,321	36,868	63,592
Bowling centers	0	4,925	7,062	14,717
Hotels and motels, including casino hotels	2	58,323	100,924	172,217
Other accommodations	0	19,121	24,910	35,012
Full-service restaurants	18	388,865	568,480	1,050,420
Limited-service restaurants	14	254,494	399,139	944,671
All other food and drinking places	11	294,343	385,676	609,728
Automotive repair and maintenance, except car washes	5	245,955	294,681	454,971
Car washes	3	120,391	183,526	286,444
Electronic and precision equipment repair and maintenance	4	285,469	434,632	701,281
Commercial and industrial machinery and equipment repair and maintenance	1	108,898	131,350	204,443
Personal and household goods repair and maintenance	3	127,776	115,921	153,782
Personal care services	4	122,834	101,215	133,398
Death care services	0	12,636	16,038	26,327
Dry-cleaning and laundry services	1	29,882	32,484	47,470
Other personal services	4	117,846	93,191	130,634
Religious organizations	5	283,520	152,592	518,753
Grantmaking, giving, and social advocacy organizations	1	48,224	144,711	233,042
Business and professional associations	1	76,061	115,472	205,932
Labor and civic organizations	2	52,486	124,653	241,283
Private households	1	20,359	20,359	20,359
Postal service	2	196,022	196,181	217,425
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	11	991,934	(575,621)	454,992
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	8,213	9,538	22,733
Local government passenger transit	1	54,022	(25,692)	58,906
Local government electric utilities	0	22,903	62,631	140,229
Other local government enterprises	2	160,142	334,242	659,157
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	12	1,403,497	2,354,230	4,032,426

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 422: Detailed M2M Program Impacts by Types of Impact, Missouri.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	168	12,078,152	16,136,249	27,704,585
Oilseed farming	0	10,127	37,218	124,367
Grain farming	0	3,140	8,374	40,519
Vegetable and melon farming	0	368	577	2,163
Fruit farming	0	262	438	1,401
Tree nut farming	0	407	422	905

## APPENDIX

Greenhouse, nursery, and floriculture production	0	625	831	2,770
Tobacco farming	0	6	6	21
Cotton farming	0	312	405	1,338
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	700	741	2,975
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1,011	3,089	16,754
Dairy cattle and milk production	0	175	366	3,417
Poultry and egg production	0	607	872	15,754
Animal production, except cattle and poultry and eggs	0	2,500	7,835	21,658
Forestry, forest products, and timber tract production	0	225	237	305
Commercial logging	0	1,617	1,622	2,453
Commercial fishing	0	(206)	30	70
Commercial hunting and trapping	0	11	46	242
Support activities for agriculture and forestry	0	4,854	3,752	4,776
Oil and gas extraction	0	648	326	16,871
Coal mining	0	395	620	1,038
Copper, nickel, lead, and zinc mining	0	6,470	19,661	34,972
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	525	1,518	4,081
Sand and gravel mining	0	206	258	560
Other clay, ceramic, refractory minerals mining	0	(82)	(13)	169
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	40	47	81
Other nonmetallic minerals	0	105	88	180
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	2	1	18
Metal mining services	0	15	22	234



## APPENDIX

Other nonmetallic minerals services	0	1	1	16
Electric power generation - Hydroelectric	0	438	1,281	1,839
Electric power generation - Fossil fuel	0	12,181	45,353	112,718
Electric power generation - Nuclear	0	9,441	22,366	46,387
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	112	773	1,021
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	320	85	379
Electric power transmission and distribution	0	20,571	80,145	214,467
Natural gas distribution	0	10,465	31,016	58,682
Water, sewage and other systems	0	3,564	6,632	12,719
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	32,074	37,935	97,666

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Maintenance and repair construction of residential structures	0	14,674	18,926	49,619
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	62	30	86
Dog and cat food manufacturing	0	5,726	22,469	64,282
Other animal food manufacturing	0	1,406	2,345	17,064
Flour milling	0	398	777	5,559
Rice milling	0	27	44	488
Malt manufacturing	0	92	217	1,445
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	305	1,568	15,706
Fats and oils refining and blending	0	102	197	1,965
Breakfast cereal manufacturing	0	1,408	3,528	16,755
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	95	112	383
Chocolate and confectionery manufacturing from cacao beans	0	47	83	344
Confectionery manufacturing from purchased chocolate	0	788	976	3,706
Frozen fruits, juices and vegetables manufacturing	0	502	875	3,576
Frozen specialties manufacturing	0	2,649	3,748	14,585
Canned fruits and vegetables manufacturing	0	796	1,303	4,036
Canned specialties	0	42	43	131
Dehydrated food products manufacturing	0	59	75	271
Cheese manufacturing	0	3,023	4,410	45,172
Dry, condensed, and evaporated dairy product manufacturing	0	1,341	3,288	20,034
Fluid milk manufacturing	0	1,641	2,653	16,976
Creamery butter manufacturing	0	130	497	3,226
Ice cream and frozen dessert manufacturing	0	556	907	4,000
Frozen cakes and other pastries manufacturing	0	878	1,199	2,470
Poultry processing	0	3,881	5,402	25,594
Animal, except poultry, slaughtering	0	2,416	3,341	27,551
Meat processed from carcasses	0	4,701	5,144	37,203

## APPENDIX

Rendering and meat byproduct processing	0	137	132	719
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	4,854	5,696	12,966
Cookie and cracker manufacturing	0	807	1,149	4,286
Dry pasta, mixes, and dough manufacturing	0	624	1,352	5,680
Tortilla manufacturing	0	134	133	193
Roasted nuts and peanut butter manufacturing	0	308	385	1,883
Other snack food manufacturing	0	368	520	2,965
Coffee and tea manufacturing	0	547	718	2,626
Flavoring syrup and concentrate manufacturing	0	879	3,975	12,310
Mayonnaise, dressing, and sauce manufacturing	0	482	808	2,922
Spice and extract manufacturing	0	564	777	3,010
All other food manufacturing	0	1,348	1,659	6,149
Bottled and canned soft drinks & water	0	1,668	3,476	15,501
Manufactured ice	0	286	141	667
Breweries	0	5,216	13,241	28,520
Wineries	0	276	478	2,661
Distilleries	0	955	5,606	10,916
Tobacco product manufacturing	0	71	2,155	3,193
Fiber, yarn, and thread mills	0	7	14	96
Broadwoven fabric mills	0	3	5	29
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	111	236	529
Knit fabric mills	0	4	6	16
Textile and fabric finishing mills	0	31	42	186
Fabric coating mills	0	246	331	896
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	81	134	509
Textile bag and canvas mills	0	338	456	1,181
Rope, cordage, twine, tire cord and tire fabric mills	0	31	60	147
Other textile product mills	0	431	573	1,499
Hosiery and sock mills	0	10	16	38
Other apparel knitting mills	0	225	257	661
Cut and sew apparel contractors	0	91	100	240

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	85	111	411
Womens and girls cut and sew apparel manufacturing	0	28	47	341
Other cut and sew apparel manufacturing	0	398	481	1,037
Apparel accessories and other apparel manufacturing	0	71	92	316
Leather and hide tanning and finishing	0	129	215	594
Footwear manufacturing	0	237	280	923
Other leather and allied product manufacturing	0	61	66	201
Sawmills	0	1,789	2,128	7,947
Wood preservation	0	76	140	594
Veneer and plywood manufacturing	0	2	2	7
Engineered wood member and truss manufacturing	0	156	183	556
Reconstituted wood product manufacturing	0	39	73	328
Wood windows and door manufacturing	0	560	654	1,722
Cut stock, resawing lumber, and planing	0	415	562	1,528
Other millwork, including flooring	0	855	1,054	2,805
Wood container and pallet manufacturing	0	1,573	1,727	4,069
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	213	230	550
All other miscellaneous wood product manufacturing	0	619	675	1,663
Pulp mills	0	0	0	0
Paper mills	0	1,061	4,197	12,992
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	5,081	11,088	37,803
Paper bag and coated and treated paper manufacturing	0	918	2,593	7,257
Stationery product manufacturing	0	267	524	1,672
Sanitary paper product manufacturing	0	374	2,090	3,911

## APPENDIX

All other converted paper product manufacturing	0	1,572	3,230	7,146
Printing	0	25,502	47,634	82,969
Support activities for printing	0	1,139	2,078	2,835
Petroleum refineries	0	71	3,312	23,309
Asphalt paving mixture and block manufacturing	0	285	617	2,339
Asphalt shingle and coating materials manufacturing	0	178	763	1,682
Petroleum lubricating oil and grease manufacturing	0	691	3,954	7,655
All other petroleum and coal products manufacturing	0	77	354	844
Petrochemical manufacturing	0	132	926	4,271
Industrial gas manufacturing	0	220	512	1,656
Synthetic dye and pigment manufacturing	0	407	850	2,802
Other basic inorganic chemical manufacturing	0	372	762	2,845
Other basic organic chemical manufacturing	0	1,666	3,077	26,388
Plastics material and resin manufacturing	0	596	888	6,602
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	199	385	1,009
Phosphatic fertilizer manufacturing	0	13	23	71
Fertilizer mixing	0	144	157	345
Pesticide and other agricultural chemical manufacturing	0	1,264	3,549	14,479
Medicinal and botanical manufacturing	0	1,041	1,800	4,311
Pharmaceutical preparation manufacturing	0	5,867	19,229	52,448
In-vitro diagnostic substance manufacturing	0	186	246	546
Biological product (except diagnostic) manufacturing	0	2,164	5,146	10,976
Paint and coating manufacturing	0	2,703	3,846	11,334
Adhesive manufacturing	0	928	1,504	5,061
Soap and other detergent manufacturing	0	6,819	19,829	47,391

## APPENDIX

Polish and other sanitation good manufacturing	0	4,509	8,366	21,267
Surface active agent manufacturing	0	128	342	712
Toilet preparation manufacturing	0	2,369	5,619	13,788
Printing ink manufacturing	0	440	459	1,204
Explosives manufacturing	0	122	140	449
Custom compounding of purchased resins	0	145	233	515
Photographic film and chemical manufacturing	0	773	1,379	3,887
Other miscellaneous chemical product manufacturing	0	1,111	1,490	5,024
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,776	2,916	10,417
Unlaminated plastics profile shape manufacturing	0	558	1,215	3,304
Plastics pipe and pipe fitting manufacturing	0	80	191	604
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	20	37	109
Polystyrene foam product manufacturing	0	351	586	2,046
Urethane and other foam product (except polystyrene) manufacturing	0	459	738	3,097
Plastics bottle manufacturing	0	630	1,052	4,516
Other plastics product manufacturing	0	5,670	8,444	26,736
Tire manufacturing	0	171	245	1,354
Rubber and plastics hoses and belting manufacturing	0	752	1,182	3,092
Other rubber product manufacturing	0	947	1,411	5,109
Pottery, ceramics, and plumbing fixture manufacturing	0	17	23	76
Brick, tile, and other structural clay product manufacturing	0	284	483	1,249
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	268	396	1,114
Glass container manufacturing	0	469	751	2,262
Glass product manufacturing made of purchased glass	0	128	214	624

## APPENDIX

Cement manufacturing	0	264	593	1,861
Ready-mix concrete manufacturing	0	1,034	1,691	7,155
Concrete block and brick manufacturing	0	247	428	1,160
Concrete pipe manufacturing	0	38	60	184
Other concrete product manufacturing	0	451	640	1,874
Lime manufacturing	0	170	411	1,115
Gypsum product manufacturing	0	32	79	234
Abrasive product manufacturing	0	133	388	812
Cut stone and stone product manufacturing	0	465	543	1,268
Ground or treated mineral and earth manufacturing	0	196	540	1,339
Mineral wool manufacturing	0	21	47	149
Miscellaneous nonmetallic mineral products manufacturing	0	32	77	227
Iron and steel mills and ferroalloy manufacturing	0	60	101	768
Iron, steel pipe and tube manufacturing from purchased steel	0	83	113	467
Rolled steel shape manufacturing	0	63	118	482
Steel wire drawing	0	221	259	1,200
Alumina refining and primary aluminum production	0	72	138	891
Secondary smelting and alloying of aluminum	0	90	124	866
Aluminum sheet, plate, and foil manufacturing	0	43	73	378
Other aluminum rolling, drawing and extruding	0	100	125	659
Nonferrous metal (exc aluminum) smelting and refining	0	3	10	33
Copper rolling, drawing, extruding and alloying	0	481	626	3,215
Nonferrous metal, except copper and aluminum, shaping	0	6	8	33
Secondary processing of other nonferrous metals	0	24	52	312
Ferrous metal foundries	0	64	94	256
Nonferrous metal foundries	0	768	1,031	2,359
Custom roll forming	0	18	26	146
Crown and closure manufacturing and metal stamping	0	463	677	1,784

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Iron and steel forging	0	80	112	402
Nonferrous forging	0	44	56	210
Cutlery, utensil, pot, and pan manufacturing	0	32	68	225
Handtool manufacturing	0	226	367	781
Prefabricated metal buildings and components manufacturing	0	99	141	463
Fabricated structural metal manufacturing	0	396	596	1,841
Plate work manufacturing	0	264	274	813
Metal window and door manufacturing	0	752	1,196	3,143
Sheet metal work manufacturing	0	675	880	2,034
Ornamental and architectural metal work manufacturing	0	336	434	1,056
Power boiler and heat exchanger manufacturing	0	19	28	75
Metal tank (heavy gauge) manufacturing	0	177	221	637
Metal cans manufacturing	0	243	590	2,689
Metal barrels, drums and pails manufacturing	0	149	189	751
Hardware manufacturing	0	69	116	347
Spring and wire product manufacturing	0	361	500	1,534
Machine shops	0	2,250	2,589	5,044
Turned product and screw, nut, and bolt manufacturing	0	347	488	1,392
Metal heat treating	0	363	578	1,344
Metal coating and nonprecious engraving	0	327	563	1,234
Electroplating, anodizing, and coloring metal	0	945	1,065	2,393
Valve and fittings, other than plumbing, manufacturing	0	886	1,474	3,862
Plumbing fixture fitting and trim manufacturing	0	171	582	2,029
Ball and roller bearing manufacturing	0	274	529	1,104
Small arms ammunition manufacturing	0	1,089	2,707	4,659
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	50	109	229



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Fabricated pipe and pipe fitting manufacturing	0	151	177	448
Other fabricated metal manufacturing	0	9,511	12,688	29,530
Farm machinery and equipment manufacturing	0	55	81	354
Lawn and garden equipment manufacturing	0	55	95	515
Construction machinery manufacturing	0	5	9	31
Mining machinery and equipment manufacturing	0	13	16	46
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	11	14	40
Sawmill, woodworking, and paper machinery	0	26	29	88
Printing machinery and equipment manufacturing	0	132	148	313
All other industrial machinery manufacturing	0	11	14	43
Optical instrument and lens manufacturing	0	7	10	28
Photographic and photocopying equipment manufacturing	0	4	5	32
Other commercial service industry machinery manufacturing	0	177	338	987
Air purification and ventilation equipment manufacturing	0	115	166	469
Heating equipment (except warm air furnaces) manufacturing	0	175	256	592
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,684	3,132	10,143
Industrial mold manufacturing	0	111	126	233
Special tool, die, jig, and fixture manufacturing	0	258	318	534
Cutting tool and machine tool accessory manufacturing	0	8	8	24
Machine tool manufacturing	0	63	70	193

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Rolling mill and other metalworking machinery manufacturing	0	10	12	28
Turbine and turbine generator set units manufacturing	0	10	14	43
Speed changer, industrial high-speed drive, and gear manufacturing	0	208	302	923
Mechanical power transmission equipment manufacturing	0	30	42	111
Other engine equipment manufacturing	0	1,143	2,073	12,090
Pump and pumping equipment manufacturing	0	29	49	125
Air and gas compressor manufacturing	0	11	17	63
Elevator and moving stairway manufacturing	0	19	29	86
Conveyor and conveying equipment manufacturing	0	22	23	55
Overhead cranes, hoists, and monorail systems manufacturing	0	2	4	14
Industrial truck, trailer, and stacker manufacturing	0	7	11	41
Power-driven handtool manufacturing	0	24	55	123
Welding and soldering equipment manufacturing	0	57	74	143
Packaging machinery manufacturing	0	34	49	127
Industrial process furnace and oven manufacturing	0	21	25	63
Fluid power cylinder and actuator manufacturing	0	8	10	39
Fluid power pump and motor manufacturing	0	1	1	4
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	93	118	350
Electronic computer manufacturing	0	4	19	63
Computer storage device manufacturing	0	6	43	156
Computer terminals and other computer peripheral equipment manufacturing	0	13	42	99

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Telephone apparatus manufacturing	0	7	28	130
Broadcast and wireless communications equipment manufacturing	0	(1)	0	9
Other communications equipment manufacturing	0	220	580	1,383
Audio and video equipment manufacturing	0	7	39	168
Printed circuit assembly (electronic assembly) manufacturing	0	25	69	229
Bare printed circuit board manufacturing	0	15	28	76
Semiconductor and related device manufacturing	0	231	700	1,707
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	3	7	20
Electronic connector manufacturing	0	792	1,816	4,017
Other electronic component manufacturing	0	1,023	1,362	3,125
Electromedical and electrotherapeutic apparatus manufacturing	0	0	4	10
Search, detection, and navigation instruments manufacturing	0	2	7	11
Automatic environmental control manufacturing	0	2,162	3,841	7,039
Industrial process variable instruments manufacturing	0	13	29	64
Totalizing fluid meter and counting device manufacturing	0	(1)	0	4
Electricity and signal testing instruments manufacturing	0	1	2	7
Analytical laboratory instrument manufacturing	0	33	99	176
Irradiation apparatus manufacturing	0	1	4	8
Watch, clock, and other measuring and controlling device manufacturing	0	20	67	127
Blank magnetic and optical recording media manufacturing	0	0	0	0

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Software and other prerecorded and record reproducing	0	67	162	291
Electric lamp bulb and part manufacturing	0	67	150	308
Lighting fixture manufacturing	0	224	410	947
Small electrical appliance manufacturing	0	112	319	721
Household cooking appliance manufacturing	0	23	68	220
Household refrigerator and home freezer manufacturing	0	23	80	222
Household laundry equipment manufacturing	0	38	103	436
Other major household appliance manufacturing	0	10	30	83
Power, distribution, and specialty transformer manufacturing	0	224	423	957
Motor and generator manufacturing	0	326	633	1,557
Switchgear and switchboard apparatus manufacturing	0	169	363	865
Relay and industrial control manufacturing	0	71	112	279
Storage battery manufacturing	0	1,331	2,641	7,171
Primary battery manufacturing	0	1,015	4,106	6,614
Fiber optic cable manufacturing	0	185	380	1,585
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	744	2,120	4,666
Carbon and graphite product manufacturing	0	23	38	126
All other miscellaneous electrical equipment and component manufacturing	0	18	23	70
Automobile manufacturing	0	172	389	3,334
Light truck and utility vehicle manufacturing	0	1,872	4,341	37,234
Heavy duty truck manufacturing	0	1	1	6
Motor vehicle body manufacturing	0	48	58	285
Truck trailer manufacturing	0	4	4	20
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	943	998	5,088
Motor vehicle gasoline engine and engine parts manufacturing	0	502	640	4,940

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Motor vehicle electrical and electronic equipment manufacturing	0	1,108	1,325	7,308
Motor vehicle transmission and power train parts manufacturing	0	1,475	2,001	10,183
Motor vehicle seating and interior trim manufacturing	0	439	534	3,501
Motor vehicle metal stamping	0	509	616	3,033
Other motor vehicle parts manufacturing	0	1,960	2,309	15,263
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	966	1,374	6,330
Aircraft manufacturing	0	126	111	502
Aircraft engine and engine parts manufacturing	0	14	13	86
Other aircraft parts and auxiliary equipment manufacturing	0	111	108	368
Guided missile and space vehicle manufacturing	0	9	9	20
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	2	2	3
Railroad rolling stock manufacturing	0	22	20	141
Ship building and repairing	0	65	64	207
Boat building	0	1,715	1,798	9,460
Motorcycle, bicycle, and parts manufacturing	0	847	464	3,515
Military armored vehicle, tank, and tank component manufacturing	0	350	288	1,458
All other transportation equipment manufacturing	0	713	725	4,807
Wood kitchen cabinet and countertop manufacturing	0	993	1,325	3,088
Upholstered household furniture manufacturing	0	665	921	2,901
Nonupholstered wood household furniture manufacturing	0	163	184	460
Other household nonupholstered furniture manufacturing	0	30	47	155
Institutional furniture manufacturing	0	8	9	32
Wood office furniture manufacturing	0	3	4	16

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Custom architectural woodwork and millwork	0	18	18	59
Office furniture, except wood, manufacturing	0	17	29	88
Showcase, partition, shelving, and locker manufacturing	0	212	285	757
Mattress manufacturing	0	27	53	250
Blind and shade manufacturing	0	1	1	7
Surgical and medical instrument manufacturing	0	269	641	1,414
Surgical appliance and supplies manufacturing	0	534	1,294	2,779
Dental equipment and supplies manufacturing	0	34	68	143
Ophthalmic goods manufacturing	0	269	720	1,389
Dental laboratories	0	551	549	906
Jewelry and silverware manufacturing	0	390	538	1,278
Sporting and athletic goods manufacturing	0	624	895	2,302
Doll, toy, and game manufacturing	0	451	646	1,838
Office supplies (except paper) manufacturing	0	397	563	1,109
Sign manufacturing	0	1,447	1,445	2,542
Gasket, packing, and sealing device manufacturing	0	454	610	1,314
Musical instrument manufacturing	0	286	289	434
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	282	499	1,215
Burial casket manufacturing	0	66	80	147
All other miscellaneous manufacturing	0	1,395	1,643	3,473
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	6,821	17,701	36,201
Wholesale - Professional and commercial equipment and supplies	0	40,101	72,609	119,684
Wholesale - Household appliances and electrical and electronic goods	0	9,694	24,621	50,172
Wholesale - Machinery, equipment, and supplies	0	12,679	23,459	39,618
Wholesale - Other durable goods merchant wholesalers	0	25,788	42,422	81,503

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Wholesale - Drugs and druggists' sundries	0	17,692	55,666	106,692
Wholesale - Grocery and related product wholesalers	0	21,399	30,233	56,886
Wholesale - Petroleum and petroleum products	0	4,444	57,930	67,692
Wholesale - Other nondurable goods merchant wholesalers	1	48,961	102,733	184,251
Wholesale - Wholesale electronic markets and agents and brokers	0	37,559	21,804	24,498
Retail - Motor vehicle and parts dealers	1	30,730	46,014	69,803
Retail - Furniture and home furnishings stores	0	14,539	18,185	30,782
Retail - Electronics and appliance stores	0	16,386	16,575	28,279
Retail - Building material and garden equipment and supplies stores	0	18,203	31,680	48,069
Retail - Food and beverage stores	1	41,369	56,360	98,316
Retail - Health and personal care stores	1	33,114	39,493	61,997
Retail - Gasoline stores	1	16,990	27,287	53,884
Retail - Clothing and clothing accessories stores	1	17,838	26,219	57,270
Retail - Sporting goods, hobby, musical instrument and book stores	1	12,383	15,567	26,764
Retail - General merchandise stores	2	51,287	68,575	116,335
Retail - Miscellaneous store retailers	1	22,347	25,669	46,181
Retail - Nonstore retailers	1	36,524	112,192	195,172
Air transportation	0	21,370	58,886	84,807
Rail transportation	0	10,690	23,195	44,126
Water transportation	0	2,344	4,061	14,155
Truck transportation	1	61,255	74,362	157,015
Transit and ground passenger transportation	1	40,985	54,284	73,770
Pipeline transportation	0	2,336	5,996	8,121
Scenic and sightseeing transportation and support activities for transportation	1	35,101	41,826	93,714
Couriers and messengers	1	26,035	38,767	69,410
Warehousing and storage	1	33,734	40,176	77,394

## APPENDIX

Newspaper publishers	0	6,955	11,792	16,486
Periodical publishers	0	10,049	15,743	22,985
Book publishers	0	1,116	3,890	8,790
Directory, mailing list, and other publishers	0	3,151	11,590	17,914
Greeting card publishing	0	584	2,598	3,197
Software publishers	0	18,587	50,937	61,063
Motion picture and video industries	0	8,475	17,937	39,681
Sound recording industries	0	1,000	4,531	6,979
Radio and television broadcasting	0	39,764	31,867	76,458
Cable and other subscription programming	0	10,465	56,832	167,553
Wired telecommunications carriers	0	38,162	80,888	158,677
Wireless telecommunications carriers (except satellite)	0	5,308	51,404	177,473
Satellite, telecommunications resellers, and all other telecommunications	0	3,397	5,472	23,434
Data processing, hosting, and related services	0	65,625	149,926	234,076
News syndicates, libraries, archives and all other information services	0	2,934	5,951	9,878
Internet publishing and broadcasting and web search portals	0	12,517	43,071	120,816
Nondepository credit intermediation and related activities	1	53,933	80,702	134,840
Securities and commodity contracts intermediation and brokerage	1	145,583	128,796	246,832
Monetary authorities and depository credit intermediation	2	182,135	555,703	860,249
Other financial investment activities	1	95,912	93,960	185,124
Direct life insurance carriers	0	18,667	38,511	55,338
Insurance carriers, except direct life	1	55,888	192,101	401,667
Insurance agencies, brokerages, and related activities	1	82,708	126,185	262,259
Funds, trusts, and other financial vehicles	0	10,349	10,096	95,072
Other real estate	5	103,293	316,294	925,555
Tenant-occupied housing	1	12,477	179,135	207,573



## APPENDIX

Owner-occupied dwellings	0	0	677,057	855,454
Automotive equipment rental and leasing	0	15,609	50,562	63,853
General and consumer goods rental except video tapes and discs	0	19,313	21,563	30,221
Video tape and disc rental	0	3,093	4,715	7,550
Commercial and industrial machinery and equipment rental and leasing	0	32,429	55,925	78,903
Lessors of nonfinancial intangible assets	0	1,621	55,806	66,427
Legal services	1	137,814	256,963	349,001
Accounting, tax preparation, bookkeeping, and payroll services	2	151,205	184,398	250,769
Architectural, engineering, and related services	1	56,609	63,640	109,390
Specialized design services	0	35,881	37,800	44,431
Custom computer programming services	0	22,388	26,430	37,717
Computer systems design services	1	70,212	74,297	98,162
Other computer related services, including facilities management	0	29,445	61,224	91,820
Management consulting services	56	5,329,439	5,254,958	7,801,025
Environmental and other technical consulting services	0	31,347	26,599	39,497
Scientific research and development services	10	937,912	1,282,311	2,536,863
Advertising, public relations, and related services	1	63,908	80,352	128,970
Photographic services	0	22,344	10,147	16,072
Veterinary services	0	8,549	10,941	17,990
Marketing research and all other miscellaneous professional, scientific, and technical services	1	107,963	90,501	123,485
Management of companies and enterprises	3	346,960	404,513	560,878
Office administrative services	1	78,241	34,700	69,229
Facilities support services	0	6,446	8,975	26,312
Employment services	4	165,057	282,611	432,883
Business support services	1	57,688	51,463	80,744
Travel arrangement and reservation services	0	20,454	29,542	65,040
Investigation and security services	1	28,776	29,727	42,811
Services to buildings	2	44,252	46,734	75,441

## APPENDIX

Landscape and horticultural services	1	26,568	28,525	47,422
Other support services	0	18,111	24,500	43,289
Waste management and remediation services	0	15,124	28,683	51,129
Elementary and secondary schools	0	22,538	18,805	22,824
Junior colleges, colleges, universities, and professional schools	1	71,948	91,964	127,917
Other educational services	1	19,194	17,429	35,662
Offices of physicians	2	194,980	234,094	326,220
Offices of dentists	1	38,113	49,219	72,886
Offices of other health practitioners	1	44,604	42,212	60,031
Outpatient care centers	1	37,026	39,273	75,401
Medical and diagnostic laboratories	0	10,122	16,048	25,717
Home health care services	1	40,772	30,765	43,640
Other ambulatory health care services	0	13,926	15,527	25,849
Hospitals	5	363,536	434,380	813,488
Nursing and community care facilities	1	50,098	59,829	105,391
Residential mental retardation, mental health, substance abuse and other facilities	1	24,502	26,649	41,531
Individual and family services	3	62,489	61,828	97,301
Child day care services	1	20,649	27,335	36,379
Community food, housing, and other relief services, including rehabilitation services	0	15,122	17,826	40,157
Performing arts companies	0	7,528	15,741	25,151
Commercial Sports Except Racing	0	25,089	29,075	38,043
Racing and Track Operation	0	1,194	1,952	3,773
Independent artists, writers, and performers	1	12,464	19,651	24,004
Promoters of performing arts and sports and agents for public figures	0	6,148	20,988	36,834
Museums, historical sites, zoos, and parks	0	3,949	5,476	8,849
Amusement parks and arcades	0	2,732	4,708	6,892
Gambling industries (except casino hotels)	0	12,978	28,366	45,396
Other amusement and recreation industries	0	9,961	11,755	22,138

## APPENDIX

Fitness and recreational sports centers	0	7,354	9,627	16,376
Bowling centers	0	1,231	1,702	3,508
Hotels and motels, including casino hotels	1	20,048	33,206	55,790
Other accommodations	0	8,419	10,787	14,820
Full-service restaurants	4	97,668	143,627	259,684
Limited-service restaurants	3	65,941	102,810	234,711
All other food and drinking places	3	91,211	117,586	180,440
Automotive repair and maintenance, except car washes	1	59,132	68,246	104,753
Car washes	1	28,960	44,004	68,187
Electronic and precision equipment repair and maintenance	0	9,837	14,994	23,420
Commercial and industrial machinery and equipment repair and maintenance	0	20,159	23,890	37,039
Personal and household goods repair and maintenance	0	20,670	16,914	22,477
Personal care services	1	33,801	25,489	33,965
Death care services	0	3,605	4,327	7,066
Dry-cleaning and laundry services	0	6,913	7,401	10,793
Other personal services	1	29,967	20,842	30,026
Religious organizations	2	85,284	35,728	143,196
Grantmaking, giving, and social advocacy organizations	0	16,704	43,001	69,244
Business and professional associations	0	18,220	25,079	43,131
Labor and civic organizations	1	15,777	33,138	65,489
Private households	0	5,877	5,877	5,877
Postal service	1	62,719	62,774	69,420
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	2,959	(2,209)	1,175
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	961	1,087	2,437
Local government passenger transit	0	19,903	(12,048)	14,642
Local government electric utilities	0	4,521	11,336	24,746
Other local government enterprises	0	35,743	69,132	135,276

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	200,522	326,200	682,074

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 28. Montana

**Table 423: Detailed NASA Impacts by Types of Impact, Montana.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>118</i>	<i>6,346,935</i>	<i>9,174,487</i>	<i>19,473,047</i>
Oilseed farming	0	6	1,185	4,180
Grain farming	0	2,232	10,752	53,893
Vegetable and melon farming	0	1,983	3,242	9,310
Fruit farming	0	159	303	754
Tree nut farming	0	1	1	1
Greenhouse, nursery, and floriculture production	0	2,909	3,864	8,858
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	457	783	2,397
All other crop farming	0	1,978	2,633	5,936
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	150	2,958	16,855

## APPENDIX

Dairy cattle and milk production	0	279	997	6,899
Poultry and egg production	0	192	282	3,362
Animal production, except cattle and poultry and eggs	0	1,997	15,021	35,565
Forestry, forest products, and timber tract production	0	517	525	667
Commercial logging	0	5,638	5,609	9,491
Commercial fishing	0	1,332	1,730	1,907
Commercial hunting and trapping	0	908	674	913
Support activities for agriculture and forestry	0	9,384	8,279	10,236
Oil and gas extraction	0	11,172	12,451	44,517
Coal mining	0	4,350	8,646	14,464
Copper, nickel, lead, and zinc mining	0	14,900	80,102	130,545
Iron ore mining	0	0	0	0
Gold ore mining	0	1,083	2,419	5,543
Silver ore mining	0	193	565	1,901
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	262	455	694
Stone mining and quarrying	0	1,095	2,280	5,421
Sand and gravel mining	0	1,057	1,646	3,257
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	573	726	1,142
Drilling oil and gas wells	0	5	6	25
Support activities for oil and gas operations	0	206	225	711
Metal mining services	0	1,371	1,808	6,265
Other nonmetallic minerals services	0	41	52	171
Electric power generation - Hydroelectric	0	2,172	5,881	10,582
Electric power generation - Fossil fuel	0	7,098	22,343	69,269
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	55	138	377
Electric power generation - Wind	0	141	1,950	10,620

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	22,368	69,035	213,605
Natural gas distribution	0	6,801	16,753	44,437
Water, sewage and other systems	0	431	1,095	4,011
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	35,786	45,458	120,470
Maintenance and repair construction of residential structures	0	7,882	10,699	28,899
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	52	34	86
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	801	1,192	12,110
Flour milling	0	419	696	5,178
Rice milling	0	67	100	792
Malt manufacturing	0	249	416	2,930

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	13	48	1,078
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	11	15	274
Beet sugar manufacturing	0	795	1,332	7,949
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	5	6	45
Chocolate and confectionery manufacturing from cacao beans	0	15	28	199
Confectionery manufacturing from purchased chocolate	0	75	93	760
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	7	7	122
Canned fruits and vegetables manufacturing	0	32	46	547
Canned specialties	0	3	4	115
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	59	77	1,098
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	1,075	1,492	12,209
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	10	14	96
Frozen cakes and other pastries manufacturing	0	365	428	890
Poultry processing	0	114	136	877
Animal, except poultry, slaughtering	0	328	417	6,487
Meat processed from carcasses	0	916	975	11,427
Rendering and meat byproduct processing	0	15	19	96
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	1,842	2,176	6,365
Cookie and cracker manufacturing	0	69	83	655
Dry pasta, mixes, and dough manufacturing	0	136	260	1,422
Tortilla manufacturing	0	62	72	504

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	139	151	908
Other snack food manufacturing	0	105	122	887
Coffee and tea manufacturing	0	48	70	971
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	1	2	34
Spice and extract manufacturing	0	8	11	102
All other food manufacturing	0	37	44	379
Bottled and canned soft drinks & water	0	901	1,547	10,866
Manufactured ice	0	107	27	445
Breweries	0	956	2,242	12,385
Wineries	0	4	7	65
Distilleries	0	132	764	3,058
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	168	231	2,173
Broadwoven fabric mills	0	25	33	115
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	12	14	90
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	2	3	17
Textile bag and canvas mills	0	40	48	214
Rope, cordage, twine, tire cord and tire fabric mills	0	14	19	72
Other textile product mills	0	57	68	303
Hosiery and sock mills	0	2	2	8
Other apparel knitting mills	0	2	2	6
Cut and sew apparel contractors	0	8	9	84
Mens and boys cut and sew apparel manufacturing	0	1	1	6
Womens and girls cut and sew apparel manufacturing	0	1	1	7
Other cut and sew apparel manufacturing	0	0	1	30
Apparel accessories and other apparel manufacturing	0	1	1	24
Leather and hide tanning and finishing	0	5	11	97



## APPENDIX

Footwear manufacturing	0	2	2	19
Other leather and allied product manufacturing	0	5	5	39
Sawmills	0	3,129	6,058	19,261
Wood preservation	0	92	489	1,293
Veneer and plywood manufacturing	0	824	1,609	3,577
Engineered wood member and truss manufacturing	0	327	579	1,759
Reconstituted wood product manufacturing	0	500	1,997	4,569
Wood windows and door manufacturing	0	636	1,159	4,341
Cut stock, resawing lumber, and planing	0	439	1,136	2,609
Other millwork, including flooring	0	243	486	1,754
Wood container and pallet manufacturing	0	6	12	132
Manufactured home (mobile home) manufacturing	0	0	1	2
Prefabricated wood building manufacturing	0	165	220	830
All other miscellaneous wood product manufacturing	0	301	515	2,722
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	346	787	2,589
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	8,744	12,889	27,943
Support activities for printing	0	114	167	264
Petroleum refineries	0	7,701	43,624	294,539
Asphalt paving mixture and block manufacturing	0	37	53	800
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	89	253	935

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	143	408	5,476
Industrial gas manufacturing	0	188	243	1,526
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	108	133	753
Other basic organic chemical manufacturing	0	80	105	1,496
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	37	45	523
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	136	169	966
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	9	9	88
Pesticide and other agricultural chemical manufacturing	0	247	404	4,466
Medicinal and botanical manufacturing	0	77	82	562
Pharmaceutical preparation manufacturing	0	4	9	80
In-vitro diagnostic substance manufacturing	0	3	3	17
Biological product (except diagnostic) manufacturing	0	68	86	394
Paint and coating manufacturing	0	12	16	339
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	98	156	1,928
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	40	56	589
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	75	92	571
Other miscellaneous chemical product manufacturing	0	230	257	1,762

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	147	260	1,241
Plastics pipe and pipe fitting manufacturing	0	22	42	221
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	111	162	779
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	693	912	3,648
Tire manufacturing	0	29	38	221
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	401	533	2,396
Pottery, ceramics, and plumbing fixture manufacturing	0	6	10	113
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	17	33	348
Cement manufacturing	0	367	879	2,613
Ready-mix concrete manufacturing	0	1,166	1,996	8,659
Concrete block and brick manufacturing	0	196	362	938
Concrete pipe manufacturing	0	62	101	262
Other concrete product manufacturing	0	378	560	1,774
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	697	2,141	3,299
Cut stone and stone product manufacturing	0	396	474	1,346

## APPENDIX

Ground or treated mineral and earth manufacturing	0	279	812	1,461
Mineral wool manufacturing	0	421	983	1,946
Miscellaneous nonmetallic mineral products manufacturing	0	102	249	506
Iron and steel mills and ferroalloy manufacturing	0	4	12	208
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	(0)	0	11
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	2	4	52
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	7	12	114
Secondary processing of other nonferrous metals	0	1	6	32
Ferrous metal foundries	0	75	146	375
Nonferrous metal foundries	0	51	85	308
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	24	31	120
Iron and steel forging	0	9	12	87
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	133	291	889
Handtool manufacturing	0	85	120	318
Prefabricated metal buildings and components manufacturing	0	7	9	45
Fabricated structural metal manufacturing	0	632	843	3,217
Plate work manufacturing	0	304	321	1,022
Metal window and door manufacturing	0	103	138	368

## APPENDIX

Sheet metal work manufacturing	0	344	409	1,091
Ornamental and architectural metal work manufacturing	0	207	255	963
Power boiler and heat exchanger manufacturing	0	2	3	10
Metal tank (heavy gauge) manufacturing	0	18	21	83
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	33	48	198
Spring and wire product manufacturing	0	3	4	43
Machine shops	0	2,446	2,742	6,962
Turned product and screw, nut, and bolt manufacturing	0	51	65	266
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	69	103	396
Electroplating, anodizing, and coloring metal	0	26	30	113
Valve and fittings, other than plumbing, manufacturing	0	30	42	136
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	559	1,093	4,453
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	251	488	1,503
Fabricated pipe and pipe fitting manufacturing	0	46	51	137
Other fabricated metal manufacturing	0	746	915	3,088
Farm machinery and equipment manufacturing	0	61	65	546
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	15	14	84
Mining machinery and equipment manufacturing	0	1	1	11

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	2	2	17
Semiconductor machinery manufacturing	0	53	53	203
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	4	5	21
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	2
Photographic and photocopying equipment manufacturing	0	4	4	39
Other commercial service industry machinery manufacturing	0	3	3	24
Air purification and ventilation equipment manufacturing	0	5	5	26
Heating equipment (except warm air furnaces) manufacturing	0	2	2	18
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	13	12	40
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	28	28	97
Machine tool manufacturing	0	2	2	11
Rolling mill and other metalworking machinery manufacturing	0	7	7	28
Turbine and turbine generator set units manufacturing	0	0	1	4
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	6	6	49
Other engine equipment manufacturing	0	2	3	41
Pump and pumping equipment manufacturing	0	3	3	23

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Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	7	7	34
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	2	2	14
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	9	9	49
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	1	2	16
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	5
Telephone apparatus manufacturing	0	1	1	6
Broadcast and wireless communications equipment manufacturing	0	2	2	10
Other communications equipment manufacturing	0	3	4	26
Audio and video equipment manufacturing	0	0	0	3
Printed circuit assembly (electronic assembly) manufacturing	0	8	11	72
Bare printed circuit board manufacturing	0	0	0	0

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Semiconductor and related device manufacturing	0	9	12	56
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	(1)	1	109
Other electronic component manufacturing	0	16	18	67
Electromedical and electrotherapeutic apparatus manufacturing	0	1	2	6
Search, detection, and navigation instruments manufacturing	0	0	0	1
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	3	4	14
Totalizing fluid meter and counting device manufacturing	0	10	15	56
Electricity and signal testing instruments manufacturing	0	103	129	510
Analytical laboratory instrument manufacturing	0	38,755	53,838	155,913
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	7	10	35
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	2	3	12
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	10	17	80
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0



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Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	1	6
Switchgear and switchboard apparatus manufacturing	0	1	1	3
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	8	17	65
Wiring device manufacturing	0	27	71	180
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	6	7	21
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	11	15	69
Truck trailer manufacturing	0	7	8	35
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	1,741	1,924	7,327
Motor vehicle gasoline engine and engine parts manufacturing	0	2	3	26
Motor vehicle electrical and electronic equipment manufacturing	0	71	115	740
Motor vehicle transmission and power train parts manufacturing	0	82	123	675
Motor vehicle seating and interior trim manufacturing	0	6	8	70
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	52	83	581
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0

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Aircraft manufacturing	0	0	0	4
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	9	7	28
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	85	60	3,675
Motorcycle, bicycle, and parts manufacturing	0	3	(4)	110
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	30	9	312
Wood kitchen cabinet and countertop manufacturing	0	349	307	1,110
Upholstered household furniture manufacturing	0	12	12	78
Nonupholstered wood household furniture manufacturing	0	164	157	584
Other household nonupholstered furniture manufacturing	0	10	10	79
Institutional furniture manufacturing	0	1	1	6
Wood office furniture manufacturing	0	0	0	2
Custom architectural woodwork and millwork	0	21	19	80
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	1	1	7
Mattress manufacturing	0	10	6	78
Blind and shade manufacturing	0	1	1	9
Surgical and medical instrument manufacturing	0	22	29	131
Surgical appliance and supplies manufacturing	0	73	97	463

## APPENDIX

Dental equipment and supplies manufacturing	0	14	17	74
Ophthalmic goods manufacturing	0	13	17	53
Dental laboratories	0	49	45	87
Jewelry and silverware manufacturing	0	358	401	1,203
Sporting and athletic goods manufacturing	0	412	469	1,847
Doll, toy, and game manufacturing	0	282	301	1,277
Office supplies (except paper) manufacturing	0	27	30	264
Sign manufacturing	0	1,052	803	3,001
Gasket, packing, and sealing device manufacturing	0	556	603	2,433
Musical instrument manufacturing	0	148	150	358
Fasteners, buttons, needles, and pins manufacturing	0	113	122	281
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	153	166	370
All other miscellaneous manufacturing	2	89,131	96,646	298,242
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	5,115	12,464	29,107
Wholesale - Professional and commercial equipment and supplies	0	11,635	19,837	38,792
Wholesale - Household appliances and electrical and electronic goods	0	6,951	16,258	35,967
Wholesale - Machinery, equipment, and supplies	0	17,180	30,517	55,526
Wholesale - Other durable goods merchant wholesalers	0	26,571	41,889	87,981
Wholesale - Drugs and druggists' sundries	0	5,915	17,038	35,794
Wholesale - Grocery and related product wholesalers	0	15,210	20,975	43,725
Wholesale - Petroleum and petroleum products	0	4,063	38,396	47,934
Wholesale - Other nondurable goods merchant wholesalers	1	36,825	70,794	153,050
Wholesale - Wholesale electronic markets and agents and brokers	0	16,669	9,072	10,854
Retail - Motor vehicle and parts dealers	0	23,028	28,174	45,308

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Retail - Furniture and home furnishings stores	0	10,932	11,723	21,824
Retail - Electronics and appliance stores	0	9,187	7,714	15,509
Retail - Building material and garden equipment and supplies stores	0	15,915	22,332	35,673
Retail - Food and beverage stores	1	36,239	42,839	74,501
Retail - Health and personal care stores	0	14,874	16,033	27,246
Retail - Gasoline stores	0	16,406	19,987	38,088
Retail - Clothing and clothing accessories stores	0	9,020	10,492	26,179
Retail - Sporting goods, hobby, musical instrument and book stores	0	10,247	10,814	21,030
Retail - General merchandise stores	1	35,808	37,710	68,073
Retail - Miscellaneous store retailers	1	25,454	23,812	36,342
Retail - Nonstore retailers	1	13,903	30,473	96,805
Air transportation	0	11,307	31,739	49,248
Rail transportation	0	5,921	19,767	30,363
Water transportation	0	(310)	(299)	4,419
Truck transportation	1	37,046	43,709	93,425
Transit and ground passenger transportation	0	8,131	10,110	14,796
Pipeline transportation	0	4,879	10,379	14,364
Scenic and sightseeing transportation and support activities for transportation	1	29,969	33,772	83,699
Couriers and messengers	0	15,374	19,785	34,978
Warehousing and storage	0	2,873	3,261	8,477
Newspaper publishers	0	11,144	18,282	26,302
Periodical publishers	0	1,842	2,635	7,337
Book publishers	0	1,011	2,946	8,259
Directory, mailing list, and other publishers	0	616	1,712	4,210
Greeting card publishing	0	0	0	0
Software publishers	0	7,259	18,720	23,930
Motion picture and video industries	0	5,506	14,341	32,749
Sound recording industries	0	253	2,761	4,282
Radio and television broadcasting	0	19,542	12,773	92,911

## APPENDIX

Cable and other subscription programming	0	127	1,190	3,115
Wired telecommunications carriers	0	19,866	50,479	103,794
Wireless telecommunications carriers (except satellite)	0	1,758	8,581	28,876
Satellite, telecommunications resellers, and all other telecommunications	0	2,340	2,944	8,617
Data processing, hosting, and related services	0	11,827	31,138	75,868
News syndicates, libraries, archives and all other information services	0	1,235	2,447	3,727
Internet publishing and broadcasting and web search portals	0	2,775	7,501	25,935
Nondepository credit intermediation and related activities	0	19,274	26,395	46,765
Securities and commodity contracts intermediation and brokerage	0	43,456	43,799	97,855
Monetary authorities and depository credit intermediation	1	110,812	306,912	532,782
Other financial investment activities	1	7,991	10,362	61,180
Direct life insurance carriers	0	663	1,445	2,008
Insurance carriers, except direct life	0	15,700	60,209	127,245
Insurance agencies, brokerages, and related activities	1	30,629	46,802	120,216
Funds, trusts, and other financial vehicles	0	6,384	7,806	59,651
Other real estate	9	169,996	504,889	1,573,960
Tenant-occupied housing	0	7,000	103,649	119,486
Owner-occupied dwellings	0	0	361,632	456,917
Automotive equipment rental and leasing	0	7,117	24,882	38,647
General and consumer goods rental except video tapes and discs	0	7,855	9,386	15,921
Video tape and disc rental	0	1,795	2,587	4,606
Commercial and industrial machinery and equipment rental and leasing	0	9,741	17,593	30,963
Lessors of nonfinancial intangible assets	0	918	36,005	45,574

## APPENDIX

Legal services	2	143,638	218,089	372,895
Accounting, tax preparation, bookkeeping, and payroll services	1	45,957	57,437	93,132
Architectural, engineering, and related services	1	79,177	90,922	174,568
Specialized design services	0	5,953	6,234	8,719
Custom computer programming services	0	13,197	14,597	23,726
Computer systems design services	0	18,589	19,128	27,284
Other computer related services, including facilities management	0	11,003	15,876	37,850
Management consulting services	2	103,746	102,317	188,047
Environmental and other technical consulting services	1	37,235	30,914	51,229
Scientific research and development services	36	2,285,617	2,781,808	7,249,260
Advertising, public relations, and related services	1	21,709	28,085	70,315
Photographic services	0	6,332	3,540	7,006
Veterinary services	0	4,795	6,379	11,100
Marketing research and all other miscellaneous professional, scientific, and technical services	2	98,276	90,435	154,895
Management of companies and enterprises	1	86,065	99,802	174,661
Office administrative services	1	39,853	20,113	43,409
Facilities support services	0	3,984	5,649	15,043
Employment services	2	80,517	135,930	210,179
Business support services	1	26,982	24,414	43,462
Travel arrangement and reservation services	0	6,817	9,666	24,867
Investigation and security services	0	12,214	12,473	17,384
Services to buildings	1	31,064	32,269	56,667
Landscape and horticultural services	1	24,380	25,785	44,597
Other support services	0	7,144	8,970	18,957
Waste management and remediation services	0	11,379	22,460	40,585
Elementary and secondary schools	0	10,272	9,463	12,264
Junior colleges, colleges, universities, and professional schools	0	5,356	7,840	13,476
Other educational services	0	9,146	8,845	19,124
Offices of physicians	1	105,836	122,973	175,853
Offices of dentists	0	25,800	31,693	49,721

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Offices of other health practitioners	1	36,367	34,648	47,706
Outpatient care centers	0	15,733	17,012	35,020
Medical and diagnostic laboratories	0	3,424	4,702	7,321
Home health care services	0	18,403	13,406	19,229
Other ambulatory health care services	0	8,844	9,733	16,459
Hospitals	3	229,195	260,399	489,313
Nursing and community care facilities	1	28,324	31,352	57,008
Residential mental retardation, mental health, substance abuse and other facilities	0	12,399	13,094	21,102
Individual and family services	1	24,540	20,673	32,706
Child day care services	1	12,257	13,204	19,385
Community food, housing, and other relief services, including rehabilitation services	0	8,212	8,603	21,816
Performing arts companies	0	2,448	3,748	9,796
Commercial Sports Except Racing	0	2,483	3,145	10,606
Racing and Track Operation	0	331	493	1,865
Independent artists, writers, and performers	1	10,564	13,085	19,116
Promoters of performing arts and sports and agents for public figures	0	1,540	3,129	12,092
Museums, historical sites, zoos, and parks	0	2,313	2,651	4,746
Amusement parks and arcades	0	359	539	951
Gambling industries (except casino hotels)	0	6,844	16,463	31,745
Other amusement and recreation industries	0	8,168	9,114	16,001
Fitness and recreational sports centers	0	4,275	5,776	10,987
Bowling centers	0	771	1,043	2,293
Hotels and motels, including casino hotels	0	2,263	4,043	7,513
Other accommodations	0	488	617	947
Full-service restaurants	3	61,386	81,985	160,136
Limited-service restaurants	2	39,891	53,969	127,006
All other food and drinking places	2	45,746	59,283	99,789
Automotive repair and maintenance, except car washes	1	39,932	37,779	64,341
Car washes	0	20,001	25,084	40,969

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Electronic and precision equipment repair and maintenance	0	7,006	8,800	17,766
Commercial and industrial machinery and equipment repair and maintenance	0	14,685	16,951	29,274
Personal and household goods repair and maintenance	0	14,444	8,838	13,885
Personal care services	1	15,641	11,615	15,660
Death care services	0	1,466	1,672	3,011
Dry-cleaning and laundry services	0	3,777	3,965	6,088
Other personal services	1	16,757	14,024	19,263
Religious organizations	1	32,884	7,283	67,289
Grantmaking, giving, and social advocacy organizations	0	14,741	29,933	56,793
Business and professional associations	0	10,356	12,886	26,424
Labor and civic organizations	0	7,070	12,355	27,625
Private households	0	2,785	2,785	2,785
Postal service	0	24,608	24,629	27,625
Federal electric utilities	0	2,726	5,010	24,544
Other federal government enterprises	0	888	(5,216)	728
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	549	671	1,211
Local government passenger transit	0	3,841	(1,369)	4,495
Local government electric utilities	0	692	1,972	3,950
Other local government enterprises	0	19,186	41,708	94,270
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0



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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	7	803,770	1,119,239	1,119,239

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 424: Detailed M2M Program Impacts by Types of Impact, Montana.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1</i>	<i>62,676</i>	<i>89,726</i>	<i>194,990</i>
Oilseed farming	0	0	16	68
Grain farming	0	19	104	480
Vegetable and melon farming	0	20	33	91
Fruit farming	0	2	4	9
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	4	5	12
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	3	6	17
All other crop farming	0	13	18	39
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1	27	143
Dairy cattle and milk production	0	3	12	71
Poultry and egg production	0	2	2	27
Animal production, except cattle and poultry and eggs	0	14	120	291
Forestry, forest products, and timber tract production	0	2	2	2
Commercial logging	0	16	16	25
Commercial fishing	0	17	17	19
Commercial hunting and trapping	0	9	6	8
Support activities for agriculture and forestry	0	90	79	98
Oil and gas extraction	0	70	102	355
Coal mining	0	29	50	93
Copper, nickel, lead, and zinc mining	0	101	384	660
Iron ore mining	0	0	0	0
Gold ore mining	0	8	14	36

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Silver ore mining	0	1	3	10
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	3	3	6
Stone mining and quarrying	0	20	21	51
Sand and gravel mining	0	26	20	33
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	12	8	12
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	1	1	5
Metal mining services	0	2	4	13
Other nonmetallic minerals services	0	0	0	1
Electric power generation - Hydroelectric	0	34	83	137
Electric power generation - Fossil fuel	0	77	228	682
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	1	1	3
Electric power generation - Wind	0	1	17	88
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	214	667	2,009
Natural gas distribution	0	76	194	450
Water, sewage and other systems	0	5	12	39
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	355	452	1,165
Maintenance and repair construction of residential structures	0	76	103	270
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	1
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	8	13	127
Flour milling	0	3	6	44
Rice milling	0	1	1	11
Malt manufacturing	0	2	4	22
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	1	15
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	2
Beet sugar manufacturing	0	5	9	51
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	0	1	4
Confectionery manufacturing from purchased chocolate	0	1	1	8
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	1
Canned fruits and vegetables manufacturing	0	0	1	7

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Canned specialties	0	0	0	1
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	1	1	12
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	11	15	120
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	1
Frozen cakes and other pastries manufacturing	0	4	4	9
Poultry processing	0	1	1	7
Animal, except poultry, slaughtering	0	3	3	51
Meat processed from carcasses	0	9	10	112
Rendering and meat byproduct processing	0	0	0	1
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	18	22	62
Cookie and cracker manufacturing	0	1	1	7
Dry pasta, mixes, and dough manufacturing	0	2	3	16
Tortilla manufacturing	0	1	1	5
Roasted nuts and peanut butter manufacturing	0	2	2	10
Other snack food manufacturing	0	1	1	9
Coffee and tea manufacturing	0	1	1	10
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	1
All other food manufacturing	0	0	1	4
Bottled and canned soft drinks & water	0	8	15	99
Manufactured ice	0	1	0	4
Breweries	0	9	22	119
Wineries	0	0	0	1
Distilleries	0	1	9	31
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	1
Broadwoven fabric mills	0	0	0	0

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Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	1
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	0	1	2
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	1
Other textile product mills	0	1	1	3
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	1
Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	1
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	1
Sawmills	0	15	30	90
Wood preservation	0	1	4	10
Veneer and plywood manufacturing	0	3	6	13
Engineered wood member and truss manufacturing	0	2	3	8
Reconstituted wood product manufacturing	0	4	15	36
Wood windows and door manufacturing	0	6	11	41
Cut stock, resawing lumber, and planing	0	3	9	19
Other millwork, including flooring	0	2	5	17
Wood container and pallet manufacturing	0	0	0	1
Manufactured home (mobile home) manufacturing	0	0	0	0

## APPENDIX

Prefabricated wood building manufacturing	0	2	2	9
All other miscellaneous wood product manufacturing	0	2	3	14
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	1	3	10
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	92	135	281
Support activities for printing	0	1	2	3
Petroleum refineries	0	81	412	2,831
Asphalt paving mixture and block manufacturing	0	0	0	7
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	1	2	8
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	1	3	39
Industrial gas manufacturing	0	2	3	16
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	1	1	7
Other basic organic chemical manufacturing	0	1	1	14
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	1
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	2	2	11
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	1

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	2	3	38
Medicinal and botanical manufacturing	0	1	1	8
Pharmaceutical preparation manufacturing	0	0	0	1
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	2	2	9
Paint and coating manufacturing	0	0	0	1
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	1	2	18
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1	1	8
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	1	1	6
Other miscellaneous chemical product manufacturing	0	2	2	17
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	1	1	5
Plastics pipe and pipe fitting manufacturing	0	0	1	3
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	1	2	8
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	7	9	34
Tire manufacturing	0	0	0	1

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	4	6	27
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	1
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	4
Cement manufacturing	0	3	8	24
Ready-mix concrete manufacturing	0	11	18	81
Concrete block and brick manufacturing	0	2	3	9
Concrete pipe manufacturing	0	1	1	2
Other concrete product manufacturing	0	4	5	17
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	3	8	12
Cut stone and stone product manufacturing	0	3	4	12
Ground or treated mineral and earth manufacturing	0	3	7	13
Mineral wool manufacturing	0	5	11	23
Miscellaneous nonmetallic mineral products manufacturing	0	1	3	6
Iron and steel mills and ferroalloy manufacturing	0	0	0	1
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	(0)	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0



## APPENDIX

Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	1	1	3
Nonferrous metal foundries	0	0	0	1
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	1
Iron and steel forging	0	0	0	1
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	1	3	9
Handtool manufacturing	0	1	1	4
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	6	9	32
Plate work manufacturing	0	2	3	8
Metal window and door manufacturing	0	1	1	4
Sheet metal work manufacturing	0	2	3	7
Ornamental and architectural metal work manufacturing	0	2	3	9
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	1	2
Spring and wire product manufacturing	0	0	0	1
Machine shops	0	7	8	20
Turned product and screw, nut, and bolt manufacturing	0	0	0	1
Metal heat treating	0	0	0	0

## APPENDIX

Metal coating and nonprecious engraving	0	0	0	2
Electroplating, anodizing, and coloring metal	0	0	0	1
Valve and fittings, other than plumbing, manufacturing	0	0	1	2
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	3	6	25
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	3	5	14
Fabricated pipe and pipe fitting manufacturing	0	0	1	1
Other fabricated metal manufacturing	0	4	4	14
Farm machinery and equipment manufacturing	0	1	1	7
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	1	1	4
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	1	1	4
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	1

## APPENDIX

Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	1
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0

## APPENDIX

Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	1
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	(0)	0	2
Other electronic component manufacturing	0	0	0	1
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0

## APPENDIX

Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	1
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	1
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	1	2

## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	1
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	14	16	60
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0
Motor vehicle electrical and electronic equipment manufacturing	0	1	1	6
Motor vehicle transmission and power train parts manufacturing	0	1	2	8
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	1	4
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	1	0	27
Motorcycle, bicycle, and parts manufacturing	0	0	(0)	1

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	3
Wood kitchen cabinet and countertop manufacturing	0	3	3	10
Upholstered household furniture manufacturing	0	0	0	1
Nonupholstered wood household furniture manufacturing	0	2	1	5
Other household nonupholstered furniture manufacturing	0	0	0	1
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	1
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	1
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	0	0	1
Surgical appliance and supplies manufacturing	0	1	1	5
Dental equipment and supplies manufacturing	0	0	0	1
Ophthalmic goods manufacturing	0	0	0	1
Dental laboratories	0	1	1	1
Jewelry and silverware manufacturing	0	4	4	12
Sporting and athletic goods manufacturing	0	4	4	17
Doll, toy, and game manufacturing	0	4	4	14
Office supplies (except paper) manufacturing	0	0	0	3
Sign manufacturing	0	8	6	22
Gasket, packing, and sealing device manufacturing	0	1	1	5
Musical instrument manufacturing	0	3	3	6
Fasteners, buttons, needles, and pins manufacturing	0	1	1	3

## APPENDIX

Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	1	1	2
All other miscellaneous manufacturing	0	3	4	13
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	50	123	286
Wholesale - Professional and commercial equipment and supplies	0	117	200	382
Wholesale - Household appliances and electrical and electronic goods	0	52	122	267
Wholesale - Machinery, equipment, and supplies	0	136	242	438
Wholesale - Other durable goods merchant wholesalers	0	155	244	509
Wholesale - Drugs and druggists' sundries	0	56	159	327
Wholesale - Grocery and related product wholesalers	0	137	188	392
Wholesale - Petroleum and petroleum products	0	36	381	468
Wholesale - Other nondurable goods merchant wholesalers	0	275	544	1,153
Wholesale - Wholesale electronic markets and agents and brokers	0	144	74	89
Retail - Motor vehicle and parts dealers	0	204	251	401
Retail - Furniture and home furnishings stores	0	101	108	198
Retail - Electronics and appliance stores	0	84	71	139
Retail - Building material and garden equipment and supplies stores	0	152	214	337
Retail - Food and beverage stores	0	353	413	701
Retail - Health and personal care stores	0	132	143	242
Retail - Gasoline stores	0	167	189	340
Retail - Clothing and clothing accessories stores	0	86	99	239
Retail - Sporting goods, hobby, musical instrument and book stores	0	93	98	187



## APPENDIX

Retail - General merchandise stores	0	309	328	588
Retail - Miscellaneous store retailers	0	241	224	329
Retail - Nonstore retailers	0	137	304	919
Air transportation	0	114	329	503
Rail transportation	0	61	179	293
Water transportation	0	(4)	(4)	57
Truck transportation	0	386	446	927
Transit and ground passenger transportation	0	110	138	189
Pipeline transportation	0	34	78	110
Scenic and sightseeing transportation and support activities for transportation	0	337	385	954
Couriers and messengers	0	161	214	370
Warehousing and storage	0	27	30	79
Newspaper publishers	0	99	158	224
Periodical publishers	0	22	31	79
Book publishers	0	10	28	79
Directory, mailing list, and other publishers	0	5	15	36
Greeting card publishing	0	0	0	0
Software publishers	0	78	198	246
Motion picture and video industries	0	70	185	349
Sound recording industries	0	3	33	47
Radio and television broadcasting	0	271	194	945
Cable and other subscription programming	0	2	13	29
Wired telecommunications carriers	0	196	464	926
Wireless telecommunications carriers (except satellite)	0	23	94	306
Satellite, telecommunications resellers, and all other telecommunications	0	29	32	85
Data processing, hosting, and related services	0	122	300	698
News syndicates, libraries, archives and all other information services	0	16	32	45
Internet publishing and broadcasting and web search portals	0	47	122	363

## APPENDIX

Nondepository credit intermediation and related activities	0	198	275	458
Securities and commodity contracts intermediation and brokerage	0	425	421	879
Monetary authorities and depository credit intermediation	0	1,036	2,951	4,983
Other financial investment activities	0	103	129	609
Direct life insurance carriers	0	5	12	16
Insurance carriers, except direct life	0	143	565	1,149
Insurance agencies, brokerages, and related activities	0	283	434	1,079
Funds, trusts, and other financial vehicles	0	71	85	549
Other real estate	0	2,153	6,359	17,176
Tenant-occupied housing	0	75	1,053	1,197
Owner-occupied dwellings	0	0	3,641	4,600
Automotive equipment rental and leasing	0	87	251	373
General and consumer goods rental except video tapes and discs	0	83	93	148
Video tape and disc rental	0	17	24	41
Commercial and industrial machinery and equipment rental and leasing	0	114	177	301
Lessors of nonfinancial intangible assets	0	9	353	444
Legal services	0	1,536	2,429	4,048
Accounting, tax preparation, bookkeeping, and payroll services	0	468	587	928
Architectural, engineering, and related services	0	903	1,042	1,970
Specialized design services	0	63	66	90
Custom computer programming services	0	106	117	185
Computer systems design services	0	190	195	273
Other computer related services, including facilities management	0	134	186	424
Management consulting services	0	1,305	1,289	2,302
Environmental and other technical consulting services	0	457	383	625

## APPENDIX

Scientific research and development services	0	30,381	37,479	90,267
Advertising, public relations, and related services	0	205	264	630
Photographic services	0	62	36	68
Veterinary services	0	46	62	104
Marketing research and all other miscellaneous professional, scientific, and technical services	0	1,123	1,030	1,738
Management of companies and enterprises	0	885	1,036	1,757
Office administrative services	0	546	281	547
Facilities support services	0	46	65	163
Employment services	0	900	1,561	2,322
Business support services	0	249	230	396
Travel arrangement and reservation services	0	76	109	269
Investigation and security services	0	130	134	180
Services to buildings	0	354	369	615
Landscape and horticultural services	0	246	261	435
Other support services	0	64	80	168
Waste management and remediation services	0	114	227	405
Elementary and secondary schools	0	123	113	144
Junior colleges, colleges, universities, and professional schools	0	70	102	167
Other educational services	0	98	95	198
Offices of physicians	0	957	1,120	1,589
Offices of dentists	0	244	304	470
Offices of other health practitioners	0	329	316	435
Outpatient care centers	0	157	171	346
Medical and diagnostic laboratories	0	32	45	68
Home health care services	0	165	122	176
Other ambulatory health care services	0	83	92	153
Hospitals	0	2,317	2,622	4,808
Nursing and community care facilities	0	270	299	529
Residential mental retardation, mental health, substance abuse and other facilities	0	133	141	222

## APPENDIX

Individual and family services	0	258	221	348
Child day care services	0	121	132	190
Community food, housing, and other relief services, including rehabilitation services	0	92	98	239
Performing arts companies	0	28	42	99
Commercial Sports Except Racing	0	24	30	98
Racing and Track Operation	0	3	5	18
Independent artists, writers, and performers	0	129	156	217
Promoters of performing arts and sports and agents for public figures	0	18	33	118
Museums, historical sites, zoos, and parks	0	24	27	47
Amusement parks and arcades	0	4	5	9
Gambling industries (except casino hotels)	0	69	157	298
Other amusement and recreation industries	0	75	80	141
Fitness and recreational sports centers	0	45	56	106
Bowling centers	0	7	9	20
Hotels and motels, including casino hotels	0	29	49	90
Other accommodations	0	7	9	13
Full-service restaurants	0	591	794	1,517
Limited-service restaurants	0	388	522	1,186
All other food and drinking places	0	498	635	1,038
Automotive repair and maintenance, except car washes	0	408	371	629
Car washes	0	193	241	390
Electronic and precision equipment repair and maintenance	0	81	102	195
Commercial and industrial machinery and equipment repair and maintenance	0	137	155	266
Personal and household goods repair and maintenance	0	153	83	131
Personal care services	0	161	109	149
Death care services	0	16	17	30
Dry-cleaning and laundry services	0	39	40	62
Other personal services	0	180	132	186
Religious organizations	0	369	64	693
Grantmaking, giving, and social advocacy organizations	0	190	331	629

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Business and professional associations	0	108	121	240
Labor and civic organizations	0	79	122	279
Private households	0	30	30	30
Postal service	0	228	228	255
Federal electric utilities	0	13	24	114
Other federal government enterprises	0	10	(69)	8
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	3	4	6
Local government passenger transit	0	43	(19)	34
Local government electric utilities	0	7	19	37
Other local government enterprises	0	204	411	920
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 29. Nebraska

**Table 425: Detailed NASA Impacts by Types of Impact, Nebraska.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	47	3,272,333	5,414,393	9,984,630
Oilseed farming	0	12,234	20,229	52,169
Grain farming	0	3,831	5,599	30,113
Vegetable and melon farming	0	626	691	2,581
Fruit farming	0	27	31	105
Tree nut farming	0	4	4	7
Greenhouse, nursery, and floriculture production	0	588	630	1,852
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	117	138	479
All other crop farming	0	476	500	1,428
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	0	2,939	4,880	33,426
Dairy cattle and milk production	0	233	320	3,271
Poultry and egg production	0	130	134	2,426
Animal production, except cattle and poultry and eggs	0	1,438	2,510	6,602
Forestry, forest products, and timber tract production	0	75	85	108
Commercial logging	0	241	296	687
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	(5)	55	171
Support activities for agriculture and forestry	0	1,407	1,329	1,628
Oil and gas extraction	0	845	432	11,356
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(129)	(27,588)	527
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	430	935	1,569
Sand and gravel mining	0	441	701	1,337

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	77	101	146
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	5	6	30
Metal mining services	0	19	11	317
Other nonmetallic minerals services	0	1	1	14
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	177	4,209	5,785
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	2,083	5,646	6,529
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	471	10,317	13,855
Natural gas distribution	0	6,594	19,999	23,301
Water, sewage and other systems	0	146	1,608	1,866
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	15,455	16,966	52,600
Maintenance and repair construction of residential structures	0	3,369	4,007	12,638
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	15	5	21
Dog and cat food manufacturing	0	547	2,724	9,935
Other animal food manufacturing	0	364	678	5,164
Flour milling	0	207	488	2,567
Rice milling	0	0	0	0
Malt manufacturing	0	82	208	875
Wet corn milling	0	1,199	3,788	19,793
Soybean and other oilseed processing	0	53	374	3,062
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	2,395	7,333	16,574
Beet sugar manufacturing	0	106	257	1,045
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	22	35	157
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	9	12	56
Frozen fruits, juices and vegetables manufacturing	0	210	448	1,863
Frozen specialties manufacturing	0	167	276	1,151
Canned fruits and vegetables manufacturing	0	12	14	61
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	12	22	124
Cheese manufacturing	0	6	10	147



## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	54	158	937
Fluid milk manufacturing	0	369	675	4,173
Creamery butter manufacturing	0	65	345	1,945
Ice cream and frozen dessert manufacturing	0	26	46	205
Frozen cakes and other pastries manufacturing	0	353	589	1,035
Poultry processing	0	927	1,329	5,484
Animal, except poultry, slaughtering	0	3,734	5,674	42,102
Meat processed from carcasses	0	1,377	1,519	12,425
Rendering and meat byproduct processing	0	70	62	299
Seafood product preparation and packaging	0	93	120	596
Bread and bakery product, except frozen, manufacturing	0	1,363	1,920	4,459
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	4	8	31
Tortilla manufacturing	0	189	240	787
Roasted nuts and peanut butter manufacturing	0	168	436	1,394
Other snack food manufacturing	0	70	99	524
Coffee and tea manufacturing	0	3	3	16
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	4	7	42
Spice and extract manufacturing	0	4	7	42
All other food manufacturing	0	282	415	1,814
Bottled and canned soft drinks & water	0	643	1,565	7,400
Manufactured ice	0	50	36	155
Breweries	0	94	314	1,296
Wineries	0	4	8	55
Distilleries	0	6	63	183
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	47	91	353
Broadwoven fabric mills	0	2	4	13
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	70	187	542
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	3	4	21
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	8	16	49
Textile bag and canvas mills	0	60	91	204
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	30	45	122
Hosiery and sock mills	0	1	2	7
Other apparel knitting mills	0	1	2	7
Cut and sew apparel contractors	0	12	14	31
Mens and boys cut and sew apparel manufacturing	0	1	2	8
Womens and girls cut and sew apparel manufacturing	0	3	5	37
Other cut and sew apparel manufacturing	0	4	6	23
Apparel accessories and other apparel manufacturing	0	1	2	9
Leather and hide tanning and finishing	0	41	93	202
Footwear manufacturing	0	1	2	10
Other leather and allied product manufacturing	0	0	0	4
Sawmills	0	59	100	542
Wood preservation	0	42	160	493
Veneer and plywood manufacturing	0	27	46	233
Engineered wood member and truss manufacturing	0	129	193	534
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	429	652	1,816
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	49	79	254
Wood container and pallet manufacturing	0	343	435	1,245
Manufactured home (mobile home) manufacturing	0	1	1	3
Prefabricated wood building manufacturing	0	67	82	255
All other miscellaneous wood product manufacturing	0	140	193	585

## APPENDIX

Pulp mills	0	0	0	0
Paper mills	0	50	93	468
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	1,666	2,237	11,268
Paper bag and coated and treated paper manufacturing	0	123	185	751
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	182	411	1,966
All other converted paper product manufacturing	0	14	19	86
Printing	0	5,148	7,133	15,664
Support activities for printing	0	382	521	816
Petroleum refineries	0	187	230	8,059
Asphalt paving mixture and block manufacturing	0	123	62	433
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	104	99	379
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	123	487	1,566
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	18	56	133
Other basic organic chemical manufacturing	0	634	1,635	9,358
Plastics material and resin manufacturing	0	322	733	4,345
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	166	299	526
Phosphatic fertilizer manufacturing	0	11	34	90
Fertilizer mixing	0	47	53	99
Pesticide and other agricultural chemical manufacturing	0	128	613	1,788
Medicinal and botanical manufacturing	0	9	9	16

## APPENDIX

Pharmaceutical preparation manufacturing	0	181	1,053	2,314
In-vitro diagnostic substance manufacturing	0	72	147	327
Biological product (except diagnostic) manufacturing	0	147	536	1,058
Paint and coating manufacturing	0	219	290	676
Adhesive manufacturing	0	139	272	912
Soap and other detergent manufacturing	0	404	911	2,002
Polish and other sanitation good manufacturing	0	433	830	2,366
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	94	301	715
Printing ink manufacturing	0	75	77	185
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	192	233	525
Photographic film and chemical manufacturing	0	113	114	237
Other miscellaneous chemical product manufacturing	0	101	111	244
Plastics packaging materials and unlaminated film and sheet manufacturing	0	211	370	1,325
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	932	2,374	7,262
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	6	12	52
Polystyrene foam product manufacturing	0	81	147	480
Urethane and other foam product (except polystyrene) manufacturing	0	20	35	138
Plastics bottle manufacturing	0	56	101	405
Other plastics product manufacturing	0	2,206	3,488	11,837
Tire manufacturing	0	73	107	392
Rubber and plastics hoses and belting manufacturing	0	325	555	1,329
Other rubber product manufacturing	0	585	926	2,974

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	41	53	133
Brick, tile, and other structural clay product manufacturing	0	1,438	2,422	6,414
Flat glass manufacturing	0	11	20	64
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	47	75	248
Cement manufacturing	0	236	512	1,589
Ready-mix concrete manufacturing	0	714	1,135	4,200
Concrete block and brick manufacturing	0	1,211	2,086	6,193
Concrete pipe manufacturing	0	77	119	347
Other concrete product manufacturing	0	1,757	2,439	6,445
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	188	217	483
Ground or treated mineral and earth manufacturing	0	77	196	718
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	9	20	62
Iron and steel mills and ferroalloy manufacturing	0	1,062	1,950	6,782
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	101	243	716
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	585	889	4,743
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	54	118	286
Nonferrous metal foundries	0	31	58	176
Custom roll forming	0	148	250	1,293
Crown and closure manufacturing and metal stamping	0	33	51	184
Iron and steel forging	0	255	371	1,503
Nonferrous forging	0	116	154	688
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	1	2	6
Prefabricated metal buildings and components manufacturing	0	175	265	742
Fabricated structural metal manufacturing	0	1,057	1,685	4,641
Plate work manufacturing	0	305	319	918
Metal window and door manufacturing	0	71	117	297
Sheet metal work manufacturing	0	4,700	6,371	16,181
Ornamental and architectural metal work manufacturing	0	48	68	236
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	100	128	425
Metal cans manufacturing	0	25	63	255
Metal barrels, drums and pails manufacturing	0	60	78	313
Hardware manufacturing	0	23	41	140
Spring and wire product manufacturing	0	10	14	56
Machine shops	0	1,742	2,081	4,469
Turned product and screw, nut, and bolt manufacturing	0	393	586	1,796
Metal heat treating	0	17	27	64
Metal coating and nonprecious engraving	0	154	297	688
Electroplating, anodizing, and coloring metal	0	770	880	1,759

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	40	70	213
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	544	1,453	2,425
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	2	5	19
Fabricated pipe and pipe fitting manufacturing	0	27	33	98
Other fabricated metal manufacturing	0	537	754	2,115
Farm machinery and equipment manufacturing	0	109	178	610
Lawn and garden equipment manufacturing	0	16	35	135
Construction machinery manufacturing	0	3	8	23
Mining machinery and equipment manufacturing	0	1	1	4
Oil and gas field machinery and equipment manufacturing	0	4	5	16
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	1	1	3
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	2
Optical instrument and lens manufacturing	0	0	1	1
Photographic and photocopying equipment manufacturing	0	15	25	57
Other commercial service industry machinery manufacturing	0	17	38	113
Air purification and ventilation equipment manufacturing	0	4	6	16

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	11	18	50
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	51	116	338
Industrial mold manufacturing	0	15	18	36
Special tool, die, jig, and fixture manufacturing	0	45	63	109
Cutting tool and machine tool accessory manufacturing	0	16	18	46
Machine tool manufacturing	0	13	15	43
Rolling mill and other metalworking machinery manufacturing	0	5	7	19
Turbine and turbine generator set units manufacturing	0	0	0	1
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	5
Mechanical power transmission equipment manufacturing	0	28	48	116
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	9	18	50
Air and gas compressor manufacturing	0	0	0	1
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	73	78	236
Overhead cranes, hoists, and monorail systems manufacturing	0	4	10	31
Industrial truck, trailer, and stacker manufacturing	0	22	40	137
Power-driven handtool manufacturing	0	2	6	18
Welding and soldering equipment manufacturing	0	1	1	3
Packaging machinery manufacturing	0	3	5	14
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	20	31	100



## APPENDIX

Fluid power pump and motor manufacturing	0	5	8	24
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	12	18	50
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	2	350,575	601,288	1,353,547
Telephone apparatus manufacturing	0	10	18	73
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	13	21	77
Audio and video equipment manufacturing	0	2	4	18
Printed circuit assembly (electronic assembly) manufacturing	0	132	197	761
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	41	68	184
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	2,277	3,174	8,339
Electronic connector manufacturing	0	3,508	5,138	14,202
Other electronic component manufacturing	0	55	65	291
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	2,757	4,176	8,893
Automatic environmental control manufacturing	0	19	25	54
Industrial process variable instruments manufacturing	0	1	2	6
Totalizing fluid meter and counting device manufacturing	0	80	161	398

## APPENDIX

Electricity and signal testing instruments manufacturing	0	67	99	430
Analytical laboratory instrument manufacturing	0	4,208	7,231	20,646
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	1
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	13	22	130
Electric lamp bulb and part manufacturing	0	5	15	30
Lighting fixture manufacturing	0	41	94	190
Small electrical appliance manufacturing	0	1	2	7
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	271	719	1,378
Relay and industrial control manufacturing	0	9	17	49
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	5	14	80
Wiring device manufacturing	0	462	1,649	3,309
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	130	176	458

## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	2	5	28
Motor vehicle body manufacturing	0	51	65	249
Truck trailer manufacturing	0	10	12	51
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	87	95	442
Motor vehicle gasoline engine and engine parts manufacturing	0	253	349	1,761
Motor vehicle electrical and electronic equipment manufacturing	0	415	535	2,681
Motor vehicle transmission and power train parts manufacturing	0	456	669	3,498
Motor vehicle seating and interior trim manufacturing	0	32	42	278
Motor vehicle metal stamping	0	127	163	854
Other motor vehicle parts manufacturing	0	2,485	3,571	16,306
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	10	14	70
Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	1	1	6
Other aircraft parts and auxiliary equipment manufacturing	0	3	3	12
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	3	3	29
Ship building and repairing	0	0	0	0
Boat building	0	9	9	76
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	754	663	4,604

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	455	814	1,748
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	25	32	119
Other household nonupholstered furniture manufacturing	0	1	2	7
Institutional furniture manufacturing	0	1	2	6
Wood office furniture manufacturing	0	2	3	8
Custom architectural woodwork and millwork	0	9	9	24
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	255	448	1,043
Mattress manufacturing	0	25	80	213
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	445	1,651	3,183
Surgical appliance and supplies manufacturing	0	121	455	769
Dental equipment and supplies manufacturing	0	1	4	8
Ophthalmic goods manufacturing	0	7	29	53
Dental laboratories	0	44	44	77
Jewelry and silverware manufacturing	0	39	63	161
Sporting and athletic goods manufacturing	0	31	70	225
Doll, toy, and game manufacturing	0	19	65	153
Office supplies (except paper) manufacturing	0	8	18	63
Sign manufacturing	0	283	287	922
Gasket, packing, and sealing device manufacturing	0	10	19	58
Musical instrument manufacturing	0	7	8	34
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	89	253	550
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	0	14,774	21,655	40,094
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,327	6,031	12,859
Wholesale - Professional and commercial equipment and supplies	0	26,606	49,192	81,341
Wholesale - Household appliances and electrical and electronic goods	0	13,081	32,543	68,541
Wholesale - Machinery, equipment, and supplies	0	8,081	15,221	26,629
Wholesale - Other durable goods merchant wholesalers	0	17,294	28,678	53,243
Wholesale - Drugs and druggists' sundries	0	5,319	17,159	32,370
Wholesale - Grocery and related product wholesalers	0	4,501	6,479	12,030
Wholesale - Petroleum and petroleum products	0	1,406	16,484	19,521
Wholesale - Other nondurable goods merchant wholesalers	0	17,589	36,257	67,636
Wholesale - Wholesale electronic markets and agents and brokers	0	5,026	3,340	3,721
Retail - Motor vehicle and parts dealers	0	9,003	14,071	21,012
Retail - Furniture and home furnishings stores	0	4,723	5,976	9,984
Retail - Electronics and appliance stores	0	4,268	4,484	7,837
Retail - Building material and garden equipment and supplies stores	0	5,646	10,407	15,771
Retail - Food and beverage stores	1	13,328	19,094	34,127
Retail - Health and personal care stores	0	10,373	12,394	19,297
Retail - Gasoline stores	0	5,975	10,155	19,588
Retail - Clothing and clothing accessories stores	0	4,542	7,345	16,655
Retail - Sporting goods, hobby, musical instrument and book stores	0	3,504	4,592	8,239
Retail - General merchandise stores	1	15,204	20,046	34,486
Retail - Miscellaneous store retailers	0	4,619	5,886	11,671

## APPENDIX

Retail - Nonstore retailers	0	9,057	29,539	59,002
Air transportation	0	1,107	5,617	8,165
Rail transportation	0	3,325	10,138	15,545
Water transportation	0	1	1	156
Truck transportation	1	75,316	99,634	203,207
Transit and ground passenger transportation	0	2,278	2,885	4,729
Pipeline transportation	0	9,953	8,751	8,641
Scenic and sightseeing transportation and support activities for transportation	0	12,409	14,828	32,466
Couriers and messengers	0	5,868	8,670	15,485
Warehousing and storage	0	10,307	13,900	27,645
Newspaper publishers	0	4,120	6,624	9,604
Periodical publishers	0	3,021	4,551	6,589
Book publishers	0	151	459	1,073
Directory, mailing list, and other publishers	0	3,070	9,827	14,893
Greeting card publishing	0	0	0	0
Software publishers	0	51,441	124,589	150,724
Motion picture and video industries	0	1,225	2,409	10,159
Sound recording industries	0	89	551	1,241
Radio and television broadcasting	0	12,523	10,686	44,102
Cable and other subscription programming	0	418	1,970	5,850
Wired telecommunications carriers	0	12,373	39,627	79,049
Wireless telecommunications carriers (except satellite)	0	1,534	13,935	30,721
Satellite, telecommunications resellers, and all other telecommunications	1	51,512	83,855	218,711
Data processing, hosting, and related services	0	11,094	24,926	50,197
News syndicates, libraries, archives and all other information services	0	1,187	2,073	3,176
Internet publishing and broadcasting and web search portals	0	6,497	18,775	59,033
Nondepository credit intermediation and related activities	0	23,504	29,560	48,763
Securities and commodity contracts intermediation and brokerage	0	26,184	26,703	62,210

## APPENDIX

Monetary authorities and depository credit intermediation	1	47,781	93,542	195,370
Other financial investment activities	0	10,414	13,629	49,777
Direct life insurance carriers	0	8,925	25,677	35,256
Insurance carriers, except direct life	0	21,046	119,717	195,961
Insurance agencies, brokerages, and related activities	1	36,389	78,900	162,944
Funds, trusts, and other financial vehicles	0	2,656	3,172	31,793
Other real estate	2	31,430	94,336	278,576
Tenant-occupied housing	0	3,373	53,639	60,520
Owner-occupied dwellings	0	0	161,383	203,905
Automotive equipment rental and leasing	0	2,055	4,603	7,816
General and consumer goods rental except video tapes and discs	0	3,035	3,895	6,117
Video tape and disc rental	0	780	1,317	2,129
Commercial and industrial machinery and equipment rental and leasing	0	3,401	5,837	9,830
Lessors of nonfinancial intangible assets	0	622	13,683	17,715
Legal services	0	38,112	71,120	103,586
Accounting, tax preparation, bookkeeping, and payroll services	0	18,167	23,318	34,321
Architectural, engineering, and related services	0	18,348	21,264	37,926
Specialized design services	0	2,179	2,350	3,010
Custom computer programming services	0	8,101	9,373	14,063
Computer systems design services	0	10,022	10,806	14,618
Other computer related services, including facilities management	0	6,625	9,820	17,993
Management consulting services	0	27,554	27,343	43,909
Environmental and other technical consulting services	0	6,346	5,424	8,715
Scientific research and development services	7	499,068	748,577	1,691,289
Advertising, public relations, and related services	0	12,609	17,315	33,050
Photographic services	0	2,888	1,307	2,501
Veterinary services	0	2,306	3,124	5,169

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	1	32,803	26,113	40,085
Management of companies and enterprises	1	111,846	131,566	200,552
Office administrative services	0	16,943	7,824	16,937
Facilities support services	0	355	486	1,396
Employment services	1	48,233	82,374	119,411
Business support services	0	13,657	12,296	20,473
Travel arrangement and reservation services	0	3,060	4,581	11,410
Investigation and security services	0	5,230	5,520	8,138
Services to buildings	0	10,947	11,937	19,472
Landscape and horticultural services	0	6,317	7,060	11,954
Other support services	0	2,658	3,607	7,394
Waste management and remediation services	0	4,254	8,420	15,566
Elementary and secondary schools	0	817	688	945
Junior colleges, colleges, universities, and professional schools	0	12,118	14,891	22,579
Other educational services	0	5,229	4,851	11,338
Offices of physicians	0	58,806	71,157	98,783
Offices of dentists	0	11,406	14,787	22,299
Offices of other health practitioners	0	15,011	14,198	19,855
Outpatient care centers	0	13,836	14,690	24,835
Medical and diagnostic laboratories	0	2,716	4,286	6,637
Home health care services	0	8,927	7,378	9,543
Other ambulatory health care services	0	4,102	4,591	7,669
Hospitals	1	77,689	92,839	186,139
Nursing and community care facilities	0	14,981	17,605	31,375
Residential mental retardation, mental health, substance abuse and other facilities	0	6,475	6,925	9,748
Individual and family services	1	13,750	12,372	19,135
Child day care services	0	5,901	6,830	10,024
Community food, housing, and other relief services, including rehabilitation services	0	3,548	3,892	8,970
Performing arts companies	0	827	1,211	2,852



## APPENDIX

Commercial Sports Except Racing	0	940	1,163	3,730
Racing and Track Operation	0	384	614	1,552
Independent artists, writers, and performers	0	3,009	3,696	5,086
Promoters of performing arts and sports and agents for public figures	0	1,593	3,177	9,693
Museums, historical sites, zoos, and parks	0	1,154	1,319	2,557
Amusement parks and arcades	0	188	405	567
Gambling industries (except casino hotels)	0	1,767	6,246	10,366
Other amusement and recreation industries	0	2,208	2,837	5,394
Fitness and recreational sports centers	0	1,809	2,789	4,988
Bowling centers	0	349	500	1,066
Hotels and motels, including casino hotels	0	849	1,501	2,668
Other accommodations	0	343	433	601
Full-service restaurants	1	18,628	29,053	53,950
Limited-service restaurants	1	14,742	24,493	54,795
All other food and drinking places	1	15,347	20,183	33,462
Automotive repair and maintenance, except car washes	0	16,671	22,397	33,138
Car washes	0	7,548	11,764	18,221
Electronic and precision equipment repair and maintenance	0	6,982	10,453	17,393
Commercial and industrial machinery and equipment repair and maintenance	0	5,280	7,467	11,805
Personal and household goods repair and maintenance	0	4,037	4,792	6,023
Personal care services	0	6,679	6,836	8,682
Death care services	0	764	1,143	1,788
Dry-cleaning and laundry services	0	1,679	2,010	2,877
Other personal services	0	6,041	6,702	8,773
Religious organizations	0	17,835	16,684	42,472
Grantmaking, giving, and social advocacy organizations	0	3,909	17,361	23,961
Business and professional associations	0	2,650	5,215	9,403
Labor and civic organizations	0	2,363	8,227	15,879
Private households	0	2,185	2,185	2,185
Postal service	0	11,650	11,659	13,022
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	566	(3,534)	506
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	409	506	929
Local government passenger transit	0	748	(85)	850
Local government electric utilities	0	14,115	43,958	76,999
Other local government enterprises	0	7,323	17,156	28,768
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	7	738,039	1,159,111	1,389,789

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 426: Detailed M2M Program Impacts by Types of Impact, Nebraska.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	3	235,631	395,849	765,176
Oilseed farming	0	759	1,816	5,289
Grain farming	0	230	375	1,838
Vegetable and melon farming	0	43	50	175
Fruit farming	0	2	3	9
Tree nut farming	0	1	1	1

## APPENDIX

Greenhouse, nursery, and floriculture production	0	15	16	47
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	6	8	24
All other crop farming	0	25	28	77
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	194	310	1,880
Dairy cattle and milk production	0	19	26	237
Poultry and egg production	0	7	8	137
Animal production, except cattle and poultry and eggs	0	69	134	363
Forestry, forest products, and timber tract production	0	4	4	5
Commercial logging	0	5	6	12
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	(0)	4	10
Support activities for agriculture and forestry	0	98	92	113
Oil and gas extraction	0	37	25	637
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(7)	217	26
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	47	50	86
Sand and gravel mining	0	85	66	106
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	13	9	12
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	1
Metal mining services	0	1	1	19

## APPENDIX

Other nonmetallic minerals services	0	0	0	1
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	14	316	418
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	138	359	390
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	33	728	950
Natural gas distribution	0	557	1,750	1,785
Water, sewage and other systems	0	13	120	124
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	602	664	1,998

## APPENDIX

Maintenance and repair construction of residential structures	0	226	270	824
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1	0	1
Dog and cat food manufacturing	0	32	164	573
Other animal food manufacturing	0	27	52	374
Flour milling	0	12	28	151
Rice milling	0	0	0	0
Malt manufacturing	0	5	14	46
Wet corn milling	0	104	356	1,876
Soybean and other oilseed processing	0	5	36	289
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	130	390	877
Beet sugar manufacturing	0	5	11	47
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	2	3	11
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	1	1	4
Frozen fruits, juices and vegetables manufacturing	0	18	38	146
Frozen specialties manufacturing	0	14	22	87
Canned fruits and vegetables manufacturing	0	1	1	6
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	1	2	11
Cheese manufacturing	0	0	1	12
Dry, condensed, and evaporated dairy product manufacturing	0	5	15	78
Fluid milk manufacturing	0	26	49	287
Creamery butter manufacturing	0	6	29	156
Ice cream and frozen dessert manufacturing	0	2	4	14
Frozen cakes and other pastries manufacturing	0	25	42	72
Poultry processing	0	53	80	311
Animal, except poultry, slaughtering	0	209	323	2,341
Meat processed from carcasses	0	95	107	845

## APPENDIX

Rendering and meat byproduct processing	0	6	5	24
Seafood product preparation and packaging	0	6	8	34
Bread and bakery product, except frozen, manufacturing	0	95	134	304
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	1	2
Tortilla manufacturing	0	12	16	50
Roasted nuts and peanut butter manufacturing	0	14	40	112
Other snack food manufacturing	0	5	7	36
Coffee and tea manufacturing	0	0	0	1
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	1	3
Spice and extract manufacturing	0	0	1	4
All other food manufacturing	0	24	36	149
Bottled and canned soft drinks & water	0	41	104	470
Manufactured ice	0	3	3	9
Breweries	0	6	22	87
Wineries	0	1	1	8
Distilleries	0	0	5	13
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	1	4
Broadwoven fabric mills	0	0	0	1
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	7	20	52
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	2
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	1	1	4
Textile bag and canvas mills	0	4	7	15
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	3	4	10
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	1
Cut and sew apparel contractors	0	2	2	4

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	0	0	1
Womens and girls cut and sew apparel manufacturing	0	0	1	4
Other cut and sew apparel manufacturing	0	0	1	2
Apparel accessories and other apparel manufacturing	0	0	0	1
Leather and hide tanning and finishing	0	3	6	13
Footwear manufacturing	0	0	0	1
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	3	5	24
Wood preservation	0	2	9	26
Veneer and plywood manufacturing	0	1	2	10
Engineered wood member and truss manufacturing	0	5	8	23
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	27	42	114
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	3	5	16
Wood container and pallet manufacturing	0	25	32	90
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	4	5	14
All other miscellaneous wood product manufacturing	0	9	13	36
Pulp mills	0	0	0	0
Paper mills	0	3	5	26
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	115	148	745
Paper bag and coated and treated paper manufacturing	0	9	12	50
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	11	22	109

## APPENDIX

All other converted paper product manufacturing	0	1	1	6
Printing	0	421	581	1,223
Support activities for printing	0	37	49	76
Petroleum refineries	0	13	14	505
Asphalt paving mixture and block manufacturing	0	6	3	19
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	8	7	27
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	9	37	114
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	1	4	10
Other basic organic chemical manufacturing	0	42	110	650
Plastics material and resin manufacturing	0	28	65	399
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	14	27	44
Phosphatic fertilizer manufacturing	0	1	2	5
Fertilizer mixing	0	3	4	7
Pesticide and other agricultural chemical manufacturing	0	8	38	109
Medicinal and botanical manufacturing	0	1	1	2
Pharmaceutical preparation manufacturing	0	20	124	246
In-vitro diagnostic substance manufacturing	0	12	26	57
Biological product (except diagnostic) manufacturing	0	24	93	168
Paint and coating manufacturing	0	13	18	41
Adhesive manufacturing	0	14	31	95
Soap and other detergent manufacturing	0	27	77	137



## APPENDIX

Polish and other sanitation good manufacturing	0	39	87	204
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	8	30	65
Printing ink manufacturing	0	7	7	16
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	18	26	61
Photographic film and chemical manufacturing	0	9	11	20
Other miscellaneous chemical product manufacturing	0	7	8	19
Plastics packaging materials and unlaminated film and sheet manufacturing	0	30	52	181
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	145	391	1,131
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	1	4
Polystyrene foam product manufacturing	0	6	11	35
Urethane and other foam product (except polystyrene) manufacturing	0	2	3	12
Plastics bottle manufacturing	0	6	11	42
Other plastics product manufacturing	0	210	331	1,066
Tire manufacturing	0	3	4	17
Rubber and plastics hoses and belting manufacturing	0	25	41	96
Other rubber product manufacturing	0	50	79	261
Pottery, ceramics, and plumbing fixture manufacturing	0	5	6	17
Brick, tile, and other structural clay product manufacturing	0	157	252	692
Flat glass manufacturing	0	1	1	5
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	4	6	20

## APPENDIX

Cement manufacturing	0	20	41	130
Ready-mix concrete manufacturing	0	44	67	251
Concrete block and brick manufacturing	0	123	200	603
Concrete pipe manufacturing	0	6	9	26
Other concrete product manufacturing	0	179	238	639
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	11	13	28
Ground or treated mineral and earth manufacturing	0	7	17	65
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	1	2	6
Iron and steel mills and ferroalloy manufacturing	0	92	145	525
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	6	14	47
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	78	110	568
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	5	8	22
Nonferrous metal foundries	0	3	4	14
Custom roll forming	0	25	42	200
Crown and closure manufacturing and metal stamping	0	5	7	26

## APPENDIX

Iron and steel forging	0	44	64	250
Nonferrous forging	0	21	28	117
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	0	0	1
Prefabricated metal buildings and components manufacturing	0	18	28	74
Fabricated structural metal manufacturing	0	103	166	449
Plate work manufacturing	0	27	28	78
Metal window and door manufacturing	0	5	8	20
Sheet metal work manufacturing	0	557	759	1,859
Ornamental and architectural metal work manufacturing	0	3	5	16
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	13	16	53
Metal cans manufacturing	0	3	7	28
Metal barrels, drums and pails manufacturing	0	7	10	36
Hardware manufacturing	0	3	5	17
Spring and wire product manufacturing	0	1	2	6
Machine shops	0	168	202	424
Turned product and screw, nut, and bolt manufacturing	0	67	100	291
Metal heat treating	0	3	4	10
Metal coating and nonprecious engraving	0	20	39	90
Electroplating, anodizing, and coloring metal	0	118	135	264
Valve and fittings, other than plumbing, manufacturing	0	5	8	24
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	22	58	98
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	1

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	1	2	5
Other fabricated metal manufacturing	0	51	71	191
Farm machinery and equipment manufacturing	0	11	19	57
Lawn and garden equipment manufacturing	0	2	4	13
Construction machinery manufacturing	0	1	2	5
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	1
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	4	7	15
Other commercial service industry machinery manufacturing	0	1	3	7
Air purification and ventilation equipment manufacturing	0	0	1	2
Heating equipment (except warm air furnaces) manufacturing	0	1	2	4
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	3	7	21
Industrial mold manufacturing	0	1	2	4
Special tool, die, jig, and fixture manufacturing	0	7	10	16
Cutting tool and machine tool accessory manufacturing	0	2	2	5
Machine tool manufacturing	0	1	2	5

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	1	1	2
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	1
Mechanical power transmission equipment manufacturing	0	2	4	10
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	1	2	5
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	7	7	21
Overhead cranes, hoists, and monorail systems manufacturing	0	0	1	2
Industrial truck, trailer, and stacker manufacturing	0	2	4	13
Power-driven handtool manufacturing	0	0	1	3
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	1	2
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	1	2	7
Fluid power pump and motor manufacturing	0	1	1	3
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2	2	6
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	44,867	76,753	174,079

## APPENDIX

Telephone apparatus manufacturing	0	1	1	4
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	1	1	5
Audio and video equipment manufacturing	0	0	1	2
Printed circuit assembly (electronic assembly) manufacturing	0	28	42	157
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	10	16	41
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	350	480	1,217
Electronic connector manufacturing	0	620	902	2,541
Other electronic component manufacturing	0	11	13	53
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	3,399	5,280	10,817
Automatic environmental control manufacturing	0	3	4	9
Industrial process variable instruments manufacturing	0	0	0	1
Totalizing fluid meter and counting device manufacturing	0	7	15	36
Electricity and signal testing instruments manufacturing	0	10	15	61
Analytical laboratory instrument manufacturing	0	0	0	1
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	2	3	15
Electric lamp bulb and part manufacturing	0	1	2	3
Lighting fixture manufacturing	0	4	10	19
Small electrical appliance manufacturing	0	0	0	1
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	37	98	188
Relay and industrial control manufacturing	0	2	3	8
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	1	2	9
Wiring device manufacturing	0	79	280	517
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	16	23	65
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	1
Motor vehicle body manufacturing	0	3	4	17
Truck trailer manufacturing	0	1	1	3
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	5	5	25
Motor vehicle gasoline engine and engine parts manufacturing	0	18	25	133

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	30	38	175
Motor vehicle transmission and power train parts manufacturing	0	45	68	306
Motor vehicle seating and interior trim manufacturing	0	2	2	14
Motor vehicle metal stamping	0	9	11	58
Other motor vehicle parts manufacturing	0	194	252	1,311
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1	1	5
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	3
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	1
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	2
Ship building and repairing	0	0	0	0
Boat building	0	0	0	4
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	54	50	340
Wood kitchen cabinet and countertop manufacturing	0	44	72	159
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	2	2	8
Other household nonupholstered furniture manufacturing	0	0	0	1
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	1



## APPENDIX

Custom architectural woodwork and millwork	0	1	1	2
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	26	43	102
Mattress manufacturing	0	2	5	14
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	34	123	224
Surgical appliance and supplies manufacturing	0	12	44	70
Dental equipment and supplies manufacturing	0	0	0	1
Ophthalmic goods manufacturing	0	1	2	4
Dental laboratories	0	4	4	7
Jewelry and silverware manufacturing	0	3	5	11
Sporting and athletic goods manufacturing	0	2	5	15
Doll, toy, and game manufacturing	0	2	6	12
Office supplies (except paper) manufacturing	0	1	2	6
Sign manufacturing	0	18	19	56
Gasket, packing, and sealing device manufacturing	0	0	1	2
Musical instrument manufacturing	0	1	1	4
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	8	27	49
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	5	8	16
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	175	455	970
Wholesale - Professional and commercial equipment and supplies	0	3,052	5,654	9,121
Wholesale - Household appliances and electrical and electronic goods	0	1,462	3,646	7,545
Wholesale - Machinery, equipment, and supplies	0	655	1,240	2,157
Wholesale - Other durable goods merchant wholesalers	0	1,496	2,483	4,569

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	368	1,172	2,157
Wholesale - Grocery and related product wholesalers	0	292	418	775
Wholesale - Petroleum and petroleum products	0	75	996	1,161
Wholesale - Other nondurable goods merchant wholesalers	0	1,308	2,784	5,090
Wholesale - Wholesale electronic markets and agents and brokers	0	458	289	321
Retail - Motor vehicle and parts dealers	0	577	907	1,343
Retail - Furniture and home furnishings stores	0	303	383	630
Retail - Electronics and appliance stores	0	271	286	489
Retail - Building material and garden equipment and supplies stores	0	341	629	942
Retail - Food and beverage stores	0	901	1,278	2,229
Retail - Health and personal care stores	0	641	770	1,195
Retail - Gasoline stores	0	385	604	1,092
Retail - Clothing and clothing accessories stores	0	301	483	1,063
Retail - Sporting goods, hobby, musical instrument and book stores	0	220	289	509
Retail - General merchandise stores	0	914	1,214	2,074
Retail - Miscellaneous store retailers	0	304	384	735
Retail - Nonstore retailers	0	621	2,050	3,899
Air transportation	0	76	394	563
Rail transportation	0	231	624	1,019
Water transportation	0	0	0	15
Truck transportation	0	3,434	4,392	8,649
Transit and ground passenger transportation	0	213	272	418
Pipeline transportation	0	481	455	459
Scenic and sightseeing transportation and support activities for transportation	0	874	1,059	2,321
Couriers and messengers	0	425	649	1,133
Warehousing and storage	0	860	1,156	2,282

## APPENDIX

Newspaper publishers	0	291	452	646
Periodical publishers	0	282	415	554
Book publishers	0	11	31	73
Directory, mailing list, and other publishers	0	202	654	986
Greeting card publishing	0	0	0	0
Software publishers	0	11,333	23,526	27,806
Motion picture and video industries	0	78	156	551
Sound recording industries	0	7	44	91
Radio and television broadcasting	0	1,371	1,284	3,543
Cable and other subscription programming	0	39	148	365
Wired telecommunications carriers	0	431	1,281	2,497
Wireless telecommunications carriers (except satellite)	0	121	897	1,920
Satellite, telecommunications resellers, and all other telecommunications	0	107	145	346
Data processing, hosting, and related services	0	901	1,899	3,645
News syndicates, libraries, archives and all other information services	0	110	191	275
Internet publishing and broadcasting and web search portals	0	843	2,318	6,272
Nondepository credit intermediation and related activities	0	1,870	2,375	3,687
Securities and commodity contracts intermediation and brokerage	0	1,962	1,966	4,284
Monetary authorities and depository credit intermediation	0	3,363	6,797	13,786
Other financial investment activities	0	955	1,214	3,536
Direct life insurance carriers	0	509	1,509	2,025
Insurance carriers, except direct life	0	1,440	8,431	13,268
Insurance agencies, brokerages, and related activities	0	3,008	6,556	13,031
Funds, trusts, and other financial vehicles	0	209	244	2,075
Other real estate	0	2,920	8,718	22,348
Tenant-occupied housing	0	254	3,803	4,229

## APPENDIX

Owner-occupied dwellings	0	0	11,334	14,320
Automotive equipment rental and leasing	0	173	318	517
General and consumer goods rental except video tapes and discs	0	214	258	379
Video tape and disc rental	0	52	84	133
Commercial and industrial machinery and equipment rental and leasing	0	269	396	648
Lessors of nonfinancial intangible assets	0	45	977	1,257
Legal services	0	3,135	6,094	8,652
Accounting, tax preparation, bookkeeping, and payroll services	0	1,385	1,786	2,562
Architectural, engineering, and related services	0	1,561	1,817	3,192
Specialized design services	0	171	185	232
Custom computer programming services	0	667	766	1,121
Computer systems design services	0	785	844	1,122
Other computer related services, including facilities management	0	556	793	1,386
Management consulting services	0	2,616	2,600	4,053
Environmental and other technical consulting services	0	580	500	790
Scientific research and development services	1	53,029	80,619	168,349
Advertising, public relations, and related services	0	959	1,310	2,383
Photographic services	0	203	97	175
Veterinary services	0	152	209	337
Marketing research and all other miscellaneous professional, scientific, and technical services	0	2,864	2,275	3,434
Management of companies and enterprises	0	10,332	12,271	18,118
Office administrative services	0	1,692	797	1,558
Facilities support services	0	29	40	108
Employment services	0	3,941	6,911	9,641
Business support services	0	967	889	1,432
Travel arrangement and reservation services	0	243	367	877
Investigation and security services	0	418	442	631
Services to buildings	0	901	985	1,530

## APPENDIX

Landscape and horticultural services	0	465	521	850
Other support services	0	202	274	558
Waste management and remediation services	0	314	626	1,140
Elementary and secondary schools	0	68	57	77
Junior colleges, colleges, universities, and professional schools	0	1,116	1,359	1,958
Other educational services	0	275	255	576
Offices of physicians	0	3,708	4,522	6,228
Offices of dentists	0	754	988	1,469
Offices of other health practitioners	0	948	904	1,261
Outpatient care centers	0	964	1,028	1,712
Medical and diagnostic laboratories	0	176	286	428
Home health care services	0	560	468	609
Other ambulatory health care services	0	269	303	498
Hospitals	0	5,479	6,520	12,757
Nursing and community care facilities	0	995	1,171	2,033
Residential mental retardation, mental health, substance abuse and other facilities	0	484	518	715
Individual and family services	0	1,008	923	1,419
Child day care services	0	407	478	684
Community food, housing, and other relief services, including rehabilitation services	0	278	308	687
Performing arts companies	0	67	95	204
Commercial Sports Except Racing	0	65	81	253
Racing and Track Operation	0	28	42	103
Independent artists, writers, and performers	0	228	273	359
Promoters of performing arts and sports and agents for public figures	0	128	234	668
Museums, historical sites, zoos, and parks	0	84	95	178
Amusement parks and arcades	0	14	26	37
Gambling industries (except casino hotels)	0	124	414	679
Other amusement and recreation industries	0	142	175	331

## APPENDIX

Fitness and recreational sports centers	0	132	190	335
Bowling centers	0	23	31	66
Hotels and motels, including casino hotels	0	75	128	224
Other accommodations	0	34	43	58
Full-service restaurants	0	1,261	1,978	3,595
Limited-service restaurants	0	1,015	1,677	3,618
All other food and drinking places	0	1,180	1,526	2,458
Automotive repair and maintenance, except car washes	0	1,100	1,419	2,087
Car washes	0	519	805	1,238
Electronic and precision equipment repair and maintenance	0	4,196	6,301	9,856
Commercial and industrial machinery and equipment repair and maintenance	0	376	522	821
Personal and household goods repair and maintenance	0	298	316	397
Personal care services	0	479	449	577
Death care services	0	57	81	126
Dry-cleaning and laundry services	0	131	155	221
Other personal services	0	453	440	592
Religious organizations	0	1,395	1,016	3,049
Grantmaking, giving, and social advocacy organizations	0	352	1,341	1,851
Business and professional associations	0	201	357	621
Labor and civic organizations	0	185	569	1,120
Private households	0	163	163	163
Postal service	0	826	827	922
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	46	(327)	40
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	16	19	33
Local government passenger transit	0	59	(8)	45
Local government electric utilities	0	1,104	3,136	5,344
Other local government enterprises	0	539	1,168	1,941

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 30. Nevada

**Table 427: Detailed NASA Impacts by Types of Impact, Nevada.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	301	19,710,117	31,351,661	57,796,330
Oilseed farming	0	0	0	0
Grain farming	0	288	1,273	7,503
Vegetable and melon farming	0	559	889	2,836
Fruit farming	0	24	44	124
Tree nut farming	0	93	97	141
Greenhouse, nursery, and floriculture production	0	193	250	623
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	2,321	2,959	7,400
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	123	2,122	18,138

## APPENDIX

Dairy cattle and milk production	0	165	423	4,446
Poultry and egg production	0	52	68	963
Animal production, except cattle and poultry and eggs	0	884	5,450	17,007
Forestry, forest products, and timber tract production	0	324	348	409
Commercial logging	0	303	327	419
Commercial fishing	0	901	2,766	4,416
Commercial hunting and trapping	0	35	235	709
Support activities for agriculture and forestry	0	9,239	7,693	10,668
Oil and gas extraction	0	2,237	932	65,579
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	14,403	91,721	142,545
Iron ore mining	0	0	0	0
Gold ore mining	0	20,832	39,230	59,143
Silver ore mining	0	3,804	5,058	8,756
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	66	186	554
Stone mining and quarrying	0	412	1,812	4,414
Sand and gravel mining	0	1,187	2,414	5,426
Other clay, ceramic, refractory minerals mining	0	170	277	568
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	531	1,132	2,027
Other nonmetallic minerals	0	1,387	2,005	3,447
Drilling oil and gas wells	0	0	0	4
Support activities for oil and gas operations	0	20	22	176
Metal mining services	0	1,391	1,993	6,765
Other nonmetallic minerals services	0	6	7	103
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	18,391	77,523	190,738
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	1,268	3,460	4,993
Electric power generation - Wind	0	73	619	915



## APPENDIX

Electric power generation - Geothermal	0	5,452	14,724	34,245
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	45,884	187,666	432,012
Natural gas distribution	0	26,725	83,455	157,728
Water, sewage and other systems	0	1,015	2,305	4,788
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	96,216	137,018	310,529
Maintenance and repair construction of residential structures	0	28,455	45,186	101,845
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	161	91	231
Dog and cat food manufacturing	0	365	1,414	5,663
Other animal food manufacturing	0	757	1,455	10,578
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	71	381	3,653
Fats and oils refining and blending	0	62	123	1,224
Breakfast cereal manufacturing	0	973	2,444	8,288
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	63	94	546
Chocolate and confectionery manufacturing from cacao beans	0	8	19	138
Confectionery manufacturing from purchased chocolate	0	375	525	3,056
Frozen fruits, juices and vegetables manufacturing	0	332	607	3,350
Frozen specialties manufacturing	0	749	1,128	5,929
Canned fruits and vegetables manufacturing	0	311	568	2,149
Canned specialties	0	115	284	1,647
Dehydrated food products manufacturing	0	30	55	327
Cheese manufacturing	0	3	6	160
Dry, condensed, and evaporated dairy product manufacturing	0	140	338	2,089
Fluid milk manufacturing	0	1,207	1,916	11,977
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	619	965	3,945
Frozen cakes and other pastries manufacturing	0	1,000	1,507	2,734
Poultry processing	0	33	45	366
Animal, except poultry, slaughtering	0	128	170	1,439
Meat processed from carcasses	0	1,165	1,284	11,738
Rendering and meat byproduct processing	0	79	81	429
Seafood product preparation and packaging	0	51	64	529
Bread and bakery product, except frozen, manufacturing	0	3,804	5,294	14,364
Cookie and cracker manufacturing	0	1,132	1,577	4,928
Dry pasta, mixes, and dough manufacturing	0	29	70	428
Tortilla manufacturing	0	318	390	1,781

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	238	244	985
Other snack food manufacturing	0	499	774	3,536
Coffee and tea manufacturing	0	195	372	2,173
Flavoring syrup and concentrate manufacturing	0	75	562	1,124
Mayonnaise, dressing, and sauce manufacturing	0	285	543	2,310
Spice and extract manufacturing	0	363	556	3,091
All other food manufacturing	0	429	593	4,218
Bottled and canned soft drinks & water	0	1,721	3,485	18,151
Manufactured ice	0	218	95	622
Breweries	0	156	414	1,763
Wineries	0	3	6	42
Distilleries	0	163	873	2,439
Tobacco product manufacturing	0	12	920	3,050
Fiber, yarn, and thread mills	0	5	9	56
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	44	101	436
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	1	12
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	269	563	1,944
Curtain and linen mills	0	106	179	510
Textile bag and canvas mills	0	310	429	1,114
Rope, cordage, twine, tire cord and tire fabric mills	0	21	42	105
Other textile product mills	0	354	481	1,307
Hosiery and sock mills	0	33	56	125
Other apparel knitting mills	0	19	35	80
Cut and sew apparel contractors	0	41	54	167
Mens and boys cut and sew apparel manufacturing	0	30	50	201
Womens and girls cut and sew apparel manufacturing	0	22	41	266
Other cut and sew apparel manufacturing	0	18	32	103
Apparel accessories and other apparel manufacturing	0	17	31	89
Leather and hide tanning and finishing	0	0	0	0

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	1	1	40
Sawmills	0	11	16	96
Wood preservation	0	131	347	1,201
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	409	533	1,531
Reconstituted wood product manufacturing	0	208	460	1,515
Wood windows and door manufacturing	0	832	1,097	3,452
Cut stock, resawing lumber, and planing	0	76	114	550
Other millwork, including flooring	0	1,187	1,601	4,077
Wood container and pallet manufacturing	0	659	764	2,415
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	105	120	381
All other miscellaneous wood product manufacturing	0	103	124	611
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	340	402	2,372
Paper bag and coated and treated paper manufacturing	0	218	276	1,601
Stationery product manufacturing	0	26	29	134
Sanitary paper product manufacturing	0	2,821	4,509	23,948
All other converted paper product manufacturing	0	206	238	1,047
Printing	1	28,746	41,007	86,552
Support activities for printing	0	82	115	193
Petroleum refineries	0	627	8,605	49,818
Asphalt paving mixture and block manufacturing	0	169	430	2,890
Asphalt shingle and coating materials manufacturing	0	174	768	1,887
Petroleum lubricating oil and grease manufacturing	0	130	746	2,453

## APPENDIX

All other petroleum and coal products manufacturing	0	390	2,471	11,023
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	46	93	456
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	375	658	2,574
Other basic organic chemical manufacturing	0	38	71	1,220
Plastics material and resin manufacturing	0	75	111	1,092
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	43	63	312
Pesticide and other agricultural chemical manufacturing	0	61	159	1,369
Medicinal and botanical manufacturing	0	191	275	1,282
Pharmaceutical preparation manufacturing	0	647	1,991	10,780
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	833	1,323	5,996
Adhesive manufacturing	0	29	40	249
Soap and other detergent manufacturing	0	251	637	5,973
Polish and other sanitation good manufacturing	0	237	374	2,211
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	180	409	1,848
Printing ink manufacturing	0	205	214	851
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	85	126	539
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	1,026	1,360	5,493

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,091	1,906	7,888
Unlaminated plastics profile shape manufacturing	0	493	1,151	3,202
Plastics pipe and pipe fitting manufacturing	0	117	310	976
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	101	210	763
Polystyrene foam product manufacturing	0	172	313	1,255
Urethane and other foam product (except polystyrene) manufacturing	0	222	376	1,222
Plastics bottle manufacturing	0	74	132	547
Other plastics product manufacturing	0	2,546	4,006	13,534
Tire manufacturing	0	161	234	1,105
Rubber and plastics hoses and belting manufacturing	0	189	322	971
Other rubber product manufacturing	0	2,271	3,592	13,581
Pottery, ceramics, and plumbing fixture manufacturing	0	15	17	35
Brick, tile, and other structural clay product manufacturing	0	103	115	372
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	547	895	2,322
Cement manufacturing	0	306	767	1,870
Ready-mix concrete manufacturing	0	4,083	7,074	22,276
Concrete block and brick manufacturing	0	1,103	2,078	4,524
Concrete pipe manufacturing	0	202	341	770
Other concrete product manufacturing	0	2,021	2,999	6,870
Lime manufacturing	0	281	723	1,683
Gypsum product manufacturing	0	1,121	3,079	7,747
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	613	726	1,514

## APPENDIX

Ground or treated mineral and earth manufacturing	0	316	906	2,400
Mineral wool manufacturing	0	18	40	106
Miscellaneous nonmetallic mineral products manufacturing	0	69	177	436
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	(30)	(31)	16
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	177	292	2,772
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	121	171	1,020
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	75	165	779
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	247	298	1,657
Secondary processing of other nonferrous metals	0	267	484	3,226
Ferrous metal foundries	0	453	578	1,745
Nonferrous metal foundries	0	135	167	497
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	333	497	1,253
Iron and steel forging	0	0	0	0
Nonferrous forging	0	336	433	1,119
Cutlery, utensil, pot, and pan manufacturing	0	16	52	126
Handtool manufacturing	0	65	111	243
Prefabricated metal buildings and components manufacturing	0	173	256	737
Fabricated structural metal manufacturing	0	1,482	2,277	5,392
Plate work manufacturing	0	137	145	433
Metal window and door manufacturing	0	268	431	1,200

## APPENDIX

Sheet metal work manufacturing	0	1,176	1,569	4,066
Ornamental and architectural metal work manufacturing	0	903	1,247	3,406
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	38	48	146
Metal cans manufacturing	0	113	271	1,128
Metal barrels, drums and pails manufacturing	0	7	9	74
Hardware manufacturing	0	147	258	803
Spring and wire product manufacturing	0	105	148	387
Machine shops	0	1,200	1,419	2,860
Turned product and screw, nut, and bolt manufacturing	0	883	1,271	3,012
Metal heat treating	0	23	37	92
Metal coating and nonprecious engraving	0	223	416	1,007
Electroplating, anodizing, and coloring metal	0	75	87	226
Valve and fittings, other than plumbing, manufacturing	0	255	435	1,178
Plumbing fixture fitting and trim manufacturing	0	17	57	224
Ball and roller bearing manufacturing	0	113	220	502
Small arms ammunition manufacturing	0	190	499	1,409
Ammunition, except for small arms, manufacturing	0	1	1	6
Small arms, ordnance, and accessories manufacturing	0	256	684	1,507
Fabricated pipe and pipe fitting manufacturing	0	1	2	7
Other fabricated metal manufacturing	0	821	1,125	2,754
Farm machinery and equipment manufacturing	0	7	10	96
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	5	9	26
Mining machinery and equipment manufacturing	0	2	2	6



## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	1	1	5
Sawmill, woodworking, and paper machinery	0	2	2	8
Printing machinery and equipment manufacturing	0	2	3	9
All other industrial machinery manufacturing	0	1	1	3
Optical instrument and lens manufacturing	0	0	0	2
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	46	78	327
Air purification and ventilation equipment manufacturing	0	50	69	226
Heating equipment (except warm air furnaces) manufacturing	0	8	10	30
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	116	192	506
Industrial mold manufacturing	0	19	22	49
Special tool, die, jig, and fixture manufacturing	0	15	18	38
Cutting tool and machine tool accessory manufacturing	0	18	19	42
Machine tool manufacturing	0	15	17	46
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	4	5	17
Speed changer, industrial high-speed drive, and gear manufacturing	0	83	112	305
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	18	28	74

## APPENDIX

Air and gas compressor manufacturing	0	1	2	5
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	3	3	11
Overhead cranes, hoists, and monorail systems manufacturing	0	9	15	55
Industrial truck, trailer, and stacker manufacturing	0	5	8	33
Power-driven handtool manufacturing	0	27	59	177
Welding and soldering equipment manufacturing	0	5	6	16
Packaging machinery manufacturing	0	3	4	13
Industrial process furnace and oven manufacturing	0	4	5	15
Fluid power cylinder and actuator manufacturing	0	58	75	195
Fluid power pump and motor manufacturing	0	9	12	53
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	17	21	63
Electronic computer manufacturing	0	3	8	32
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	16	39	210
Telephone apparatus manufacturing	0	12	28	111
Broadcast and wireless communications equipment manufacturing	0	4	7	25
Other communications equipment manufacturing	0	7	14	59
Audio and video equipment manufacturing	0	12	26	91
Printed circuit assembly (electronic assembly) manufacturing	0	168	305	1,079
Bare printed circuit board manufacturing	0	44	65	227

## APPENDIX

Semiconductor and related device manufacturing	0	30	66	282
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	42	70	227
Electronic connector manufacturing	0	108	197	757
Other electronic component manufacturing	0	90	112	468
Electromedical and electrotherapeutic apparatus manufacturing	0	19	48	61
Search, detection, and navigation instruments manufacturing	0	9,735	18,798	35,046
Automatic environmental control manufacturing	0	462	680	1,616
Industrial process variable instruments manufacturing	0	168	280	547
Totalizing fluid meter and counting device manufacturing	0	37	99	195
Electricity and signal testing instruments manufacturing	0	11	19	79
Analytical laboratory instrument manufacturing	0	10,197	21,569	39,193
Irradiation apparatus manufacturing	0	30	72	140
Watch, clock, and other measuring and controlling device manufacturing	0	6	14	35
Blank magnetic and optical recording media manufacturing	0	16	145	2,122
Software and other prerecorded and record reproducing	0	8	15	54
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	51	68	344
Small electrical appliance manufacturing	0	8	12	67
Household cooking appliance manufacturing	0	5	11	85
Household refrigerator and home freezer manufacturing	0	6	11	73
Household laundry equipment manufacturing	0	10	18	184

## APPENDIX

Other major household appliance manufacturing	0	3	5	39
Power, distribution, and specialty transformer manufacturing	0	2	3	10
Motor and generator manufacturing	0	162	200	518
Switchgear and switchboard apparatus manufacturing	0	10	14	73
Relay and industrial control manufacturing	0	19	24	103
Storage battery manufacturing	0	3,868	4,977	17,114
Primary battery manufacturing	0	9,387	14,389	54,174
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	485	671	2,883
Wiring device manufacturing	0	1,885	2,549	8,155
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	15,571	16,826	43,909
Automobile manufacturing	0	85	89	1,417
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	2	2	17
Motor vehicle body manufacturing	0	44	48	265
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	202	206	439
Motor vehicle gasoline engine and engine parts manufacturing	0	404	441	2,745
Motor vehicle electrical and electronic equipment manufacturing	0	131	168	789
Motor vehicle transmission and power train parts manufacturing	0	110	120	601
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	720	714	3,871
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	360	376	2,162

## APPENDIX

Aircraft manufacturing	0	1	5	17
Aircraft engine and engine parts manufacturing	0	9	42	84
Other aircraft parts and auxiliary equipment manufacturing	0	12	27	68
Guided missile and space vehicle manufacturing	0	26	51	115
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	3	7	31
Ship building and repairing	0	0	0	0
Boat building	0	259	464	1,386
Motorcycle, bicycle, and parts manufacturing	0	55	379	826
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	48	133	621
Wood kitchen cabinet and countertop manufacturing	0	924	1,085	2,558
Upholstered household furniture manufacturing	0	14	18	85
Nonupholstered wood household furniture manufacturing	0	73	77	219
Other household nonupholstered furniture manufacturing	0	35	47	234
Institutional furniture manufacturing	0	30	31	105
Wood office furniture manufacturing	0	0	0	1
Custom architectural woodwork and millwork	0	91	86	218
Office furniture, except wood, manufacturing	0	62	83	284
Showcase, partition, shelving, and locker manufacturing	0	72	84	258
Mattress manufacturing	0	43	61	395
Blind and shade manufacturing	0	12	12	59
Surgical and medical instrument manufacturing	0	92	728	1,087
Surgical appliance and supplies manufacturing	0	88	712	1,082

## APPENDIX

Dental equipment and supplies manufacturing	0	5	34	57
Ophthalmic goods manufacturing	0	35	309	452
Dental laboratories	0	214	223	426
Jewelry and silverware manufacturing	0	361	785	1,591
Sporting and athletic goods manufacturing	0	109	416	751
Doll, toy, and game manufacturing	0	44	288	502
Office supplies (except paper) manufacturing	0	133	457	879
Sign manufacturing	0	4,785	4,908	9,553
Gasket, packing, and sealing device manufacturing	0	21	74	277
Musical instrument manufacturing	0	34	36	84
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	5,702	12,155	15,634
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	12,391	28,770	66,818
Wholesale - Professional and commercial equipment and supplies	0	48,647	84,543	147,578
Wholesale - Household appliances and electrical and electronic goods	0	25,781	58,654	133,748
Wholesale - Machinery, equipment, and supplies	0	29,093	51,754	89,457
Wholesale - Other durable goods merchant wholesalers	1	55,015	88,268	164,775
Wholesale - Drugs and druggists' sundries	0	41,784	107,206	196,310
Wholesale - Grocery and related product wholesalers	1	40,458	54,521	111,252
Wholesale - Petroleum and petroleum products	0	4,325	78,145	86,955
Wholesale - Other nondurable goods merchant wholesalers	1	76,135	162,312	288,318
Wholesale - Wholesale electronic markets and agents and brokers	1	46,025	18,284	22,618
Retail - Motor vehicle and parts dealers	1	62,621	99,160	134,239

## APPENDIX

Retail - Furniture and home furnishings stores	1	29,723	44,323	68,296
Retail - Electronics and appliance stores	1	34,611	42,197	67,576
Retail - Building material and garden equipment and supplies stores	1	25,330	51,400	73,524
Retail - Food and beverage stores	3	93,415	136,119	213,262
Retail - Health and personal care stores	1	57,593	73,911	114,768
Retail - Gasoline stores	1	34,472	60,594	100,533
Retail - Clothing and clothing accessories stores	1	47,815	79,638	143,577
Retail - Sporting goods, hobby, musical instrument and book stores	1	25,114	37,232	55,859
Retail - General merchandise stores	3	93,644	151,088	230,330
Retail - Miscellaneous store retailers	2	53,070	65,878	96,574
Retail - Nonstore retailers	2	72,359	200,791	360,247
Air transportation	0	49,345	174,154	233,148
Rail transportation	0	3,022	30,139	44,086
Water transportation	0	1,796	4,092	24,987
Truck transportation	1	83,595	99,165	213,818
Transit and ground passenger transportation	2	44,886	74,027	106,731
Pipeline transportation	0	8,334	9,293	10,948
Scenic and sightseeing transportation and support activities for transportation	2	126,497	145,155	309,530
Couriers and messengers	1	37,028	51,254	94,876
Warehousing and storage	1	66,946	73,948	155,894
Newspaper publishers	0	9,885	16,414	21,258
Periodical publishers	0	5,927	9,275	18,276
Book publishers	0	2,704	9,085	14,254
Directory, mailing list, and other publishers	0	712	2,461	4,700
Greeting card publishing	0	479	1,875	2,698
Software publishers	0	42,052	110,470	136,282
Motion picture and video industries	1	38,801	61,394	126,636
Sound recording industries	0	5,431	22,092	27,147
Radio and television broadcasting	0	156,095	152,739	235,787

## APPENDIX

Cable and other subscription programming	0	8,111	12,465	22,629
Wired telecommunications carriers	0	40,045	120,992	230,785
Wireless telecommunications carriers (except satellite)	0	9,354	65,759	149,192
Satellite, telecommunications resellers, and all other telecommunications	0	9,263	14,621	42,611
Data processing, hosting, and related services	1	45,526	248,801	371,905
News syndicates, libraries, archives and all other information services	0	3,399	9,572	13,203
Internet publishing and broadcasting and web search portals	0	46,909	321,832	549,609
Nondepository credit intermediation and related activities	1	115,044	203,058	318,569
Securities and commodity contracts intermediation and brokerage	1	60,024	60,944	154,995
Monetary authorities and depository credit intermediation	2	133,706	658,302	885,686
Other financial investment activities	5	21,329	47,195	484,803
Direct life insurance carriers	0	6,375	17,286	22,121
Insurance carriers, except direct life	1	75,896	374,551	607,006
Insurance agencies, brokerages, and related activities	2	98,777	184,300	409,187
Funds, trusts, and other financial vehicles	1	34,665	29,225	357,802
Other real estate	25	293,500	1,248,776	4,062,750
Tenant-occupied housing	1	18,597	424,407	479,653
Owner-occupied dwellings	0	0	1,299,700	1,642,155
Automotive equipment rental and leasing	0	14,660	74,225	98,724
General and consumer goods rental except video tapes and discs	0	22,701	33,264	48,066
Video tape and disc rental	0	5,244	8,566	13,712
Commercial and industrial machinery and equipment rental and leasing	0	23,522	81,073	108,196
Lessors of nonfinancial intangible assets	0	3,578	129,452	147,442



## APPENDIX

Legal services	6	598,075	834,138	1,257,702
Accounting, tax preparation, bookkeeping, and payroll services	2	133,707	188,302	270,687
Architectural, engineering, and related services	3	239,125	297,327	519,559
Specialized design services	0	22,431	24,393	30,970
Custom computer programming services	0	38,867	46,614	69,209
Computer systems design services	0	42,462	49,770	67,329
Other computer related services, including facilities management	0	18,836	31,231	57,603
Management consulting services	6	439,090	442,125	719,371
Environmental and other technical consulting services	1	75,229	69,071	104,670
Scientific research and development services	95	8,476,308	11,734,537	23,694,127
Advertising, public relations, and related services	2	106,226	170,369	287,734
Photographic services	1	23,231	4,449	14,857
Veterinary services	0	15,505	23,925	35,405
Marketing research and all other miscellaneous professional, scientific, and technical services	8	386,341	358,097	570,116
Management of companies and enterprises	7	968,621	1,140,624	1,603,234
Office administrative services	1	43,701	23,968	68,457
Facilities support services	0	14,368	19,492	37,603
Employment services	10	358,429	569,453	935,617
Business support services	2	100,771	86,683	156,110
Travel arrangement and reservation services	1	27,632	38,090	99,684
Investigation and security services	2	58,019	60,462	89,331
Services to buildings	5	131,298	140,249	233,487
Landscape and horticultural services	2	83,112	89,941	144,185
Other support services	1	52,898	70,703	131,112
Waste management and remediation services	1	47,430	86,804	141,392
Elementary and secondary schools	1	42,869	40,012	47,564
Junior colleges, colleges, universities, and professional schools	0	10,230	15,089	20,407
Other educational services	1	41,603	40,230	67,009
Offices of physicians	3	316,062	367,708	536,261
Offices of dentists	1	67,265	83,022	127,590

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Offices of other health practitioners	1	80,060	74,296	104,019
Outpatient care centers	1	62,923	66,393	121,039
Medical and diagnostic laboratories	0	25,415	37,578	60,318
Home health care services	1	72,369	52,724	68,432
Other ambulatory health care services	0	22,255	24,432	40,307
Hospitals	5	428,460	494,521	893,008
Nursing and community care facilities	1	52,633	59,101	100,168
Residential mental retardation, mental health, substance abuse and other facilities	1	20,782	22,045	34,342
Individual and family services	3	66,168	66,526	103,360
Child day care services	1	18,639	27,554	42,987
Community food, housing, and other relief services, including rehabilitation services	1	19,046	23,162	51,550
Performing arts companies	0	15,187	39,488	47,223
Commercial Sports Except Racing	0	19,850	30,338	41,817
Racing and Track Operation	0	1,087	5,666	6,174
Independent artists, writers, and performers	1	36,631	72,788	78,757
Promoters of performing arts and sports and agents for public figures	0	10,991	55,752	75,882
Museums, historical sites, zoos, and parks	0	4,866	8,078	11,890
Amusement parks and arcades	0	3,776	7,325	9,496
Gambling industries (except casino hotels)	1	36,585	69,311	111,291
Other amusement and recreation industries	1	29,459	37,189	51,733
Fitness and recreational sports centers	1	22,742	32,396	40,692
Bowling centers	0	3,835	5,728	7,973
Hotels and motels, including casino hotels	3	123,070	201,359	307,114
Other accommodations	0	1,988	2,250	2,773
Full-service restaurants	5	151,857	253,739	395,208
Limited-service restaurants	4	82,168	160,671	314,331
All other food and drinking places	3	84,074	186,934	240,538
Automotive repair and maintenance, except car washes	2	105,181	128,701	185,069
Car washes	1	54,686	84,604	123,149

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Electronic and precision equipment repair and maintenance	1	82,675	112,965	196,719
Commercial and industrial machinery and equipment repair and maintenance	0	30,563	33,777	53,772
Personal and household goods repair and maintenance	1	41,450	33,463	45,154
Personal care services	2	46,417	36,103	47,572
Death care services	0	4,351	5,362	8,137
Dry-cleaning and laundry services	0	14,091	15,293	21,967
Other personal services	2	54,066	39,402	54,862
Religious organizations	1	64,915	27,422	100,577
Grantmaking, giving, and social advocacy organizations	0	14,917	40,981	67,347
Business and professional associations	0	14,977	21,610	36,203
Labor and civic organizations	1	23,696	53,649	83,717
Private households	1	15,306	15,306	15,306
Postal service	1	50,712	50,744	56,065
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	3,110	3,352	18,233
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	1,826	2,036	3,244
Local government passenger transit	0	10	(9)	1
Local government electric utilities	0	4,612	10,213	20,348
Other local government enterprises	2	121,363	214,111	460,055
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	10	1,256,491	1,679,505	2,310,652

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 428: Detailed M2M Program Impacts by Types of Impact, Nevada.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>156</i>	<i>11,251,753</i>	<i>18,109,383</i>	<i>32,071,791</i>
Oilseed farming	0	0	0	0
Grain farming	0	138	673	3,683
Vegetable and melon farming	0	323	539	1,622
Fruit farming	0	18	34	89
Tree nut farming	0	108	112	162
Greenhouse, nursery, and floriculture production	0	96	128	312
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	1,064	1,409	3,426
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	60	1,011	8,285
Dairy cattle and milk production	0	102	268	2,479
Poultry and egg production	0	24	32	443
Animal production, except cattle and poultry and eggs	0	336	2,310	7,413
Forestry, forest products, and timber tract production	0	210	224	253
Commercial logging	0	168	181	216
Commercial fishing	0	664	1,528	2,454
Commercial hunting and trapping	0	20	126	337
Support activities for agriculture and forestry	0	4,886	4,022	5,576
Oil and gas extraction	0	827	454	30,855
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	4,935	22,151	36,212
Iron ore mining	0	0	0	0
Gold ore mining	0	7,377	11,649	19,044

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Silver ore mining	0	993	1,295	2,296
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	31	69	220
Stone mining and quarrying	0	399	864	2,161
Sand and gravel mining	0	1,516	1,513	2,839
Other clay, ceramic, refractory minerals mining	0	102	130	269
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	415	597	976
Other nonmetallic minerals	0	1,473	1,138	1,810
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	7	8	62
Metal mining services	0	436	796	2,652
Other nonmetallic minerals services	0	2	3	44
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	11,051	44,110	104,382
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	648	1,695	2,365
Electric power generation - Wind	0	37	299	414
Electric power generation - Geothermal	0	5,638	13,651	32,221
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	24,294	100,628	225,141
Natural gas distribution	0	16,698	53,960	89,417
Water, sewage and other systems	0	718	1,412	2,633
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	50,364	72,037	158,605
Maintenance and repair construction of residential structures	0	15,909	25,434	55,441
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	85	46	118
Dog and cat food manufacturing	0	177	709	2,726
Other animal food manufacturing	0	430	866	5,973
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	54	297	2,790
Fats and oils refining and blending	0	44	90	826
Breakfast cereal manufacturing	0	444	1,090	3,673
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	42	63	332
Chocolate and confectionery manufacturing from cacao beans	0	9	22	143
Confectionery manufacturing from purchased chocolate	0	236	333	1,793
Frozen fruits, juices and vegetables manufacturing	0	230	422	2,176
Frozen specialties manufacturing	0	502	751	3,716
Canned fruits and vegetables manufacturing	0	245	447	1,665

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Canned specialties	0	68	166	958
Dehydrated food products manufacturing	0	24	45	246
Cheese manufacturing	0	2	4	105
Dry, condensed, and evaporated dairy product manufacturing	0	105	260	1,431
Fluid milk manufacturing	0	706	1,147	6,866
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	385	621	2,249
Frozen cakes and other pastries manufacturing	0	600	894	1,584
Poultry processing	0	15	22	172
Animal, except poultry, slaughtering	0	59	79	660
Meat processed from carcasses	0	666	745	6,592
Rendering and meat byproduct processing	0	53	54	286
Seafood product preparation and packaging	0	26	33	245
Bread and bakery product, except frozen, manufacturing	0	2,212	3,083	8,198
Cookie and cracker manufacturing	0	707	1,047	2,974
Dry pasta, mixes, and dough manufacturing	0	19	45	280
Tortilla manufacturing	0	174	212	946
Roasted nuts and peanut butter manufacturing	0	164	187	658
Other snack food manufacturing	0	297	463	2,036
Coffee and tea manufacturing	0	125	241	1,337
Flavoring syrup and concentrate manufacturing	0	67	472	969
Mayonnaise, dressing, and sauce manufacturing	0	191	356	1,443
Spice and extract manufacturing	0	309	483	2,441
All other food manufacturing	0	309	429	2,876
Bottled and canned soft drinks & water	0	910	1,914	9,534
Manufactured ice	0	120	57	313
Breweries	0	88	239	982
Wineries	0	4	7	50
Distilleries	0	101	568	1,430
Tobacco product manufacturing	0	6	630	1,820
Fiber, yarn, and thread mills	0	3	5	29
Broadwoven fabric mills	0	0	0	0

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Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	32	77	299
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	2	18
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	199	448	1,324
Curtain and linen mills	0	72	126	337
Textile bag and canvas mills	0	184	259	648
Rope, cordage, twine, tire cord and tire fabric mills	0	8	17	41
Other textile product mills	0	235	325	831
Hosiery and sock mills	0	19	34	66
Other apparel knitting mills	0	16	29	60
Cut and sew apparel contractors	0	40	53	155
Mens and boys cut and sew apparel manufacturing	0	27	45	156
Womens and girls cut and sew apparel manufacturing	0	25	46	260
Other cut and sew apparel manufacturing	0	17	29	84
Apparel accessories and other apparel manufacturing	0	16	29	71
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	1	1	30
Sawmills	0	6	9	50
Wood preservation	0	60	174	568
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	195	264	739
Reconstituted wood product manufacturing	0	92	216	730
Wood windows and door manufacturing	0	400	546	1,670
Cut stock, resawing lumber, and planing	0	44	71	320
Other millwork, including flooring	0	620	877	2,085
Wood container and pallet manufacturing	0	342	408	1,258
Manufactured home (mobile home) manufacturing	0	0	0	0



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Prefabricated wood building manufacturing	0	62	73	221
All other miscellaneous wood product manufacturing	0	61	76	340
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	214	244	1,434
Paper bag and coated and treated paper manufacturing	0	120	138	827
Stationery product manufacturing	0	19	20	82
Sanitary paper product manufacturing	0	1,369	1,970	11,035
All other converted paper product manufacturing	0	114	124	555
Printing	0	17,163	24,429	49,327
Support activities for printing	0	57	79	130
Petroleum refineries	0	383	4,720	27,832
Asphalt paving mixture and block manufacturing	0	90	217	1,367
Asphalt shingle and coating materials manufacturing	0	90	357	905
Petroleum lubricating oil and grease manufacturing	0	78	423	1,365
All other petroleum and coal products manufacturing	0	137	824	3,695
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	27	58	272
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	187	352	1,334
Other basic organic chemical manufacturing	0	19	36	641
Plastics material and resin manufacturing	0	40	61	629
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	24	37	181

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	29	78	672
Medicinal and botanical manufacturing	0	177	278	1,089
Pharmaceutical preparation manufacturing	0	602	1,961	9,558
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	535	909	4,013
Adhesive manufacturing	0	19	30	170
Soap and other detergent manufacturing	0	130	421	3,207
Polish and other sanitation good manufacturing	0	156	292	1,415
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	130	339	1,384
Printing ink manufacturing	0	157	166	647
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	49	78	332
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	555	784	3,187
Plastics packaging materials and unlaminated film and sheet manufacturing	0	782	1,351	5,478
Unlaminated plastics profile shape manufacturing	0	298	685	1,884
Plastics pipe and pipe fitting manufacturing	0	78	211	651
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	56	117	421
Polystyrene foam product manufacturing	0	98	176	699
Urethane and other foam product (except polystyrene) manufacturing	0	137	229	741
Plastics bottle manufacturing	0	55	97	396
Other plastics product manufacturing	0	1,561	2,447	7,834
Tire manufacturing	0	58	85	431

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	102	169	499
Other rubber product manufacturing	0	1,334	2,094	8,158
Pottery, ceramics, and plumbing fixture manufacturing	0	8	8	19
Brick, tile, and other structural clay product manufacturing	0	52	55	185
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	321	511	1,324
Cement manufacturing	0	152	360	888
Ready-mix concrete manufacturing	0	2,041	3,400	10,798
Concrete block and brick manufacturing	0	569	1,014	2,237
Concrete pipe manufacturing	0	99	161	370
Other concrete product manufacturing	0	1,055	1,511	3,497
Lime manufacturing	0	111	292	691
Gypsum product manufacturing	0	690	1,824	4,687
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	292	345	716
Ground or treated mineral and earth manufacturing	0	161	447	1,221
Mineral wool manufacturing	0	11	24	63
Miscellaneous nonmetallic mineral products manufacturing	0	45	107	259
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	(21)	(19)	10
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	163	244	2,208
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	55	69	461

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Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	28	52	269
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	186	206	1,243
Secondary processing of other nonferrous metals	0	159	178	1,530
Ferrous metal foundries	0	277	287	969
Nonferrous metal foundries	0	99	109	337
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	200	301	741
Iron and steel forging	0	0	0	0
Nonferrous forging	0	285	370	900
Cutlery, utensil, pot, and pan manufacturing	0	12	41	94
Handtool manufacturing	0	53	92	202
Prefabricated metal buildings and components manufacturing	0	97	146	399
Fabricated structural metal manufacturing	0	789	1,218	2,836
Plate work manufacturing	0	75	79	228
Metal window and door manufacturing	0	143	232	630
Sheet metal work manufacturing	0	596	798	1,998
Ornamental and architectural metal work manufacturing	0	483	671	1,746
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	24	30	89
Metal cans manufacturing	0	59	145	592
Metal barrels, drums and pails manufacturing	0	4	5	36
Hardware manufacturing	0	92	162	488
Spring and wire product manufacturing	0	90	126	321
Machine shops	0	756	898	1,768
Turned product and screw, nut, and bolt manufacturing	0	615	884	2,016
Metal heat treating	0	17	27	67

## APPENDIX

Metal coating and nonprecious engraving	0	133	247	598
Electroplating, anodizing, and coloring metal	0	58	67	172
Valve and fittings, other than plumbing, manufacturing	0	194	329	882
Plumbing fixture fitting and trim manufacturing	0	11	38	140
Ball and roller bearing manufacturing	0	124	241	530
Small arms ammunition manufacturing	0	63	163	466
Ammunition, except for small arms, manufacturing	0	0	1	3
Small arms, ordnance, and accessories manufacturing	0	157	413	849
Fabricated pipe and pipe fitting manufacturing	0	1	1	4
Other fabricated metal manufacturing	0	492	674	1,572
Farm machinery and equipment manufacturing	0	5	8	66
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	11	21	57
Mining machinery and equipment manufacturing	0	1	1	2
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	1	1	5
Sawmill, woodworking, and paper machinery	0	1	2	5
Printing machinery and equipment manufacturing	0	2	2	7
All other industrial machinery manufacturing	0	0	1	2
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	23	43	170
Air purification and ventilation equipment manufacturing	0	38	55	173
Heating equipment (except warm air furnaces) manufacturing	0	6	8	21
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	59	101	259
Industrial mold manufacturing	0	13	14	31
Special tool, die, jig, and fixture manufacturing	0	13	16	32
Cutting tool and machine tool accessory manufacturing	0	12	14	30
Machine tool manufacturing	0	14	15	39
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	2	3	9
Speed changer, industrial high-speed drive, and gear manufacturing	0	65	91	223
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	12	21	51
Air and gas compressor manufacturing	0	1	1	3
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	1	1	5
Overhead cranes, hoists, and monorail systems manufacturing	0	4	7	24
Industrial truck, trailer, and stacker manufacturing	0	3	4	17
Power-driven handtool manufacturing	0	39	85	226
Welding and soldering equipment manufacturing	0	4	5	11
Packaging machinery manufacturing	0	3	4	11

## APPENDIX

Industrial process furnace and oven manufacturing	0	3	4	13
Fluid power cylinder and actuator manufacturing	0	25	34	91
Fluid power pump and motor manufacturing	0	8	12	46
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	12	15	42
Electronic computer manufacturing	0	2	7	28
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	13	30	155
Telephone apparatus manufacturing	0	7	15	61
Broadcast and wireless communications equipment manufacturing	0	4	6	21
Other communications equipment manufacturing	0	4	8	35
Audio and video equipment manufacturing	0	14	29	95
Printed circuit assembly (electronic assembly) manufacturing	0	81	146	508
Bare printed circuit board manufacturing	0	23	33	123
Semiconductor and related device manufacturing	0	14	31	129
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	25	40	124
Electronic connector manufacturing	0	75	136	532
Other electronic component manufacturing	0	34	42	172
Electromedical and electrotherapeutic apparatus manufacturing	0	17	43	52
Search, detection, and navigation instruments manufacturing	0	1	1	2
Automatic environmental control manufacturing	0	561	811	1,779

## APPENDIX

Industrial process variable instruments manufacturing	0	111	182	353
Totalizing fluid meter and counting device manufacturing	0	20	53	104
Electricity and signal testing instruments manufacturing	0	1	1	4
Analytical laboratory instrument manufacturing	0	13	28	53
Irradiation apparatus manufacturing	0	25	60	114
Watch, clock, and other measuring and controlling device manufacturing	0	9	18	44
Blank magnetic and optical recording media manufacturing	0	47	416	4,714
Software and other prerecorded and record reproducing	0	6	11	34
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	38	49	240
Small electrical appliance manufacturing	0	6	9	47
Household cooking appliance manufacturing	0	3	6	51
Household refrigerator and home freezer manufacturing	0	3	6	46
Household laundry equipment manufacturing	0	6	11	111
Other major household appliance manufacturing	0	2	3	24
Power, distribution, and specialty transformer manufacturing	0	2	3	9
Motor and generator manufacturing	0	103	123	329
Switchgear and switchboard apparatus manufacturing	0	7	9	49
Relay and industrial control manufacturing	0	13	17	69
Storage battery manufacturing	0	2,948	3,585	12,537
Primary battery manufacturing	0	6,536	8,040	34,463
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	267	359	1,504
Wiring device manufacturing	0	1,421	1,918	5,704



## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	24	26	70
Automobile manufacturing	0	51	47	804
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	1	7
Motor vehicle body manufacturing	0	23	25	144
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	95	97	207
Motor vehicle gasoline engine and engine parts manufacturing	0	229	251	1,651
Motor vehicle electrical and electronic equipment manufacturing	0	67	85	366
Motor vehicle transmission and power train parts manufacturing	0	87	97	420
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	359	324	1,985
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	225	254	1,367
Aircraft manufacturing	0	1	3	10
Aircraft engine and engine parts manufacturing	0	29	129	280
Other aircraft parts and auxiliary equipment manufacturing	0	8	19	47
Guided missile and space vehicle manufacturing	0	14	26	57
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	2	5	20
Ship building and repairing	0	0	0	0
Boat building	0	115	207	605
Motorcycle, bicycle, and parts manufacturing	0	48	317	630

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	28	82	377
Wood kitchen cabinet and countertop manufacturing	0	507	546	1,321
Upholstered household furniture manufacturing	0	13	16	74
Nonupholstered wood household furniture manufacturing	0	45	46	126
Other household nonupholstered furniture manufacturing	0	24	31	148
Institutional furniture manufacturing	0	17	18	58
Wood office furniture manufacturing	0	0	0	1
Custom architectural woodwork and millwork	0	50	47	115
Office furniture, except wood, manufacturing	0	41	51	187
Showcase, partition, shelving, and locker manufacturing	0	40	43	136
Mattress manufacturing	0	24	30	213
Blind and shade manufacturing	0	5	6	29
Surgical and medical instrument manufacturing	0	55	427	602
Surgical appliance and supplies manufacturing	0	70	572	813
Dental equipment and supplies manufacturing	0	4	26	41
Ophthalmic goods manufacturing	0	23	209	306
Dental laboratories	0	159	166	311
Jewelry and silverware manufacturing	0	227	487	949
Sporting and athletic goods manufacturing	0	63	233	409
Doll, toy, and game manufacturing	0	33	199	312
Office supplies (except paper) manufacturing	0	111	384	670
Sign manufacturing	0	2,136	2,245	4,078
Gasket, packing, and sealing device manufacturing	0	11	38	138
Musical instrument manufacturing	0	43	45	81
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0

## APPENDIX

Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	3,257	6,880	8,538
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	7,184	16,687	38,739
Wholesale - Professional and commercial equipment and supplies	0	28,699	49,954	85,253
Wholesale - Household appliances and electrical and electronic goods	0	12,967	29,458	66,365
Wholesale - Machinery, equipment, and supplies	0	14,816	26,463	45,520
Wholesale - Other durable goods merchant wholesalers	0	29,731	47,756	88,450
Wholesale - Drugs and druggists' sundries	0	23,010	58,131	103,944
Wholesale - Grocery and related product wholesalers	0	21,531	28,776	58,707
Wholesale - Petroleum and petroleum products	0	2,194	44,554	48,807
Wholesale - Other nondurable goods merchant wholesalers	0	41,462	91,285	158,909
Wholesale - Wholesale electronic markets and agents and brokers	0	25,644	9,667	11,963
Retail - Motor vehicle and parts dealers	0	32,490	51,744	69,467
Retail - Furniture and home furnishings stores	0	16,004	23,855	36,146
Retail - Electronics and appliance stores	0	18,427	22,554	35,420
Retail - Building material and garden equipment and supplies stores	0	13,736	27,888	39,403
Retail - Food and beverage stores	1	53,193	76,680	117,298
Retail - Health and personal care stores	1	29,831	38,518	59,601
Retail - Gasoline stores	0	20,480	33,494	52,466
Retail - Clothing and clothing accessories stores	1	26,527	43,833	76,705
Retail - Sporting goods, hobby, musical instrument and book stores	0	13,222	19,659	28,949

## APPENDIX

Retail - General merchandise stores	1	47,175	76,693	116,087
Retail - Miscellaneous store retailers	1	29,337	36,075	51,052
Retail - Nonstore retailers	1	41,556	116,663	199,398
Air transportation	0	27,666	100,115	131,973
Rail transportation	0	1,777	15,721	24,441
Water transportation	0	1,303	2,904	17,282
Truck transportation	1	51,581	59,907	125,706
Transit and ground passenger transportation	1	33,496	55,726	75,293
Pipeline transportation	0	3,309	3,977	4,784
Scenic and sightseeing transportation and support activities for transportation	1	73,866	85,898	183,366
Couriers and messengers	1	22,202	31,716	57,392
Warehousing and storage	1	38,753	42,737	89,279
Newspaper publishers	0	5,042	8,117	10,358
Periodical publishers	0	3,957	6,068	11,022
Book publishers	0	1,494	4,770	7,474
Directory, mailing list, and other publishers	0	332	1,165	2,215
Greeting card publishing	0	188	776	1,104
Software publishers	0	21,576	55,786	67,378
Motion picture and video industries	0	28,453	45,479	77,850
Sound recording industries	0	3,958	15,182	17,239
Radio and television broadcasting	0	123,400	132,350	137,150
Cable and other subscription programming	0	6,570	8,044	12,105
Wired telecommunications carriers	0	22,638	63,495	117,638
Wireless telecommunications carriers (except satellite)	0	7,042	40,571	89,205
Satellite, telecommunications resellers, and all other telecommunications	0	6,566	8,968	23,259
Data processing, hosting, and related services	0	27,126	139,223	198,459
News syndicates, libraries, archives and all other information services	0	2,397	6,712	8,697
Internet publishing and broadcasting and web search portals	0	43,632	285,030	419,488

## APPENDIX

Nondepository credit intermediation and related activities	1	69,288	123,960	183,071
Securities and commodity contracts intermediation and brokerage	0	34,521	34,446	82,012
Monetary authorities and depository credit intermediation	1	67,494	344,241	449,234
Other financial investment activities	3	15,830	34,053	278,945
Direct life insurance carriers	0	2,948	8,256	10,312
Insurance carriers, except direct life	0	39,016	198,182	308,921
Insurance agencies, brokerages, and related activities	1	50,883	95,406	205,655
Funds, trusts, and other financial vehicles	1	22,437	18,592	192,277
Other real estate	12	190,933	807,460	2,275,996
Tenant-occupied housing	1	11,740	252,612	281,372
Owner-occupied dwellings	0	0	765,076	966,665
Automotive equipment rental and leasing	0	10,307	42,809	54,567
General and consumer goods rental except video tapes and discs	0	13,751	18,881	25,485
Video tape and disc rental	0	2,921	4,603	7,185
Commercial and industrial machinery and equipment rental and leasing	0	15,605	46,146	59,731
Lessors of nonfinancial intangible assets	0	2,000	71,166	80,529
Legal services	3	327,350	475,418	698,759
Accounting, tax preparation, bookkeeping, and payroll services	1	75,077	106,146	148,804
Architectural, engineering, and related services	2	138,963	173,559	298,720
Specialized design services	0	13,044	14,216	17,682
Custom computer programming services	0	20,457	24,367	35,318
Computer systems design services	0	24,533	28,654	38,107
Other computer related services, including facilities management	0	12,244	19,523	34,355
Management consulting services	3	237,621	239,673	379,032
Environmental and other technical consulting services	1	47,792	44,281	66,113

## APPENDIX

Scientific research and development services	53	5,526,090	7,754,138	14,470,757
Advertising, public relations, and related services	1	57,240	91,297	147,013
Photographic services	0	12,332	2,489	7,850
Veterinary services	0	8,450	13,223	19,045
Marketing research and all other miscellaneous professional, scientific, and technical services	5	230,828	213,303	334,381
Management of companies and enterprises	4	551,751	655,968	893,115
Office administrative services	1	31,029	17,341	44,740
Facilities support services	0	8,619	11,664	21,185
Employment services	5	204,210	333,051	526,534
Business support services	1	50,004	43,862	76,489
Travel arrangement and reservation services	0	16,252	22,588	56,720
Investigation and security services	1	33,435	34,932	50,004
Services to buildings	3	79,177	84,831	134,315
Landscape and horticultural services	1	44,268	47,986	74,252
Other support services	1	27,576	36,931	67,915
Waste management and remediation services	0	26,114	48,124	77,266
Elementary and secondary schools	1	29,943	27,823	32,528
Junior colleges, colleges, universities, and professional schools	0	7,876	11,512	14,792
Other educational services	1	25,979	25,203	40,459
Offices of physicians	1	167,081	195,913	283,475
Offices of dentists	1	37,292	46,517	70,496
Offices of other health practitioners	1	42,414	39,678	55,423
Outpatient care centers	1	36,773	38,957	69,958
Medical and diagnostic laboratories	0	13,838	21,007	32,636
Home health care services	1	38,056	28,044	36,651
Other ambulatory health care services	0	12,243	13,521	21,947
Hospitals	3	253,248	291,087	512,957
Nursing and community care facilities	1	29,361	33,019	54,505
Residential mental retardation, mental health, substance abuse and other facilities	0	13,042	13,842	21,126

## APPENDIX

Individual and family services	2	40,642	41,582	64,224
Child day care services	1	10,754	16,133	24,560
Community food, housing, and other relief services, including rehabilitation services	0	12,487	15,375	33,071
Performing arts companies	0	10,002	25,156	27,295
Commercial Sports Except Racing	0	10,798	16,450	22,201
Racing and Track Operation	0	658	3,258	3,415
Independent artists, writers, and performers	1	24,665	47,797	49,403
Promoters of performing arts and sports and agents for public figures	0	7,122	33,082	42,103
Museums, historical sites, zoos, and parks	0	2,969	4,873	6,951
Amusement parks and arcades	0	2,324	3,934	5,154
Gambling industries (except casino hotels)	0	21,596	38,564	61,149
Other amusement and recreation industries	0	15,673	18,974	26,310
Fitness and recreational sports centers	0	13,844	18,431	22,829
Bowling centers	0	2,084	3,002	4,131
Hotels and motels, including casino hotels	2	88,987	139,371	209,310
Other accommodations	0	1,637	1,823	2,199
Full-service restaurants	3	82,492	138,657	211,307
Limited-service restaurants	2	46,410	90,216	170,238
All other food and drinking places	1	50,385	110,235	137,759
Automotive repair and maintenance, except car washes	1	61,549	72,491	103,602
Car washes	1	30,444	46,928	67,797
Electronic and precision equipment repair and maintenance	0	16,338	22,363	37,154
Commercial and industrial machinery and equipment repair and maintenance	0	16,093	17,474	27,672
Personal and household goods repair and maintenance	0	23,838	17,156	23,165
Personal care services	1	27,933	19,883	26,489
Death care services	0	2,728	3,179	4,799
Dry-cleaning and laundry services	0	7,915	8,452	12,121
Other personal services	1	32,599	20,853	29,823
Religious organizations	1	42,559	13,994	60,511
Grantmaking, giving, and social advocacy organizations	0	11,256	26,528	43,592

## APPENDIX

Business and professional associations	0	8,818	11,503	18,603
Labor and civic organizations	0	15,515	31,066	49,495
Private households	0	9,563	9,563	9,563
Postal service	0	28,444	28,463	31,385
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	1,963	2,438	11,602
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	550	598	892
Local government passenger transit	0	6	(7)	1
Local government electric utilities	0	2,693	5,447	10,562
Other local government enterprises	1	70,797	115,693	246,073
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	(676)	(646)	(1,350)

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.



## APPENDIX

### 31. New Hampshire

**Table 429: Detailed NASA Impacts by Types of Impact, New Hampshire.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	289	21,572,484	33,484,742	58,407,446
Oilseed farming	0	(0)	(1)	83
Grain farming	0	189	1,217	3,766
Vegetable and melon farming	0	1,476	2,939	6,050
Fruit farming	0	1,090	2,725	4,779
Tree nut farming	0	20	22	24
Greenhouse, nursery, and floriculture production	0	2,301	3,343	5,590
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	1,654	2,415	4,032
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	6	1,357	3,309
Dairy cattle and milk production	0	228	1,418	5,186
Poultry and egg production	0	777	1,437	11,036
Animal production, except cattle and poultry and eggs	0	1,277	13,428	20,427
Forestry, forest products, and timber tract production	0	491	516	699
Commercial logging	0	2,619	2,577	4,862
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	2,325	1,562	1,842
Support activities for agriculture and forestry	1	17,595	15,367	19,249
Oil and gas extraction	0	827	885	33,963
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,484	1,365	4,637
Sand and gravel mining	0	2,160	2,545	6,906

## APPENDIX

Other clay, ceramic, refractory minerals mining	0	309	297	648
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	8	9	60
Metal mining services	0	4	4	188
Other nonmetallic minerals services	0	10	13	76
Electric power generation - Hydroelectric	0	1,881	7,293	11,574
Electric power generation - Fossil fuel	0	5,802	37,830	136,767
Electric power generation - Nuclear	0	21,842	57,450	113,437
Electric power generation - Solar	0	73	255	778
Electric power generation - Wind	0	40	356	506
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	1,969	8,168	12,874
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	44,584	194,573	405,726
Natural gas distribution	0	13,627	48,781	112,022
Water, sewage and other systems	0	1,796	4,898	9,358
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

## APPENDIX

Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	115,407	93,053	273,061
Maintenance and repair construction of residential structures	1	37,588	30,485	96,150
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	111	37	120
Dog and cat food manufacturing	0	98	495	3,404
Other animal food manufacturing	0	969	2,095	14,835
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	26	57	715
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	53	131	929
Nonchocolate confectionery manufacturing	0	37	60	464
Chocolate and confectionery manufacturing from cacao beans	0	1,854	4,217	16,510
Confectionery manufacturing from purchased chocolate	0	505	732	3,435
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	411	649	4,011
Canned fruits and vegetables manufacturing	0	32	73	950
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	4,096	6,692	34,050
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	41	68	332
Frozen cakes and other pastries manufacturing	0	1,684	2,136	4,380
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	1,291	1,865	15,465
Meat processed from carcasses	0	293	433	2,675
Rendering and meat byproduct processing	0	67	102	389
Seafood product preparation and packaging	0	1,514	1,895	8,723
Bread and bakery product, except frozen, manufacturing	0	2,923	3,512	12,439
Cookie and cracker manufacturing	0	166	241	988
Dry pasta, mixes, and dough manufacturing	0	263	660	3,560
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	348	367	1,957
Other snack food manufacturing	0	294	378	2,406
Coffee and tea manufacturing	0	38	94	1,708
Flavoring syrup and concentrate manufacturing	0	312	2,479	6,012
Mayonnaise, dressing, and sauce manufacturing	0	36	75	597
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	605	854	4,222
Bottled and canned soft drinks & water	0	2,105	4,376	17,950
Manufactured ice	0	263	124	582
Breweries	0	3,876	10,424	27,037
Wineries	0	42	81	447
Distilleries	0	188	1,297	3,100
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	85	92	423
Broadwoven fabric mills	0	2,488	2,385	6,574
Narrow fabric mills and schiffli machine embroidery	0	37	38	91
Nonwoven fabric mills	0	4,288	3,260	19,970
Knit fabric mills	0	72	69	216

## APPENDIX

Textile and fabric finishing mills	0	22	22	83
Fabric coating mills	0	1,230	1,181	5,911
Carpet and rug mills	0	39	44	267
Curtain and linen mills	0	60	59	190
Textile bag and canvas mills	0	474	470	1,045
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	287	292	640
Hosiery and sock mills	0	11	13	36
Other apparel knitting mills	0	11	14	41
Cut and sew apparel contractors	0	15	17	36
Mens and boys cut and sew apparel manufacturing	0	137	223	741
Womens and girls cut and sew apparel manufacturing	0	134	286	710
Other cut and sew apparel manufacturing	0	77	122	285
Apparel accessories and other apparel manufacturing	0	73	115	265
Leather and hide tanning and finishing	0	10	18	40
Footwear manufacturing	0	70	90	241
Other leather and allied product manufacturing	0	61	66	146
Sawmills	0	3,026	4,806	16,539
Wood preservation	0	116	400	1,330
Veneer and plywood manufacturing	0	569	932	2,720
Engineered wood member and truss manufacturing	0	22	30	112
Reconstituted wood product manufacturing	0	159	451	1,513
Wood windows and door manufacturing	0	2,924	4,291	11,534
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	2,429	3,800	8,394
Wood container and pallet manufacturing	0	644	789	2,260
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	741	890	2,184
All other miscellaneous wood product manufacturing	0	1,197	1,575	4,640

## APPENDIX

Pulp mills	0	0	0	0
Paper mills	0	3,904	6,102	27,706
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	1,286	1,661	8,590
Paper bag and coated and treated paper manufacturing	0	1,309	1,815	8,478
Stationery product manufacturing	0	68	85	378
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	487	597	1,991
Printing	1	48,600	99,427	192,132
Support activities for printing	0	873	1,949	3,102
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	559	1,204	5,748
Asphalt shingle and coating materials manufacturing	0	635	2,429	5,505
Petroleum lubricating oil and grease manufacturing	0	2,168	9,407	22,521
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	15	20	123
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	177	299	3,763
Plastics material and resin manufacturing	0	691	987	8,145
Synthetic rubber manufacturing	0	24	32	223
Artificial and synthetic fibers and filaments manufacturing	0	1	1	12
Nitrogenous fertilizer manufacturing	0	94	134	718
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	10	9	53
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	0

## APPENDIX

Pharmaceutical preparation manufacturing	0	593	1,525	7,722
In-vitro diagnostic substance manufacturing	0	238	281	726
Biological product (except diagnostic) manufacturing	0	1,257	1,867	4,940
Paint and coating manufacturing	0	207	250	1,279
Adhesive manufacturing	0	797	979	4,487
Soap and other detergent manufacturing	0	432	694	4,640
Polish and other sanitation good manufacturing	0	75	87	439
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	469	749	3,495
Printing ink manufacturing	0	341	378	1,450
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	363	482	2,574
Photographic film and chemical manufacturing	0	445	637	2,846
Other miscellaneous chemical product manufacturing	0	550	678	3,659
Plastics packaging materials and unlaminated film and sheet manufacturing	0	827	1,071	4,195
Unlaminated plastics profile shape manufacturing	0	6,478	9,711	35,364
Plastics pipe and pipe fitting manufacturing	0	109	169	651
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,071	1,452	5,035
Polystyrene foam product manufacturing	0	90	121	469
Urethane and other foam product (except polystyrene) manufacturing	0	1,157	1,488	6,374
Plastics bottle manufacturing	0	209	275	1,137
Other plastics product manufacturing	0	9,442	11,573	40,667
Tire manufacturing	0	95	119	629
Rubber and plastics hoses and belting manufacturing	0	2,992	3,829	12,554
Other rubber product manufacturing	0	6,028	7,500	28,561

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	388	441	921
Brick, tile, and other structural clay product manufacturing	0	320	447	1,122
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	3,639	5,089	10,877
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	1,873	2,929	6,820
Cement manufacturing	0	529	1,167	3,945
Ready-mix concrete manufacturing	0	2,502	3,899	12,899
Concrete block and brick manufacturing	0	1,167	2,007	5,907
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	1,922	2,694	6,524
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	1,158	2,743	7,588
Abrasive product manufacturing	0	583	1,606	3,103
Cut stone and stone product manufacturing	0	1,342	1,534	2,991
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	346	778	1,822
Iron and steel mills and ferroalloy manufacturing	0	25,656	39,034	243,902
Iron, steel pipe and tube manufacturing from purchased steel	0	69	94	479
Rolled steel shape manufacturing	0	203	336	1,932
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	189	249	1,334
Nonferrous metal (exc aluminum) smelting and refining	0	112	264	998



## APPENDIX

Copper rolling, drawing, extruding and alloying	0	1,409	1,854	13,335
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	32	71	445
Ferrous metal foundries	0	1,593	2,143	4,906
Nonferrous metal foundries	0	1,463	1,894	4,430
Custom roll forming	0	259	407	1,693
Crown and closure manufacturing and metal stamping	0	2,013	2,865	7,393
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	80	220	517
Handtool manufacturing	0	25	40	86
Prefabricated metal buildings and components manufacturing	0	302	432	1,202
Fabricated structural metal manufacturing	0	1,887	2,787	7,909
Plate work manufacturing	0	133	144	400
Metal window and door manufacturing	0	785	1,193	2,756
Sheet metal work manufacturing	0	6,074	7,834	19,173
Ornamental and architectural metal work manufacturing	0	429	540	1,301
Power boiler and heat exchanger manufacturing	0	134	184	414
Metal tank (heavy gauge) manufacturing	0	16	20	52
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	58	73	232
Hardware manufacturing	0	289	463	1,306
Spring and wire product manufacturing	0	452	622	1,735
Machine shops	0	12,940	14,961	27,274
Turned product and screw, nut, and bolt manufacturing	0	2,188	3,054	8,016
Metal heat treating	0	521	796	1,954
Metal coating and nonprecious engraving	0	664	1,104	2,510
Electroplating, anodizing, and coloring metal	0	717	813	1,752

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	1,458	2,376	6,856
Plumbing fixture fitting and trim manufacturing	0	486	1,490	4,945
Ball and roller bearing manufacturing	0	3,032	5,478	12,988
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	2,563	6,128	12,253
Fabricated pipe and pipe fitting manufacturing	0	686	817	2,016
Other fabricated metal manufacturing	0	307	397	1,036
Farm machinery and equipment manufacturing	0	47	76	422
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	2	3	13
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	59	68	156
Food product machinery manufacturing	0	8	10	27
Sawmill, woodworking, and paper machinery	0	225	258	671
Printing machinery and equipment manufacturing	0	605	700	1,502
All other industrial machinery manufacturing	0	42	54	114
Optical instrument and lens manufacturing	0	12,103	20,208	49,527
Photographic and photocopying equipment manufacturing	0	13	20	59
Other commercial service industry machinery manufacturing	0	254	484	1,483
Air purification and ventilation equipment manufacturing	0	115	172	422

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	251	384	969
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	137	269	842
Industrial mold manufacturing	0	39	45	105
Special tool, die, jig, and fixture manufacturing	0	113	146	269
Cutting tool and machine tool accessory manufacturing	0	158	177	374
Machine tool manufacturing	0	313	356	745
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	2	2	10
Speed changer, industrial high-speed drive, and gear manufacturing	0	16	25	79
Mechanical power transmission equipment manufacturing	0	297	450	1,132
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	2	4	12
Air and gas compressor manufacturing	0	2	4	11
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	31	34	91
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	166	224	512
Packaging machinery manufacturing	0	4	6	20
Industrial process furnace and oven manufacturing	0	57	70	136
Fluid power cylinder and actuator manufacturing	0	6	9	25

## APPENDIX

Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	140	186	483
Electronic computer manufacturing	0	841	1,295	3,879
Computer storage device manufacturing	0	61	119	725
Computer terminals and other computer peripheral equipment manufacturing	1	69,809	100,782	320,323
Telephone apparatus manufacturing	0	198	267	661
Broadcast and wireless communications equipment manufacturing	0	34	43	116
Other communications equipment manufacturing	0	33	42	98
Audio and video equipment manufacturing	0	31	46	200
Printed circuit assembly (electronic assembly) manufacturing	0	3,856	4,824	17,545
Bare printed circuit board manufacturing	0	1,382	1,621	4,347
Semiconductor and related device manufacturing	0	1,074	1,464	4,671
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	984	1,252	3,511
Electronic connector manufacturing	0	6,321	7,810	15,665
Other electronic component manufacturing	0	2,800	3,145	9,236
Electromedical and electrotherapeutic apparatus manufacturing	0	17	25	64
Search, detection, and navigation instruments manufacturing	0	10,737	12,917	28,886
Automatic environmental control manufacturing	0	555	668	1,365
Industrial process variable instruments manufacturing	0	170	213	522
Totalizing fluid meter and counting device manufacturing	0	38	59	169

## APPENDIX

Electricity and signal testing instruments manufacturing	0	3,638	4,645	16,393
Analytical laboratory instrument manufacturing	2	167,256	232,038	623,631
Irradiation apparatus manufacturing	0	2	3	7
Watch, clock, and other measuring and controlling device manufacturing	0	28	38	110
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	5	6	20
Electric lamp bulb and part manufacturing	0	2,698	5,994	10,482
Lighting fixture manufacturing	0	233	449	1,049
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	10	18	61
Motor and generator manufacturing	0	179	354	699
Switchgear and switchboard apparatus manufacturing	0	28	62	155
Relay and industrial control manufacturing	0	253	403	871
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	1,404	2,891	9,518
Other communication and energy wire manufacturing	0	820	1,973	5,775
Wiring device manufacturing	0	2,155	6,058	12,119
Carbon and graphite product manufacturing	0	777	1,393	3,305
All other miscellaneous electrical equipment and component manufacturing	0	47	59	149

## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	30	45	152
Truck trailer manufacturing	0	1	1	5
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	154	167	517
Motor vehicle gasoline engine and engine parts manufacturing	0	42	64	247
Motor vehicle electrical and electronic equipment manufacturing	0	5,532	8,609	33,244
Motor vehicle transmission and power train parts manufacturing	0	2,371	4,317	14,537
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	1,636	2,453	7,471
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	1	5
Aircraft engine and engine parts manufacturing	0	165	230	795
Other aircraft parts and auxiliary equipment manufacturing	0	8,176	9,983	29,856
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	91	98	279
Boat building	0	525	630	3,398
Motorcycle, bicycle, and parts manufacturing	0	24	36	263
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	643	885	3,790

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	1,322	1,268	3,318
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	397	397	1,219
Other household nonupholstered furniture manufacturing	0	6	6	36
Institutional furniture manufacturing	0	14	15	49
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	108	101	273
Office furniture, except wood, manufacturing	0	14	13	50
Showcase, partition, shelving, and locker manufacturing	0	82	79	337
Mattress manufacturing	0	4	4	37
Blind and shade manufacturing	0	1	1	4
Surgical and medical instrument manufacturing	0	1,441	1,831	6,088
Surgical appliance and supplies manufacturing	0	1,200	1,509	4,518
Dental equipment and supplies manufacturing	0	12	13	46
Ophthalmic goods manufacturing	0	40	49	147
Dental laboratories	0	208	196	317
Jewelry and silverware manufacturing	0	364	429	1,011
Sporting and athletic goods manufacturing	0	425	458	1,098
Doll, toy, and game manufacturing	0	1,031	1,011	3,304
Office supplies (except paper) manufacturing	0	215	228	639
Sign manufacturing	0	6,531	5,872	9,622
Gasket, packing, and sealing device manufacturing	0	2,007	2,128	5,215
Musical instrument manufacturing	0	257	261	459
Fasteners, buttons, needles, and pins manufacturing	0	1,754	1,856	3,143
Broom, brush, and mop manufacturing	0	1,356	1,318	3,879
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	0	1,999	2,194	4,226
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	12,055	37,359	74,648
Wholesale - Professional and commercial equipment and supplies	1	74,428	148,572	229,625
Wholesale - Household appliances and electrical and electronic goods	0	33,628	95,507	160,214
Wholesale - Machinery, equipment, and supplies	0	30,093	61,689	98,209
Wholesale - Other durable goods merchant wholesalers	1	59,953	109,997	187,565
Wholesale - Drugs and druggists' sundries	0	17,165	64,502	117,072
Wholesale - Grocery and related product wholesalers	1	41,139	64,500	115,918
Wholesale - Petroleum and petroleum products	0	7,389	97,032	111,165
Wholesale - Other nondurable goods merchant wholesalers	1	81,657	189,966	330,697
Wholesale - Wholesale electronic markets and agents and brokers	0	61,754	43,379	46,689
Retail - Motor vehicle and parts dealers	1	73,911	86,467	130,770
Retail - Furniture and home furnishings stores	1	34,046	38,695	66,274
Retail - Electronics and appliance stores	1	51,361	38,427	62,752
Retail - Building material and garden equipment and supplies stores	1	48,733	63,496	101,072
Retail - Food and beverage stores	4	106,409	123,001	230,392
Retail - Health and personal care stores	1	57,805	61,548	96,953
Retail - Gasoline stores	1	29,825	37,927	82,962
Retail - Clothing and clothing accessories stores	2	48,439	55,037	123,562
Retail - Sporting goods, hobby, musical instrument and book stores	1	32,417	35,363	56,245
Retail - General merchandise stores	3	92,974	103,640	189,690
Retail - Miscellaneous store retailers	2	58,667	55,460	92,979



## APPENDIX

Retail - Nonstore retailers	2	112,745	231,780	366,181
Air transportation	0	19,415	42,354	63,750
Rail transportation	0	2,296	1,201	6,319
Water transportation	0	530	3,622	19,268
Truck transportation	1	62,801	72,806	145,701
Transit and ground passenger transportation	2	52,204	61,913	83,389
Pipeline transportation	0	1,314	4,625	5,946
Scenic and sightseeing transportation and support activities for transportation	1	85,750	94,997	196,683
Couriers and messengers	1	36,916	47,388	84,845
Warehousing and storage	1	26,732	53,545	97,551
Newspaper publishers	0	19,798	29,119	41,738
Periodical publishers	0	17,760	24,766	40,700
Book publishers	0	2,871	7,309	15,692
Directory, mailing list, and other publishers	0	8,955	23,935	37,304
Greeting card publishing	0	448	1,327	2,349
Software publishers	8	1,642,783	3,419,954	3,938,183
Motion picture and video industries	0	24,113	34,368	71,797
Sound recording industries	0	5,415	10,244	15,768
Radio and television broadcasting	0	118,250	109,820	191,431
Cable and other subscription programming	0	4,658	10,414	27,450
Wired telecommunications carriers	1	73,607	166,354	324,650
Wireless telecommunications carriers (except satellite)	0	3,625	18,325	61,731
Satellite, telecommunications resellers, and all other telecommunications	0	10,009	11,966	29,890
Data processing, hosting, and related services	1	64,718	148,318	289,513
News syndicates, libraries, archives and all other information services	0	4,027	6,350	12,602
Internet publishing and broadcasting and web search portals	0	29,917	81,194	226,850
Nondepository credit intermediation and related activities	1	69,310	88,645	151,406
Securities and commodity contracts intermediation and brokerage	2	303,628	309,013	492,900

## APPENDIX

Monetary authorities and depository credit intermediation	2	185,350	366,851	734,132
Other financial investment activities	2	151,491	177,185	364,411
Direct life insurance carriers	0	42,910	112,954	142,477
Insurance carriers, except direct life	1	126,629	638,312	1,032,864
Insurance agencies, brokerages, and related activities	2	118,705	235,843	432,486
Funds, trusts, and other financial vehicles	0	15,087	19,942	135,904
Other real estate	19	431,712	1,506,019	3,713,162
Tenant-occupied housing	1	20,582	395,097	433,643
Owner-occupied dwellings	0	0	1,419,087	1,792,999
Automotive equipment rental and leasing	0	16,768	67,421	91,996
General and consumer goods rental except video tapes and discs	0	20,417	26,957	44,282
Video tape and disc rental	0	5,567	8,371	13,919
Commercial and industrial machinery and equipment rental and leasing	0	22,251	60,249	88,179
Lessors of nonfinancial intangible assets	0	3,141	51,308	62,933
Legal services	4	385,056	634,517	928,648
Accounting, tax preparation, bookkeeping, and payroll services	2	172,178	247,021	329,615
Architectural, engineering, and related services	3	235,005	291,043	492,961
Specialized design services	0	29,637	31,360	38,998
Custom computer programming services	1	77,184	87,401	123,259
Computer systems design services	1	127,196	130,372	166,214
Other computer related services, including facilities management	0	25,310	49,337	91,001
Management consulting services	9	873,441	871,937	1,303,483
Environmental and other technical consulting services	1	90,859	83,547	118,737
Scientific research and development services	77	7,244,928	9,808,314	19,565,547
Advertising, public relations, and related services	2	98,840	144,055	267,930
Photographic services	0	22,613	13,246	21,030
Veterinary services	0	18,795	28,781	42,890

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	5	324,034	306,840	428,631
Management of companies and enterprises	6	592,844	736,047	1,093,105
Office administrative services	2	167,517	83,761	148,999
Facilities support services	0	8,280	11,572	33,621
Employment services	8	417,262	703,876	984,992
Business support services	2	94,330	84,715	128,388
Travel arrangement and reservation services	0	25,239	35,755	80,417
Investigation and security services	1	47,951	49,088	64,077
Services to buildings	3	120,980	125,594	188,300
Landscape and horticultural services	2	83,106	87,653	133,196
Other support services	0	22,579	28,868	55,235
Waste management and remediation services	1	47,799	95,943	150,305
Elementary and secondary schools	1	76,483	66,726	79,225
Junior colleges, colleges, universities, and professional schools	2	125,611	170,862	231,410
Other educational services	2	71,776	68,194	121,594
Offices of physicians	3	439,061	504,052	699,613
Offices of dentists	1	94,340	113,376	162,771
Offices of other health practitioners	2	103,462	97,092	131,811
Outpatient care centers	1	74,688	78,498	152,983
Medical and diagnostic laboratories	0	13,855	19,507	30,211
Home health care services	1	75,134	49,993	67,240
Other ambulatory health care services	0	21,125	22,792	38,900
Hospitals	7	531,873	640,788	1,201,063
Nursing and community care facilities	2	104,204	120,974	195,264
Residential mental retardation, mental health, substance abuse and other facilities	1	36,473	39,669	57,949
Individual and family services	3	86,669	75,864	111,928
Child day care services	2	53,650	60,927	82,035
Community food, housing, and other relief services, including rehabilitation services	1	21,428	23,084	52,378
Performing arts companies	0	11,670	18,165	33,357

## APPENDIX

Commercial Sports Except Racing	0	8,884	10,304	21,813
Racing and Track Operation	0	4,103	6,653	12,079
Independent artists, writers, and performers	2	49,175	55,318	65,160
Promoters of performing arts and sports and agents for public figures	0	8,451	17,385	41,373
Museums, historical sites, zoos, and parks	0	4,493	5,361	10,728
Amusement parks and arcades	0	5,663	12,731	15,687
Gambling industries (except casino hotels)	0	17,206	62,615	87,072
Other amusement and recreation industries	1	42,497	46,091	66,014
Fitness and recreational sports centers	1	31,260	38,434	47,988
Bowling centers	0	4,073	5,431	7,681
Hotels and motels, including casino hotels	0	8,472	18,539	26,576
Other accommodations	0	4,473	6,489	8,446
Full-service restaurants	7	192,472	263,453	449,867
Limited-service restaurants	4	110,868	155,743	331,673
All other food and drinking places	4	125,498	175,158	252,480
Automotive repair and maintenance, except car washes	2	150,349	147,703	218,469
Car washes	1	77,857	94,040	141,997
Electronic and precision equipment repair and maintenance	2	157,872	215,239	326,198
Commercial and industrial machinery and equipment repair and maintenance	1	73,045	74,277	108,637
Personal and household goods repair and maintenance	1	50,530	40,145	48,468
Personal care services	2	72,030	46,662	61,451
Death care services	0	4,826	5,689	8,655
Dry-cleaning and laundry services	0	17,064	18,261	25,425
Other personal services	2	65,730	55,398	70,549
Religious organizations	2	75,769	24,584	143,100
Grantmaking, giving, and social advocacy organizations	1	29,284	72,752	129,165
Business and professional associations	0	29,368	40,225	67,403
Labor and civic organizations	1	21,170	44,292	93,731
Private households	1	14,805	14,805	14,805
Postal service	1	62,761	62,855	69,285
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	4,361	2,762	10,834
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	1	56,230	59,214	178,293
Local government passenger transit	0	1,815	(1,169)	815
Local government electric utilities	0	579	1,471	2,969
Other local government enterprises	0	20,694	39,563	73,473
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	6	813,714	1,415,383	2,088,849

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 430: Detailed M2M Program Impacts by Types of Impact, New Hampshire.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	51	4,068,521	6,135,327	10,528,193
Oilseed farming	0	(0)	(0)	29
Grain farming	0	32	226	644
Vegetable and melon farming	0	285	596	1,157
Fruit farming	0	275	695	1,151
Tree nut farming	0	8	9	9

## APPENDIX

Greenhouse, nursery, and floriculture production	0	384	577	943
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	259	393	637
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1	235	537
Dairy cattle and milk production	0	50	321	1,028
Poultry and egg production	0	122	230	1,734
Animal production, except cattle and poultry and eggs	0	171	2,008	3,141
Forestry, forest products, and timber tract production	0	112	117	152
Commercial logging	0	500	490	860
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	449	284	296
Support activities for agriculture and forestry	0	3,337	2,884	3,609
Oil and gas extraction	0	102	143	5,308
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	491	225	785
Sand and gravel mining	0	963	561	1,272
Other clay, ceramic, refractory minerals mining	0	57	43	95
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	1	1	7
Metal mining services	0	0	0	20

## APPENDIX

Other nonmetallic minerals services	0	1	2	12
Electric power generation - Hydroelectric	0	529	1,846	2,724
Electric power generation - Fossil fuel	0	1,180	7,313	25,358
Electric power generation - Nuclear	0	4,322	11,829	22,756
Electric power generation - Solar	0	13	42	123
Electric power generation - Wind	0	7	57	76
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	744	2,380	3,725
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	7,940	35,258	71,296
Natural gas distribution	0	2,935	10,871	21,909
Water, sewage and other systems	0	423	1,004	1,723
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	21,097	17,085	48,708

## APPENDIX

Maintenance and repair construction of residential structures	0	7,074	5,773	17,618
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	20	6	21
Dog and cat food manufacturing	0	16	83	551
Other animal food manufacturing	0	193	436	2,933
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	6	14	157
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	13	32	228
Nonchocolate confectionery manufacturing	0	8	13	95
Chocolate and confectionery manufacturing from cacao beans	0	695	1,593	5,772
Confectionery manufacturing from purchased chocolate	0	107	156	677
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	93	146	847
Canned fruits and vegetables manufacturing	0	8	19	248
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	804	1,346	6,557
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	9	15	64
Frozen cakes and other pastries manufacturing	0	339	425	852
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	201	295	2,393
Meat processed from carcasses	0	57	85	507



## APPENDIX

Rendering and meat byproduct processing	0	15	23	87
Seafood product preparation and packaging	0	255	332	1,364
Bread and bakery product, except frozen, manufacturing	0	570	686	2,382
Cookie and cracker manufacturing	0	35	54	200
Dry pasta, mixes, and dough manufacturing	0	57	141	782
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	81	95	440
Other snack food manufacturing	0	59	76	467
Coffee and tea manufacturing	0	8	20	353
Flavoring syrup and concentrate manufacturing	0	96	721	1,793
Mayonnaise, dressing, and sauce manufacturing	0	8	16	126
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	147	208	968
Bottled and canned soft drinks & water	0	374	809	3,172
Manufactured ice	0	49	25	98
Breweries	0	728	2,022	5,050
Wineries	0	18	34	182
Distilleries	0	39	284	610
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	14	17	68
Broadwoven fabric mills	0	386	409	1,099
Narrow fabric mills and schiffli machine embroidery	0	10	10	22
Nonwoven fabric mills	0	1,043	845	4,675
Knit fabric mills	0	25	24	75
Textile and fabric finishing mills	0	11	11	40
Fabric coating mills	0	355	331	1,513
Carpet and rug mills	0	9	12	60
Curtain and linen mills	0	14	14	43
Textile bag and canvas mills	0	96	97	208
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	63	65	135
Hosiery and sock mills	0	2	3	7
Other apparel knitting mills	0	3	4	10
Cut and sew apparel contractors	0	5	6	12

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	38	62	179
Womens and girls cut and sew apparel manufacturing	0	50	106	232
Other cut and sew apparel manufacturing	0	24	37	77
Apparel accessories and other apparel manufacturing	0	22	35	71
Leather and hide tanning and finishing	0	2	3	7
Footwear manufacturing	0	15	20	50
Other leather and allied product manufacturing	0	17	18	37
Sawmills	0	543	905	2,938
Wood preservation	0	18	69	216
Veneer and plywood manufacturing	0	88	148	431
Engineered wood member and truss manufacturing	0	4	5	19
Reconstituted wood product manufacturing	0	24	71	245
Wood windows and door manufacturing	0	496	753	1,968
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	444	729	1,503
Wood container and pallet manufacturing	0	112	141	394
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	148	181	426
All other miscellaneous wood product manufacturing	0	240	329	876
Pulp mills	0	0	0	0
Paper mills	0	564	770	3,824
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	240	299	1,540
Paper bag and coated and treated paper manufacturing	0	221	280	1,353
Stationery product manufacturing	0	16	18	73
Sanitary paper product manufacturing	0	0	0	0

## APPENDIX

All other converted paper product manufacturing	0	84	97	328
Printing	0	4,897	10,022	18,425
Support activities for printing	0	171	375	591
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	103	210	935
Asphalt shingle and coating materials manufacturing	0	113	387	905
Petroleum lubricating oil and grease manufacturing	0	164	729	1,618
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	3	4	27
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	28	48	626
Plastics material and resin manufacturing	0	122	177	1,526
Synthetic rubber manufacturing	0	4	5	36
Artificial and synthetic fibers and filaments manufacturing	0	0	0	3
Nitrogenous fertilizer manufacturing	0	22	34	165
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	2	2	11
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	185	505	2,303
In-vitro diagnostic substance manufacturing	0	115	137	352
Biological product (except diagnostic) manufacturing	0	558	875	2,125
Paint and coating manufacturing	0	43	56	279
Adhesive manufacturing	0	173	232	980
Soap and other detergent manufacturing	0	77	156	848

## APPENDIX

Polish and other sanitation good manufacturing	0	17	23	96
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	114	209	883
Printing ink manufacturing	0	59	66	248
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	39	58	311
Photographic film and chemical manufacturing	0	81	128	518
Other miscellaneous chemical product manufacturing	0	92	120	654
Plastics packaging materials and unlaminated film and sheet manufacturing	0	168	215	826
Unlaminated plastics profile shape manufacturing	0	785	1,161	4,178
Plastics pipe and pipe fitting manufacturing	0	15	24	91
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	190	258	886
Polystyrene foam product manufacturing	0	18	23	89
Urethane and other foam product (except polystyrene) manufacturing	0	241	305	1,298
Plastics bottle manufacturing	0	49	64	258
Other plastics product manufacturing	0	1,852	2,262	7,536
Tire manufacturing	0	11	14	81
Rubber and plastics hoses and belting manufacturing	0	532	664	2,129
Other rubber product manufacturing	0	1,281	1,581	6,205
Pottery, ceramics, and plumbing fixture manufacturing	0	49	53	117
Brick, tile, and other structural clay product manufacturing	0	38	50	131
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	927	1,281	2,727
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	406	618	1,436

## APPENDIX

Cement manufacturing	0	85	177	607
Ready-mix concrete manufacturing	0	438	657	2,190
Concrete block and brick manufacturing	0	168	274	818
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	292	396	969
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	222	505	1,427
Abrasive product manufacturing	0	129	339	669
Cut stone and stone product manufacturing	0	222	252	488
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	79	164	379
Iron and steel mills and ferroalloy manufacturing	0	170	233	1,534
Iron, steel pipe and tube manufacturing from purchased steel	0	11	14	70
Rolled steel shape manufacturing	0	27	41	260
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	24	28	158
Nonferrous metal (exc aluminum) smelting and refining	0	9	18	76
Copper rolling, drawing, extruding and alloying	0	210	260	1,815
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	3	4	35
Ferrous metal foundries	0	284	309	793
Nonferrous metal foundries	0	341	394	953
Custom roll forming	0	51	79	302
Crown and closure manufacturing and metal stamping	0	331	474	1,195

## APPENDIX

Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	19	55	122
Handtool manufacturing	0	6	10	22
Prefabricated metal buildings and components manufacturing	0	56	82	216
Fabricated structural metal manufacturing	0	329	489	1,365
Plate work manufacturing	0	23	25	67
Metal window and door manufacturing	0	146	223	503
Sheet metal work manufacturing	0	667	864	2,041
Ornamental and architectural metal work manufacturing	0	80	101	231
Power boiler and heat exchanger manufacturing	0	29	41	95
Metal tank (heavy gauge) manufacturing	0	3	3	8
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	8	10	31
Hardware manufacturing	0	55	89	244
Spring and wire product manufacturing	0	125	170	464
Machine shops	0	2,222	2,580	4,597
Turned product and screw, nut, and bolt manufacturing	0	345	481	1,211
Metal heat treating	0	69	104	256
Metal coating and nonprecious engraving	0	74	124	282
Electroplating, anodizing, and coloring metal	0	115	131	276
Valve and fittings, other than plumbing, manufacturing	0	340	551	1,576
Plumbing fixture fitting and trim manufacturing	0	77	243	766
Ball and roller bearing manufacturing	0	914	1,649	3,765
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	521	1,225	2,287

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	119	143	352
Other fabricated metal manufacturing	0	56	73	182
Farm machinery and equipment manufacturing	0	13	22	105
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	1	2	9
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	22	25	53
Food product machinery manufacturing	0	2	3	9
Sawmill, woodworking, and paper machinery	0	59	69	161
Printing machinery and equipment manufacturing	0	61	71	136
All other industrial machinery manufacturing	0	9	12	25
Optical instrument and lens manufacturing	0	17,465	31,062	65,721
Photographic and photocopying equipment manufacturing	0	5	8	23
Other commercial service industry machinery manufacturing	0	45	95	278
Air purification and ventilation equipment manufacturing	0	29	45	107
Heating equipment (except warm air furnaces) manufacturing	0	65	104	230
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	23	47	144
Industrial mold manufacturing	0	8	9	20
Special tool, die, jig, and fixture manufacturing	0	25	32	57
Cutting tool and machine tool accessory manufacturing	0	25	28	59
Machine tool manufacturing	0	68	78	154

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	1	2
Speed changer, industrial high-speed drive, and gear manufacturing	0	4	6	16
Mechanical power transmission equipment manufacturing	0	47	72	180
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	1	1	3
Air and gas compressor manufacturing	0	0	1	2
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	4	5	13
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	33	45	87
Packaging machinery manufacturing	0	1	2	5
Industrial process furnace and oven manufacturing	0	14	18	33
Fluid power cylinder and actuator manufacturing	0	1	1	3
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	28	38	91
Electronic computer manufacturing	0	30	45	152
Computer storage device manufacturing	0	15	30	179
Computer terminals and other computer peripheral equipment manufacturing	0	66	98	341



## APPENDIX

Telephone apparatus manufacturing	0	34	46	113
Broadcast and wireless communications equipment manufacturing	0	8	10	26
Other communications equipment manufacturing	0	6	8	19
Audio and video equipment manufacturing	0	12	17	68
Printed circuit assembly (electronic assembly) manufacturing	0	1,235	1,544	5,454
Bare printed circuit board manufacturing	0	100	116	333
Semiconductor and related device manufacturing	0	740	988	3,022
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	101	127	343
Electronic connector manufacturing	0	1,829	2,243	4,581
Other electronic component manufacturing	0	920	1,030	2,909
Electromedical and electrotherapeutic apparatus manufacturing	0	5	7	19
Search, detection, and navigation instruments manufacturing	0	37	46	101
Automatic environmental control manufacturing	0	249	295	554
Industrial process variable instruments manufacturing	0	28	35	84
Totalizing fluid meter and counting device manufacturing	0	6	10	28
Electricity and signal testing instruments manufacturing	0	399	509	1,689
Analytical laboratory instrument manufacturing	0	14,708	21,082	50,785
Irradiation apparatus manufacturing	0	1	1	2
Watch, clock, and other measuring and controlling device manufacturing	0	16	21	56
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	1	1	4
Electric lamp bulb and part manufacturing	0	628	1,415	2,440
Lighting fixture manufacturing	0	59	111	254
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	3	5	16
Motor and generator manufacturing	0	32	61	126
Switchgear and switchboard apparatus manufacturing	0	5	11	29
Relay and industrial control manufacturing	0	40	64	131
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	450	921	2,680
Other communication and energy wire manufacturing	0	98	228	650
Wiring device manufacturing	0	390	1,095	2,037
Carbon and graphite product manufacturing	0	133	237	591
All other miscellaneous electrical equipment and component manufacturing	0	7	9	22
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	5	8	28
Truck trailer manufacturing	0	0	0	1
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	24	27	82
Motor vehicle gasoline engine and engine parts manufacturing	0	8	12	47

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	949	1,464	5,185
Motor vehicle transmission and power train parts manufacturing	0	610	1,134	3,306
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	112	170	507
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	112	151	559
Other aircraft parts and auxiliary equipment manufacturing	0	2	3	9
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	25	27	75
Boat building	0	78	94	498
Motorcycle, bicycle, and parts manufacturing	0	7	10	67
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	129	185	779
Wood kitchen cabinet and countertop manufacturing	0	229	201	540
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	82	80	237
Other household nonupholstered furniture manufacturing	0	1	1	8
Institutional furniture manufacturing	0	3	3	9
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	20	19	49
Office furniture, except wood, manufacturing	0	2	2	7
Showcase, partition, shelving, and locker manufacturing	0	13	12	53
Mattress manufacturing	0	1	1	7
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	280	347	1,090
Surgical appliance and supplies manufacturing	0	321	409	1,145
Dental equipment and supplies manufacturing	0	3	3	11
Ophthalmic goods manufacturing	0	9	11	33
Dental laboratories	0	52	49	78
Jewelry and silverware manufacturing	0	77	89	202
Sporting and athletic goods manufacturing	0	82	86	200
Doll, toy, and game manufacturing	0	250	229	670
Office supplies (except paper) manufacturing	0	58	63	159
Sign manufacturing	0	876	807	1,235
Gasket, packing, and sealing device manufacturing	0	393	407	976
Musical instrument manufacturing	0	109	111	150
Fasteners, buttons, needles, and pins manufacturing	0	442	466	711
Broom, brush, and mop manufacturing	0	334	372	892
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	383	416	774
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,339	7,252	14,486
Wholesale - Professional and commercial equipment and supplies	0	12,731	25,451	38,474
Wholesale - Household appliances and electrical and electronic goods	0	5,648	16,050	26,554
Wholesale - Machinery, equipment, and supplies	0	5,040	10,373	16,436
Wholesale - Other durable goods merchant wholesalers	0	10,059	18,476	31,262

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	3,189	11,799	20,913
Wholesale - Grocery and related product wholesalers	0	7,346	11,422	20,525
Wholesale - Petroleum and petroleum products	0	1,242	18,323	20,667
Wholesale - Other nondurable goods merchant wholesalers	0	14,643	35,175	60,009
Wholesale - Wholesale electronic markets and agents and brokers	0	11,203	7,464	8,037
Retail - Motor vehicle and parts dealers	0	12,857	15,128	22,690
Retail - Furniture and home furnishings stores	0	6,142	6,978	11,753
Retail - Electronics and appliance stores	0	9,163	6,882	11,021
Retail - Building material and garden equipment and supplies stores	0	8,910	11,615	18,264
Retail - Food and beverage stores	1	20,323	23,240	42,503
Retail - Health and personal care stores	0	10,044	10,759	16,889
Retail - Gasoline stores	0	5,904	6,989	14,439
Retail - Clothing and clothing accessories stores	0	8,952	10,090	21,984
Retail - Sporting goods, hobby, musical instrument and book stores	0	5,719	6,257	9,767
Retail - General merchandise stores	1	15,685	17,617	32,016
Retail - Miscellaneous store retailers	0	10,867	10,176	16,469
Retail - Nonstore retailers	0	21,668	45,065	67,826
Air transportation	0	3,639	8,140	12,063
Rail transportation	0	434	201	1,126
Water transportation	0	135	903	4,684
Truck transportation	0	12,844	14,580	28,398
Transit and ground passenger transportation	0	12,714	15,222	19,207
Pipeline transportation	0	175	664	872
Scenic and sightseeing transportation and support activities for transportation	0	17,660	19,825	41,085
Couriers and messengers	0	7,240	9,589	16,785
Warehousing and storage	0	4,875	9,748	17,600

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Newspaper publishers	0	3,097	4,418	6,240
Periodical publishers	0	3,733	5,104	7,733
Book publishers	0	531	1,284	2,753
Directory, mailing list, and other publishers	0	1,280	3,475	5,392
Greeting card publishing	0	59	184	322
Software publishers	0	38,254	75,765	86,648
Motion picture and video industries	0	5,766	8,300	14,412
Sound recording industries	0	1,273	2,272	3,229
Radio and television broadcasting	0	28,349	28,824	33,888
Cable and other subscription programming	0	1,166	2,081	4,553
Wired telecommunications carriers	0	13,672	28,642	54,300
Wireless telecommunications carriers (except satellite)	0	889	3,677	12,015
Satellite, telecommunications resellers, and all other telecommunications	0	2,285	2,334	5,177
Data processing, hosting, and related services	0	12,511	26,931	50,142
News syndicates, libraries, archives and all other information services	0	937	1,470	2,742
Internet publishing and broadcasting and web search portals	0	8,653	22,379	53,954
Nondepository credit intermediation and related activities	0	13,879	17,995	28,934
Securities and commodity contracts intermediation and brokerage	0	58,314	58,325	87,077
Monetary authorities and depository credit intermediation	0	31,654	64,744	125,789
Other financial investment activities	0	37,776	42,951	70,444
Direct life insurance carriers	0	6,652	18,082	22,262
Insurance carriers, except direct life	0	21,857	113,345	176,448
Insurance agencies, brokerages, and related activities	0	19,744	39,441	70,135
Funds, trusts, and other financial vehicles	0	3,273	4,251	24,476
Other real estate	3	98,901	342,951	733,221
Tenant-occupied housing	0	4,356	78,849	85,291

## APPENDIX

Owner-occupied dwellings	0	0	280,332	354,196
Automotive equipment rental and leasing	0	3,975	13,079	17,085
General and consumer goods rental except video tapes and discs	0	4,117	5,091	7,804
Video tape and disc rental	0	1,040	1,509	2,447
Commercial and industrial machinery and equipment rental and leasing	0	4,893	11,364	16,126
Lessors of nonfinancial intangible assets	0	574	9,226	11,243
Legal services	1	74,062	127,082	181,321
Accounting, tax preparation, bookkeeping, and payroll services	0	30,969	44,600	58,052
Architectural, engineering, and related services	1	49,059	61,031	101,821
Specialized design services	0	5,371	5,694	6,940
Custom computer programming services	0	12,938	14,552	20,047
Computer systems design services	0	23,643	24,147	30,265
Other computer related services, including facilities management	0	5,369	10,070	17,723
Management consulting services	1	109,964	109,961	159,857
Environmental and other technical consulting services	0	19,402	18,000	25,197
Scientific research and development services	16	1,738,811	2,385,919	4,398,986
Advertising, public relations, and related services	0	15,979	23,156	41,081
Photographic services	0	3,943	2,432	3,647
Veterinary services	0	3,453	5,363	7,779
Marketing research and all other miscellaneous professional, scientific, and technical services	1	69,765	65,876	90,580
Management of companies and enterprises	1	105,796	132,606	190,768
Office administrative services	0	37,630	19,169	30,832
Facilities support services	0	1,517	2,119	5,807
Employment services	1	78,724	136,310	183,580
Business support services	0	15,608	14,296	20,978
Travel arrangement and reservation services	0	5,010	7,155	15,448
Investigation and security services	0	8,897	9,130	11,552
Services to buildings	1	24,929	25,957	37,028

## APPENDIX

Landscape and horticultural services	0	15,338	16,207	23,753
Other support services	0	3,626	4,646	8,818
Waste management and remediation services	0	9,054	18,296	28,255
Elementary and secondary schools	0	17,955	15,594	18,210
Junior colleges, colleges, universities, and professional schools	0	32,485	43,787	56,340
Other educational services	0	11,392	10,842	18,666
Offices of physicians	1	77,880	90,111	124,091
Offices of dentists	0	17,546	21,311	30,170
Offices of other health practitioners	0	18,387	17,394	23,560
Outpatient care centers	0	14,645	15,455	29,668
Medical and diagnostic laboratories	0	2,532	3,660	5,487
Home health care services	0	13,254	8,920	12,080
Other ambulatory health care services	0	3,900	4,233	7,108
Hospitals	1	105,519	126,601	231,567
Nursing and community care facilities	0	19,482	22,653	35,611
Residential mental retardation, mental health, substance abuse and other facilities	0	7,679	8,357	11,960
Individual and family services	1	17,871	15,918	23,347
Child day care services	0	10,394	11,979	15,738
Community food, housing, and other relief services, including rehabilitation services	0	4,716	5,144	11,280
Performing arts companies	0	2,549	3,837	6,400
Commercial Sports Except Racing	0	1,585	1,833	3,802
Racing and Track Operation	0	833	1,283	2,241
Independent artists, writers, and performers	0	10,973	12,036	13,548
Promoters of performing arts and sports and agents for public figures	0	1,819	3,427	7,633
Museums, historical sites, zoos, and parks	0	920	1,085	2,105
Amusement parks and arcades	0	1,168	2,292	2,854
Gambling industries (except casino hotels)	0	3,407	11,686	16,048
Other amusement and recreation industries	0	7,566	7,867	11,235



## APPENDIX

Fitness and recreational sports centers	0	6,380	7,331	9,028
Bowling centers	0	743	955	1,336
Hotels and motels, including casino hotels	0	2,025	4,241	5,988
Other accommodations	0	1,221	1,743	2,221
Full-service restaurants	1	35,071	48,290	80,694
Limited-service restaurants	1	21,032	29,371	60,338
All other food and drinking places	1	25,177	34,571	48,414
Automotive repair and maintenance, except car washes	0	29,433	27,866	40,966
Car washes	0	14,586	17,557	26,312
Electronic and precision equipment repair and maintenance	1	109,278	149,266	212,909
Commercial and industrial machinery and equipment repair and maintenance	0	8,626	8,619	12,561
Personal and household goods repair and maintenance	0	9,828	6,975	8,422
Personal care services	0	14,544	8,622	11,481
Death care services	0	1,015	1,131	1,712
Dry-cleaning and laundry services	0	3,592	3,782	5,254
Other personal services	0	13,471	9,954	13,034
Religious organizations	0	16,674	4,211	28,898
Grantmaking, giving, and social advocacy organizations	0	7,418	15,809	28,065
Business and professional associations	0	5,922	7,341	11,855
Labor and civic organizations	0	4,652	8,609	18,600
Private households	0	3,106	3,106	3,106
Postal service	0	11,493	11,511	12,664
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	440	340	1,007
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	5,834	5,989	16,890
Local government passenger transit	0	372	(302)	114
Local government electric utilities	0	115	266	522
Other local government enterprises	0	4,115	7,278	13,395

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 32. New Jersey

**Table 431: Detailed NASA Impacts by Types of Impact, New Jersey.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	359	33,264,166	50,068,500	87,945,610
Oilseed farming	0	1,578	4,885	9,667
Grain farming	0	431	1,150	4,216
Vegetable and melon farming	0	2,892	4,393	10,947
Fruit farming	0	1,981	3,361	7,205
Tree nut farming	0	6	6	7
Greenhouse, nursery, and floriculture production	0	4,150	5,337	11,169
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	581	745	1,517
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	31	191	514

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Dairy cattle and milk production	0	36	147	547
Poultry and egg production	0	159	276	2,521
Animal production, except cattle and poultry and eggs	0	2,331	9,279	14,072
Forestry, forest products, and timber tract production	0	4,971	5,144	6,093
Commercial logging	0	939	990	1,286
Commercial fishing	0	5,908	3,427	5,440
Commercial hunting and trapping	0	1,799	1,215	1,280
Support activities for agriculture and forestry	0	18,289	14,353	17,905
Oil and gas extraction	0	71,681	27,762	82,565
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(4,750)	(625,984)	10,295
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	5,308	3,657	6,785
Sand and gravel mining	0	4,314	3,862	4,848
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	399	383	424
Other nonmetallic minerals	0	394	323	419
Drilling oil and gas wells	0	4	3	8
Support activities for oil and gas operations	0	36	13	47
Metal mining services	0	985	434	1,431
Other nonmetallic minerals services	0	25	17	45
Electric power generation - Hydroelectric	0	543	1,650	3,116
Electric power generation - Fossil fuel	0	13,711	63,114	147,378
Electric power generation - Nuclear	0	23,996	68,084	131,319
Electric power generation - Solar	0	4,906	8,580	16,900
Electric power generation - Wind	0	0	0	0

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	1,018	818	2,233
Electric power transmission and distribution	0	57,754	252,050	526,791
Natural gas distribution	0	40,249	135,982	246,405
Water, sewage and other systems	0	13,675	30,802	46,232
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	103,922	134,387	286,228
Maintenance and repair construction of residential structures	0	35,708	50,171	107,711
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	105	74	148
Dog and cat food manufacturing	0	1,707	5,656	25,697
Other animal food manufacturing	0	2,256	4,329	24,953
Flour milling	0	254	446	2,123
Rice milling	0	0	0	0
Malt manufacturing	0	98	159	847

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Wet corn milling	0	9,086	20,568	84,366
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	8,083	14,498	134,722
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	180	367	1,809
Nonchocolate confectionery manufacturing	0	851	1,158	4,527
Chocolate and confectionery manufacturing from cacao beans	0	122	223	1,716
Confectionery manufacturing from purchased chocolate	0	2,125	2,728	9,410
Frozen fruits, juices and vegetables manufacturing	0	1,302	2,153	12,622
Frozen specialties manufacturing	0	3,805	5,267	22,845
Canned fruits and vegetables manufacturing	0	2,814	4,602	16,737
Canned specialties	0	330	689	4,042
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	2,525	3,528	39,590
Dry, condensed, and evaporated dairy product manufacturing	0	329	673	5,171
Fluid milk manufacturing	0	1,929	2,850	17,833
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	357	464	2,834
Frozen cakes and other pastries manufacturing	0	4,873	6,640	11,978
Poultry processing	0	910	1,137	5,169
Animal, except poultry, slaughtering	0	2,463	3,214	20,357
Meat processed from carcasses	0	10,532	11,508	75,753
Rendering and meat byproduct processing	0	1,801	2,042	8,040
Seafood product preparation and packaging	0	2,146	2,459	10,097
Bread and bakery product, except frozen, manufacturing	0	16,895	21,003	52,101
Cookie and cracker manufacturing	0	5,688	7,373	22,033
Dry pasta, mixes, and dough manufacturing	0	2,156	4,434	17,646
Tortilla manufacturing	0	178	207	831

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	2,464	4,972	17,392
Other snack food manufacturing	0	2,606	4,712	19,779
Coffee and tea manufacturing	0	1,837	2,965	12,881
Flavoring syrup and concentrate manufacturing	0	2,094	11,775	34,020
Mayonnaise, dressing, and sauce manufacturing	0	273	445	1,713
Spice and extract manufacturing	0	6,360	8,911	31,618
All other food manufacturing	0	7,106	9,040	39,658
Bottled and canned soft drinks & water	0	3,709	6,849	34,524
Manufactured ice	0	270	88	647
Breweries	0	2,278	5,710	15,692
Wineries	0	168	329	2,077
Distilleries	0	1,071	6,794	14,051
Tobacco product manufacturing	0	85	2,877	5,159
Fiber, yarn, and thread mills	0	591	883	2,185
Broadwoven fabric mills	0	787	1,185	3,560
Narrow fabric mills and schiffli machine embroidery	0	100	114	285
Nonwoven fabric mills	0	121	217	526
Knit fabric mills	0	272	374	906
Textile and fabric finishing mills	0	412	546	1,696
Fabric coating mills	0	845	1,129	3,989
Carpet and rug mills	0	47	90	280
Curtain and linen mills	0	1,455	2,152	4,768
Textile bag and canvas mills	0	703	924	2,778
Rope, cordage, twine, tire cord and tire fabric mills	0	342	591	1,614
Other textile product mills	0	1,469	1,881	4,772
Hosiery and sock mills	0	152	202	458
Other apparel knitting mills	0	324	374	959
Cut and sew apparel contractors	0	940	1,004	2,029
Mens and boys cut and sew apparel manufacturing	0	1,610	1,688	5,764
Womens and girls cut and sew apparel manufacturing	0	752	790	2,498
Other cut and sew apparel manufacturing	0	490	540	1,505
Apparel accessories and other apparel manufacturing	0	771	818	2,289
Leather and hide tanning and finishing	0	45	50	299

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Footwear manufacturing	0	482	504	1,447
Other leather and allied product manufacturing	0	256	252	471
Sawmills	0	254	357	1,328
Wood preservation	0	93	269	1,386
Veneer and plywood manufacturing	0	135	195	743
Engineered wood member and truss manufacturing	0	137	178	522
Reconstituted wood product manufacturing	0	101	229	829
Wood windows and door manufacturing	0	3,992	5,309	14,406
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	831	1,151	3,608
Wood container and pallet manufacturing	0	1,403	1,636	4,438
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	63	75	338
All other miscellaneous wood product manufacturing	0	374	463	1,498
Pulp mills	0	0	0	0
Paper mills	0	4,383	5,555	26,951
Paperboard mills	0	285	391	1,797
Paperboard container manufacturing	0	19,228	22,493	104,941
Paper bag and coated and treated paper manufacturing	0	18,503	22,273	93,076
Stationery product manufacturing	0	1,788	2,053	8,082
Sanitary paper product manufacturing	0	25,029	32,811	101,169
All other converted paper product manufacturing	0	823	950	3,585
Printing	9	626,733	911,323	1,672,583
Support activities for printing	0	10,581	15,440	22,237
Petroleum refineries	0	18,313	182,133	740,672
Asphalt paving mixture and block manufacturing	0	893	1,758	6,673
Asphalt shingle and coating materials manufacturing	0	259	1,094	2,846
Petroleum lubricating oil and grease manufacturing	3	769,416	2,981,713	5,644,041

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	10,315	41,973	249,241
Industrial gas manufacturing	0	3,383	5,313	14,050
Synthetic dye and pigment manufacturing	0	7,902	8,679	19,753
Other basic inorganic chemical manufacturing	0	15,480	21,729	64,088
Other basic organic chemical manufacturing	0	27,762	42,085	265,399
Plastics material and resin manufacturing	0	7,932	9,711	49,515
Synthetic rubber manufacturing	0	1,122	1,050	1,327
Artificial and synthetic fibers and filaments manufacturing	0	281	280	429
Nitrogenous fertilizer manufacturing	0	589	596	956
Phosphatic fertilizer manufacturing	0	536	626	1,357
Fertilizer mixing	0	1,368	1,157	1,673
Pesticide and other agricultural chemical manufacturing	0	5,943	8,377	31,011
Medicinal and botanical manufacturing	0	13,437	16,401	40,586
Pharmaceutical preparation manufacturing	0	69,017	146,045	397,796
In-vitro diagnostic substance manufacturing	0	2,697	3,284	7,407
Biological product (except diagnostic) manufacturing	0	1,412	2,185	4,920
Paint and coating manufacturing	0	10,073	10,073	22,345
Adhesive manufacturing	0	14,448	15,518	38,761
Soap and other detergent manufacturing	0	21,579	25,624	67,799
Polish and other sanitation good manufacturing	0	14,216	17,017	37,532
Surface active agent manufacturing	0	3,515	5,876	12,888
Toilet preparation manufacturing	0	34,305	45,733	106,705
Printing ink manufacturing	0	23,461	23,496	32,153
Explosives manufacturing	0	189	195	407
Custom compounding of purchased resins	1	134,527	162,555	432,526
Photographic film and chemical manufacturing	0	8,862	11,090	25,894
Other miscellaneous chemical product manufacturing	0	24,597	24,622	47,538



## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	11,889	16,416	66,095
Unlaminated plastics profile shape manufacturing	0	8,338	13,783	40,280
Plastics pipe and pipe fitting manufacturing	0	396	671	2,092
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,250	1,735	4,146
Polystyrene foam product manufacturing	0	736	988	3,240
Urethane and other foam product (except polystyrene) manufacturing	0	1,201	1,597	5,041
Plastics bottle manufacturing	0	3,818	5,320	23,105
Other plastics product manufacturing	0	30,443	38,795	112,694
Tire manufacturing	0	651	800	3,390
Rubber and plastics hoses and belting manufacturing	0	2,303	2,992	8,273
Other rubber product manufacturing	0	5,429	6,925	21,516
Pottery, ceramics, and plumbing fixture manufacturing	0	2,093	2,668	3,924
Brick, tile, and other structural clay product manufacturing	0	500	862	2,172
Flat glass manufacturing	0	811	1,584	4,320
Other pressed and blown glass and glassware manufacturing	0	4,525	6,572	16,173
Glass container manufacturing	0	1,353	2,290	6,382
Glass product manufacturing made of purchased glass	0	6,072	9,865	22,593
Cement manufacturing	0	284	659	2,194
Ready-mix concrete manufacturing	0	3,032	4,925	14,560
Concrete block and brick manufacturing	0	1,460	2,577	5,873
Concrete pipe manufacturing	0	90	144	325
Other concrete product manufacturing	0	2,064	2,932	6,902
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	975	2,360	6,563
Abrasive product manufacturing	0	991	2,852	5,171
Cut stone and stone product manufacturing	0	1,814	2,106	4,298

## APPENDIX

Ground or treated mineral and earth manufacturing	0	600	1,527	3,668
Mineral wool manufacturing	0	637	1,414	3,182
Miscellaneous nonmetallic mineral products manufacturing	0	247	575	1,411
Iron and steel mills and ferroalloy manufacturing	0	2,917	4,059	20,342
Iron, steel pipe and tube manufacturing from purchased steel	0	910	1,154	4,371
Rolled steel shape manufacturing	0	705	1,061	4,902
Steel wire drawing	0	64	80	392
Alumina refining and primary aluminum production	0	123	213	1,515
Secondary smelting and alloying of aluminum	0	581	834	6,278
Aluminum sheet, plate, and foil manufacturing	0	3,059	4,428	20,552
Other aluminum rolling, drawing and extruding	0	168	205	772
Nonferrous metal (exc aluminum) smelting and refining	0	223	492	1,667
Copper rolling, drawing, extruding and alloying	0	6,601	8,240	59,445
Nonferrous metal, except copper and aluminum, shaping	0	501	600	2,185
Secondary processing of other nonferrous metals	0	273	537	2,804
Ferrous metal foundries	0	732	956	2,168
Nonferrous metal foundries	0	3,714	4,720	11,509
Custom roll forming	0	310	411	1,627
Crown and closure manufacturing and metal stamping	0	7,546	9,385	25,038
Iron and steel forging	0	1,451	1,775	6,230
Nonferrous forging	0	1,396	1,615	4,712
Cutlery, utensil, pot, and pan manufacturing	0	1,403	2,793	7,931
Handtool manufacturing	0	1,427	1,926	4,377
Prefabricated metal buildings and components manufacturing	0	78	96	270
Fabricated structural metal manufacturing	0	1,657	2,100	6,056
Plate work manufacturing	0	1,086	1,134	2,948
Metal window and door manufacturing	0	1,457	1,906	5,186

## APPENDIX

Sheet metal work manufacturing	0	24,391	28,409	64,629
Ornamental and architectural metal work manufacturing	0	1,347	1,572	3,819
Power boiler and heat exchanger manufacturing	0	493	597	1,453
Metal tank (heavy gauge) manufacturing	0	687	782	2,005
Metal cans manufacturing	0	2,525	4,345	22,164
Metal barrels, drums and pails manufacturing	0	3,641	4,228	14,764
Hardware manufacturing	0	524	719	2,099
Spring and wire product manufacturing	0	1,905	2,314	6,242
Machine shops	1	109,395	119,327	216,525
Turned product and screw, nut, and bolt manufacturing	0	5,024	6,170	17,319
Metal heat treating	0	1,572	2,058	4,863
Metal coating and nonprecious engraving	0	3,237	4,561	11,852
Electroplating, anodizing, and coloring metal	0	5,560	5,999	12,471
Valve and fittings, other than plumbing, manufacturing	0	1,747	2,354	5,791
Plumbing fixture fitting and trim manufacturing	0	207	443	1,430
Ball and roller bearing manufacturing	0	474	700	1,928
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	413	751	1,870
Fabricated pipe and pipe fitting manufacturing	0	498	551	1,339
Other fabricated metal manufacturing	0	3,699	4,339	10,192
Farm machinery and equipment manufacturing	0	18	23	88
Lawn and garden equipment manufacturing	0	49	61	250
Construction machinery manufacturing	0	8	10	31
Mining machinery and equipment manufacturing	0	0	0	0

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	7	7	17
Semiconductor machinery manufacturing	0	16	17	50
Food product machinery manufacturing	0	19	20	57
Sawmill, woodworking, and paper machinery	0	174	188	498
Printing machinery and equipment manufacturing	0	1,852	1,960	4,060
All other industrial machinery manufacturing	0	129	142	360
Optical instrument and lens manufacturing	2	180,827	229,517	569,531
Photographic and photocopying equipment manufacturing	0	93	107	301
Other commercial service industry machinery manufacturing	0	526	715	2,187
Air purification and ventilation equipment manufacturing	0	28,903	35,375	72,723
Heating equipment (except warm air furnaces) manufacturing	0	443	520	1,440
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,380	1,889	6,583
Industrial mold manufacturing	0	566	593	1,064
Special tool, die, jig, and fixture manufacturing	0	417	444	792
Cutting tool and machine tool accessory manufacturing	0	527	549	1,121
Machine tool manufacturing	0	148	155	353
Rolling mill and other metalworking machinery manufacturing	0	13	14	31
Turbine and turbine generator set units manufacturing	0	41	48	165
Speed changer, industrial high-speed drive, and gear manufacturing	0	179	213	638
Mechanical power transmission equipment manufacturing	0	813	915	2,222
Other engine equipment manufacturing	0	35	47	282
Pump and pumping equipment manufacturing	0	140	181	503

## APPENDIX

Air and gas compressor manufacturing	0	10	11	31
Elevator and moving stairway manufacturing	0	177	214	571
Conveyor and conveying equipment manufacturing	0	199	208	493
Overhead cranes, hoists, and monorail systems manufacturing	0	2	3	9
Industrial truck, trailer, and stacker manufacturing	0	46	55	176
Power-driven handtool manufacturing	0	50	84	313
Welding and soldering equipment manufacturing	0	15	16	45
Packaging machinery manufacturing	0	302	354	896
Industrial process furnace and oven manufacturing	0	316	334	662
Fluid power cylinder and actuator manufacturing	0	107	124	376
Fluid power pump and motor manufacturing	0	42	50	94
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	183	202	519
Electronic computer manufacturing	0	27,120	58,282	138,881
Computer storage device manufacturing	0	21	60	281
Computer terminals and other computer peripheral equipment manufacturing	1	100,278	182,828	461,931
Telephone apparatus manufacturing	0	109	209	772
Broadcast and wireless communications equipment manufacturing	0	605	878	1,832
Other communications equipment manufacturing	0	721	1,146	2,586
Audio and video equipment manufacturing	0	66	121	429
Printed circuit assembly (electronic assembly) manufacturing	0	7,553	11,557	37,262
Bare printed circuit board manufacturing	0	1,077	1,431	3,835

## APPENDIX

Semiconductor and related device manufacturing	0	4,379	7,826	26,483
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	931	1,328	2,995
Electronic connector manufacturing	0	761	1,163	3,151
Other electronic component manufacturing	0	14,433	16,770	43,618
Electromedical and electrotherapeutic apparatus manufacturing	0	254	523	1,162
Search, detection, and navigation instruments manufacturing	0	43,811	68,579	133,572
Automatic environmental control manufacturing	0	1,967	2,607	4,636
Industrial process variable instruments manufacturing	0	877	1,287	2,753
Totalizing fluid meter and counting device manufacturing	0	76	163	396
Electricity and signal testing instruments manufacturing	0	27,170	40,096	119,608
Analytical laboratory instrument manufacturing	7	892,640	1,560,834	3,198,695
Irradiation apparatus manufacturing	0	5	10	36
Watch, clock, and other measuring and controlling device manufacturing	0	149	261	702
Blank magnetic and optical recording media manufacturing	0	3	10	68
Software and other prerecorded and record reproducing	0	609	911	2,222
Electric lamp bulb and part manufacturing	0	1,430	2,413	3,509
Lighting fixture manufacturing	0	2,219	3,350	7,949
Small electrical appliance manufacturing	0	187	361	918
Household cooking appliance manufacturing	0	23	50	134
Household refrigerator and home freezer manufacturing	0	29	66	165
Household laundry equipment manufacturing	0	46	89	337

## APPENDIX

Other major household appliance manufacturing	0	11	22	55
Power, distribution, and specialty transformer manufacturing	0	207	316	797
Motor and generator manufacturing	0	745	1,158	2,835
Switchgear and switchboard apparatus manufacturing	0	330	539	1,246
Relay and industrial control manufacturing	0	3,574	4,859	11,561
Storage battery manufacturing	0	204	335	781
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	665	1,099	3,462
Other communication and energy wire manufacturing	0	348	639	2,103
Wiring device manufacturing	0	7,499	15,222	33,771
Carbon and graphite product manufacturing	0	596	883	2,523
All other miscellaneous electrical equipment and component manufacturing	0	16,304	18,697	48,410
Automobile manufacturing	0	86	221	1,256
Light truck and utility vehicle manufacturing	0	365	793	6,975
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	105	127	449
Truck trailer manufacturing	0	9	10	34
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	1,147	1,224	3,364
Motor vehicle gasoline engine and engine parts manufacturing	0	466	608	3,230
Motor vehicle electrical and electronic equipment manufacturing	0	1,852	2,385	12,725
Motor vehicle transmission and power train parts manufacturing	0	239	325	1,949
Motor vehicle seating and interior trim manufacturing	0	52	62	310
Motor vehicle metal stamping	0	534	640	2,060
Other motor vehicle parts manufacturing	0	2,937	3,865	17,189
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,043	1,384	5,021

## APPENDIX

Aircraft manufacturing	0	1	2	7
Aircraft engine and engine parts manufacturing	0	71	147	423
Other aircraft parts and auxiliary equipment manufacturing	0	85	122	281
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	2	2	16
Ship building and repairing	0	566	686	1,910
Boat building	0	429	542	2,217
Motorcycle, bicycle, and parts manufacturing	0	14	15	129
Military armored vehicle, tank, and tank component manufacturing	0	150	255	1,338
All other transportation equipment manufacturing	0	732	1,289	5,079
Wood kitchen cabinet and countertop manufacturing	0	3,971	4,958	11,494
Upholstered household furniture manufacturing	0	458	571	2,008
Nonupholstered wood household furniture manufacturing	0	530	580	1,460
Other household nonupholstered furniture manufacturing	0	145	196	696
Institutional furniture manufacturing	0	7,836	8,404	24,884
Wood office furniture manufacturing	0	45	56	140
Custom architectural woodwork and millwork	0	141	134	324
Office furniture, except wood, manufacturing	0	2,708	3,784	11,647
Showcase, partition, shelving, and locker manufacturing	0	1,109	1,362	2,990
Mattress manufacturing	0	610	998	4,079
Blind and shade manufacturing	0	83	87	300
Surgical and medical instrument manufacturing	0	4,119	7,435	11,090
Surgical appliance and supplies manufacturing	0	14,613	26,525	46,486



## APPENDIX

Dental equipment and supplies manufacturing	0	309	502	1,228
Ophthalmic goods manufacturing	0	545	1,058	2,990
Dental laboratories	0	1,350	1,303	2,060
Jewelry and silverware manufacturing	0	3,235	4,188	7,279
Sporting and athletic goods manufacturing	0	408	544	1,760
Doll, toy, and game manufacturing	0	708	1,014	2,771
Office supplies (except paper) manufacturing	0	724	938	2,610
Sign manufacturing	0	3,595	3,049	6,433
Gasket, packing, and sealing device manufacturing	0	782	966	2,415
Musical instrument manufacturing	0	160	168	396
Fasteners, buttons, needles, and pins manufacturing	0	178	216	475
Broom, brush, and mop manufacturing	0	930	1,298	3,350
Burial casket manufacturing	0	353	408	737
All other miscellaneous manufacturing	0	1,958	2,357	5,248
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	22,420	51,038	103,430
Wholesale - Professional and commercial equipment and supplies	1	143,927	244,104	393,155
Wholesale - Household appliances and electrical and electronic goods	1	99,647	222,246	419,370
Wholesale - Machinery, equipment, and supplies	1	67,723	115,884	186,388
Wholesale - Other durable goods merchant wholesalers	1	107,300	167,766	302,174
Wholesale - Drugs and druggists' sundries	0	67,846	182,818	333,960
Wholesale - Grocery and related product wholesalers	1	93,529	125,440	221,981
Wholesale - Petroleum and petroleum products	0	14,141	220,895	244,583
Wholesale - Other nondurable goods merchant wholesalers	2	189,516	383,101	634,183
Wholesale - Wholesale electronic markets and agents and brokers	1	97,479	53,113	59,647
Retail - Motor vehicle and parts dealers	1	70,835	105,315	147,815

## APPENDIX

Retail - Furniture and home furnishings stores	1	44,296	58,927	90,716
Retail - Electronics and appliance stores	1	62,068	57,613	87,335
Retail - Building material and garden equipment and supplies stores	1	52,193	88,430	126,806
Retail - Food and beverage stores	4	150,326	197,976	313,037
Retail - Health and personal care stores	2	98,533	115,704	170,531
Retail - Gasoline stores	1	30,637	51,520	93,050
Retail - Clothing and clothing accessories stores	2	87,452	123,253	222,190
Retail - Sporting goods, hobby, musical instrument and book stores	1	52,483	60,026	77,026
Retail - General merchandise stores	3	102,698	150,723	240,934
Retail - Miscellaneous store retailers	2	71,739	81,384	116,325
Retail - Nonstore retailers	2	131,893	270,673	426,389
Air transportation	1	103,851	247,544	349,543
Rail transportation	0	17,768	22,647	51,469
Water transportation	0	18,793	29,568	79,087
Truck transportation	2	179,188	201,368	405,377
Transit and ground passenger transportation	3	92,117	101,394	147,209
Pipeline transportation	0	14,672	39,804	48,837
Scenic and sightseeing transportation and support activities for transportation	2	174,008	193,484	330,906
Couriers and messengers	1	58,853	79,469	136,250
Warehousing and storage	2	115,329	134,739	264,053
Newspaper publishers	0	30,526	48,454	57,415
Periodical publishers	0	42,010	61,352	81,476
Book publishers	0	27,980	87,715	117,685
Directory, mailing list, and other publishers	0	16,230	46,891	61,911
Greeting card publishing	0	270	516	998
Software publishers	1	144,277	341,879	387,031
Motion picture and video industries	0	42,023	71,228	125,375
Sound recording industries	0	5,189	15,045	21,516
Radio and television broadcasting	0	98,026	88,578	146,882

## APPENDIX

Cable and other subscription programming	0	18,254	80,818	159,558
Wired telecommunications carriers	1	133,232	286,691	474,581
Wireless telecommunications carriers (except satellite)	0	20,181	95,018	240,453
Satellite, telecommunications resellers, and all other telecommunications	0	23,700	27,823	70,479
Data processing, hosting, and related services	1	96,766	258,044	441,916
News syndicates, libraries, archives and all other information services	0	15,754	31,864	43,191
Internet publishing and broadcasting and web search portals	0	71,345	247,915	452,461
Nondepository credit intermediation and related activities	1	132,481	160,739	276,553
Securities and commodity contracts intermediation and brokerage	2	375,075	367,586	569,974
Monetary authorities and depository credit intermediation	3	446,139	651,669	1,168,656
Other financial investment activities	4	186,493	209,688	569,900
Direct life insurance carriers	0	84,310	139,461	179,420
Insurance carriers, except direct life	1	199,129	510,374	1,027,157
Insurance agencies, brokerages, and related activities	2	263,057	362,705	685,950
Funds, trusts, and other financial vehicles	1	26,001	46,758	274,304
Other real estate	18	486,879	1,468,240	3,586,453
Tenant-occupied housing	2	52,635	692,477	784,956
Owner-occupied dwellings	0	0	2,071,838	2,617,743
Automotive equipment rental and leasing	0	33,772	100,382	139,560
General and consumer goods rental except video tapes and discs	0	30,510	39,361	59,343
Video tape and disc rental	0	7,791	12,110	18,218
Commercial and industrial machinery and equipment rental and leasing	0	40,843	90,433	133,036
Lessors of nonfinancial intangible assets	0	6,679	128,186	146,842

## APPENDIX

Legal services	6	552,463	881,371	1,255,438
Accounting, tax preparation, bookkeeping, and payroll services	2	258,570	358,139	453,167
Architectural, engineering, and related services	2	224,273	271,441	450,085
Specialized design services	1	102,194	114,399	137,070
Custom computer programming services	6	697,111	808,225	1,105,468
Computer systems design services	2	195,805	211,722	270,302
Other computer related services, including facilities management	0	55,622	113,329	167,245
Management consulting services	14	1,467,521	1,474,949	2,094,045
Environmental and other technical consulting services	1	79,469	70,432	98,211
Scientific research and development services	60	9,331,992	12,198,165	19,841,952
Advertising, public relations, and related services	2	187,198	269,205	411,449
Photographic services	0	27,476	15,328	24,397
Veterinary services	0	19,695	28,770	42,183
Marketing research and all other miscellaneous professional, scientific, and technical services	10	867,158	765,803	1,003,840
Management of companies and enterprises	8	1,369,372	1,587,126	2,058,198
Office administrative services	2	184,236	84,678	147,053
Facilities support services	0	16,449	21,943	44,887
Employment services	11	478,638	769,668	1,165,172
Business support services	2	164,644	146,094	195,401
Travel arrangement and reservation services	1	44,228	59,167	115,418
Investigation and security services	2	87,671	91,791	125,167
Services to buildings	3	170,847	180,030	242,385
Landscape and horticultural services	2	118,010	126,722	177,938
Other support services	1	65,402	84,999	128,290
Waste management and remediation services	1	54,244	106,767	170,402
Elementary and secondary schools	2	96,643	92,185	108,464
Junior colleges, colleges, universities, and professional schools	2	86,390	133,181	179,783
Other educational services	3	100,622	101,046	169,013
Offices of physicians	4	484,613	557,018	799,698
Offices of dentists	1	103,641	124,007	185,680

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Offices of other health practitioners	2	130,753	124,486	159,306
Outpatient care centers	1	101,902	107,516	188,239
Medical and diagnostic laboratories	0	39,548	57,106	88,998
Home health care services	3	136,348	94,776	131,842
Other ambulatory health care services	0	31,491	34,094	54,829
Hospitals	8	718,831	835,294	1,509,542
Nursing and community care facilities	3	136,674	149,807	241,855
Residential mental retardation, mental health, substance abuse and other facilities	1	62,227	65,453	95,096
Individual and family services	4	130,287	117,941	164,111
Child day care services	3	80,505	95,035	124,680
Community food, housing, and other relief services, including rehabilitation services	1	28,669	32,563	68,989
Performing arts companies	0	17,926	30,677	47,657
Commercial Sports Except Racing	0	47,590	51,386	66,052
Racing and Track Operation	0	3,035	6,935	10,731
Independent artists, writers, and performers	2	48,375	59,860	71,815
Promoters of performing arts and sports and agents for public figures	0	16,085	40,902	81,429
Museums, historical sites, zoos, and parks	0	3,541	4,484	7,889
Amusement parks and arcades	0	5,512	16,989	20,290
Gambling industries (except casino hotels)	0	26,565	51,858	78,678
Other amusement and recreation industries	1	40,152	47,007	71,011
Fitness and recreational sports centers	1	33,521	48,792	66,907
Bowling centers	0	3,208	4,541	7,093
Hotels and motels, including casino hotels	1	56,763	98,478	144,247
Other accommodations	0	13,438	18,128	23,241
Full-service restaurants	7	181,866	254,939	440,584
Limited-service restaurants	5	113,763	168,586	355,609
All other food and drinking places	5	155,762	198,729	296,376
Automotive repair and maintenance, except car washes	2	151,467	174,648	249,420
Car washes	1	77,515	113,208	163,699

## APPENDIX

Electronic and precision equipment repair and maintenance	2	161,572	229,770	331,410
Commercial and industrial machinery and equipment repair and maintenance	0	48,191	57,133	79,888
Personal and household goods repair and maintenance	1	53,387	45,301	54,929
Personal care services	3	93,765	55,986	78,385
Death care services	0	10,751	13,269	19,243
Dry-cleaning and laundry services	1	23,030	25,575	36,764
Other personal services	2	85,039	70,346	91,075
Religious organizations	3	152,686	65,609	264,344
Grantmaking, giving, and social advocacy organizations	0	27,078	75,516	112,273
Business and professional associations	0	41,779	61,412	98,515
Labor and civic organizations	1	38,597	89,723	150,853
Private households	1	23,363	23,363	23,363
Postal service	1	89,853	89,908	98,850
Federal electric utilities	0	0	0	0
Other federal government enterprises	1	69,400	67,423	340,008
State government passenger transit	1	41,934	(31,205)	45,624
State government electric utilities	0	0	0	0
Other state government enterprises	1	92,928	90,185	163,710
Local government passenger transit	0	1,455	(1,225)	1,623
Local government electric utilities	0	878	2,037	4,126
Other local government enterprises	0	42,836	57,782	124,856
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	15	1,836,578	2,995,489	6,218,408

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 432: Detailed M2M Program Impacts by Types of Impact, New Jersey.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	22	2,303,962	4,703,385	8,694,247
Oilseed farming	0	342	1,743	4,339
Grain farming	0	25	74	249
Vegetable and melon farming	0	182	290	683
Fruit farming	0	160	274	553
Tree nut farming	0	1	1	1
Greenhouse, nursery, and floriculture production	0	218	289	591
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	54	72	144
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2	9	21
Dairy cattle and milk production	0	2	10	33
Poultry and egg production	0	8	14	126
Animal production, except cattle and poultry and eggs	0	67	293	454
Forestry, forest products, and timber tract production	0	1,973	2,029	2,312
Commercial logging	0	50	53	64
Commercial fishing	0	474	207	332
Commercial hunting and trapping	0	109	69	64
Support activities for agriculture and forestry	0	679	527	656
Oil and gas extraction	0	17,323	9,067	25,220
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

## APPENDIX

Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(27)	4,147	54
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	455	161	306
Sand and gravel mining	0	359	166	175
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	221	139	140
Other nonmetallic minerals	0	47	21	25
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	4	1	5
Metal mining services	0	56	32	103
Other nonmetallic minerals services	0	1	1	1
Electric power generation - Hydroelectric	0	47	130	229
Electric power generation - Fossil fuel	0	889	3,918	8,742
Electric power generation - Nuclear	0	1,543	4,597	8,616
Electric power generation - Solar	0	264	445	848
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	124	78	185
Electric power transmission and distribution	0	3,262	14,587	29,478
Natural gas distribution	0	3,326	11,639	18,455
Water, sewage and other systems	0	1,361	2,531	3,405
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0



## APPENDIX

Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	5,130	6,662	13,781
Maintenance and repair construction of residential structures	0	2,241	3,169	6,582
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	6	4	8
Dog and cat food manufacturing	0	92	317	1,381
Other animal food manufacturing	0	107	215	1,177
Flour milling	0	13	23	112
Rice milling	0	0	0	0
Malt manufacturing	0	5	10	40
Wet corn milling	0	1,875	4,650	19,064
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	3,417	6,410	55,006
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	15	30	146
Nonchocolate confectionery manufacturing	0	64	86	307
Chocolate and confectionery manufacturing from cacao beans	0	15	28	198
Confectionery manufacturing from purchased chocolate	0	149	193	615
Frozen fruits, juices and vegetables manufacturing	0	96	160	879
Frozen specialties manufacturing	0	276	379	1,547
Canned fruits and vegetables manufacturing	0	232	380	1,362

## APPENDIX

Canned specialties	0	21	42	249
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	171	239	2,740
Dry, condensed, and evaporated dairy product manufacturing	0	27	58	395
Fluid milk manufacturing	0	124	188	1,128
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	22	30	163
Frozen cakes and other pastries manufacturing	0	325	438	772
Poultry processing	0	47	62	266
Animal, except poultry, slaughtering	0	181	239	1,481
Meat processed from carcasses	0	651	722	4,600
Rendering and meat byproduct processing	0	722	804	3,184
Seafood product preparation and packaging	0	111	132	482
Bread and bakery product, except frozen, manufacturing	0	1,093	1,361	3,309
Cookie and cracker manufacturing	0	395	545	1,477
Dry pasta, mixes, and dough manufacturing	0	156	313	1,280
Tortilla manufacturing	0	11	12	49
Roasted nuts and peanut butter manufacturing	0	187	421	1,282
Other snack food manufacturing	0	172	312	1,260
Coffee and tea manufacturing	0	125	205	844
Flavoring syrup and concentrate manufacturing	0	130	687	2,043
Mayonnaise, dressing, and sauce manufacturing	0	24	39	143
Spice and extract manufacturing	0	571	817	2,632
All other food manufacturing	0	562	718	2,966
Bottled and canned soft drinks & water	0	212	406	1,958
Manufactured ice	0	16	6	36
Breweries	0	139	360	952
Wineries	0	22	43	265
Distilleries	0	72	475	883
Tobacco product manufacturing	0	5	222	347
Fiber, yarn, and thread mills	0	21	35	76
Broadwoven fabric mills	0	99	166	485

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	16	18	41
Nonwoven fabric mills	0	18	34	75
Knit fabric mills	0	110	156	372
Textile and fabric finishing mills	0	47	62	186
Fabric coating mills	0	61	79	256
Carpet and rug mills	0	4	8	20
Curtain and linen mills	0	108	167	346
Textile bag and canvas mills	0	40	54	155
Rope, cordage, twine, tire cord and tire fabric mills	0	11	20	51
Other textile product mills	0	103	135	322
Hosiery and sock mills	0	10	14	27
Other apparel knitting mills	0	26	28	67
Cut and sew apparel contractors	0	72	76	146
Mens and boys cut and sew apparel manufacturing	0	94	100	300
Womens and girls cut and sew apparel manufacturing	0	91	94	262
Other cut and sew apparel manufacturing	0	48	52	131
Apparel accessories and other apparel manufacturing	0	79	84	204
Leather and hide tanning and finishing	0	3	3	17
Footwear manufacturing	0	35	37	100
Other leather and allied product manufacturing	0	20	20	34
Sawmills	0	13	19	68
Wood preservation	0	4	14	68
Veneer and plywood manufacturing	0	6	9	34
Engineered wood member and truss manufacturing	0	6	9	25
Reconstituted wood product manufacturing	0	5	11	40
Wood windows and door manufacturing	0	120	165	437
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	31	44	130
Wood container and pallet manufacturing	0	84	101	267
Manufactured home (mobile home) manufacturing	0	0	0	0

## APPENDIX

Prefabricated wood building manufacturing	0	4	5	20
All other miscellaneous wood product manufacturing	0	27	35	101
Pulp mills	0	0	0	0
Paper mills	0	178	196	1,043
Paperboard mills	0	18	23	113
Paperboard container manufacturing	0	3,674	4,108	19,155
Paper bag and coated and treated paper manufacturing	0	649	716	3,088
Stationery product manufacturing	0	76	81	287
Sanitary paper product manufacturing	0	1,229	1,446	4,702
All other converted paper product manufacturing	0	52	57	218
Printing	0	2,771	4,043	7,021
Support activities for printing	0	232	332	474
Petroleum refineries	0	6,818	59,357	245,467
Asphalt paving mixture and block manufacturing	0	48	90	317
Asphalt shingle and coating materials manufacturing	0	14	54	145
Petroleum lubricating oil and grease manufacturing	2	395,277	1,569,402	2,868,357
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	3,621	14,750	87,717
Industrial gas manufacturing	0	208	345	878
Synthetic dye and pigment manufacturing	0	2,332	2,650	6,520
Other basic inorganic chemical manufacturing	0	5,126	7,759	22,144
Other basic organic chemical manufacturing	0	4,490	6,882	45,110
Plastics material and resin manufacturing	0	1,801	2,251	11,900
Synthetic rubber manufacturing	0	296	279	371
Artificial and synthetic fibers and filaments manufacturing	0	25	24	37
Nitrogenous fertilizer manufacturing	0	103	111	160
Phosphatic fertilizer manufacturing	0	64	76	169
Fertilizer mixing	0	205	182	262

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	301	434	1,591
Medicinal and botanical manufacturing	0	1,363	1,813	3,791
Pharmaceutical preparation manufacturing	0	7,074	15,842	38,872
In-vitro diagnostic substance manufacturing	0	436	535	1,196
Biological product (except diagnostic) manufacturing	0	167	271	561
Paint and coating manufacturing	0	778	834	1,796
Adhesive manufacturing	0	4,454	5,335	12,300
Soap and other detergent manufacturing	0	1,240	1,843	3,998
Polish and other sanitation good manufacturing	0	848	1,179	2,146
Surface active agent manufacturing	0	143	279	553
Toilet preparation manufacturing	0	2,684	4,082	8,642
Printing ink manufacturing	0	447	453	601
Explosives manufacturing	0	8	8	18
Custom compounding of purchased resins	0	51,558	74,362	206,838
Photographic film and chemical manufacturing	0	247	337	719
Other miscellaneous chemical product manufacturing	0	1,466	1,565	3,037
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,966	2,696	10,608
Unlaminated plastics profile shape manufacturing	0	2,443	3,980	11,530
Plastics pipe and pipe fitting manufacturing	0	137	242	719
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	100	138	327
Polystyrene foam product manufacturing	0	136	180	583
Urethane and other foam product (except polystyrene) manufacturing	0	90	119	372
Plastics bottle manufacturing	0	2,053	2,845	12,087
Other plastics product manufacturing	0	5,003	6,350	17,461
Tire manufacturing	0	24	30	134

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	62	79	216
Other rubber product manufacturing	0	132	167	533
Pottery, ceramics, and plumbing fixture manufacturing	0	498	604	910
Brick, tile, and other structural clay product manufacturing	0	100	165	430
Flat glass manufacturing	0	52	94	267
Other pressed and blown glass and glassware manufacturing	0	300	430	1,056
Glass container manufacturing	0	83	131	383
Glass product manufacturing made of purchased glass	0	362	572	1,308
Cement manufacturing	0	24	53	177
Ready-mix concrete manufacturing	0	112	176	521
Concrete block and brick manufacturing	0	233	386	892
Concrete pipe manufacturing	0	5	7	17
Other concrete product manufacturing	0	288	391	932
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	102	236	675
Abrasive product manufacturing	0	84	228	423
Cut stone and stone product manufacturing	0	87	100	200
Ground or treated mineral and earth manufacturing	0	203	498	1,233
Mineral wool manufacturing	0	29	61	137
Miscellaneous nonmetallic mineral products manufacturing	0	11	25	61
Iron and steel mills and ferroalloy manufacturing	0	240	287	1,498
Iron, steel pipe and tube manufacturing from purchased steel	0	82	92	351
Rolled steel shape manufacturing	0	47	64	329
Steel wire drawing	0	9	8	45
Alumina refining and primary aluminum production	0	20	31	211
Secondary smelting and alloying of aluminum	0	70	81	642
Aluminum sheet, plate, and foil manufacturing	0	372	469	2,421

## APPENDIX

Other aluminum rolling, drawing and extruding	0	30	31	126
Nonferrous metal (exc aluminum) smelting and refining	0	20	38	141
Copper rolling, drawing, extruding and alloying	0	910	1,058	7,376
Nonferrous metal, except copper and aluminum, shaping	0	171	185	742
Secondary processing of other nonferrous metals	0	57	67	458
Ferrous metal foundries	0	69	72	183
Nonferrous metal foundries	0	298	336	848
Custom roll forming	0	80	105	378
Crown and closure manufacturing and metal stamping	0	1,312	1,644	4,283
Iron and steel forging	0	850	1,044	3,513
Nonferrous forging	0	852	998	2,735
Cutlery, utensil, pot, and pan manufacturing	0	118	251	674
Handtool manufacturing	0	128	173	394
Prefabricated metal buildings and components manufacturing	0	5	6	17
Fabricated structural metal manufacturing	0	114	145	411
Plate work manufacturing	0	55	58	145
Metal window and door manufacturing	0	81	106	283
Sheet metal work manufacturing	0	3,532	4,136	9,070
Ornamental and architectural metal work manufacturing	0	70	83	192
Power boiler and heat exchanger manufacturing	0	258	321	816
Metal tank (heavy gauge) manufacturing	0	254	291	728
Metal cans manufacturing	0	1,275	2,259	11,368
Metal barrels, drums and pails manufacturing	0	1,729	2,019	6,606
Hardware manufacturing	0	78	107	303
Spring and wire product manufacturing	0	161	194	511
Machine shops	0	2,542	2,788	4,938
Turned product and screw, nut, and bolt manufacturing	0	715	877	2,354
Metal heat treating	0	328	428	1,013

## APPENDIX

Metal coating and nonprecious engraving	0	572	807	2,100
Electroplating, anodizing, and coloring metal	0	1,119	1,209	2,460
Valve and fittings, other than plumbing, manufacturing	0	138	185	452
Plumbing fixture fitting and trim manufacturing	0	54	120	366
Ball and roller bearing manufacturing	0	79	117	310
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	29	52	121
Fabricated pipe and pipe fitting manufacturing	0	26	29	71
Other fabricated metal manufacturing	0	195	229	515
Farm machinery and equipment manufacturing	0	0	1	2
Lawn and garden equipment manufacturing	0	3	3	12
Construction machinery manufacturing	0	1	1	3
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	1	1	2
Semiconductor machinery manufacturing	0	1	1	3
Food product machinery manufacturing	0	2	2	6
Sawmill, woodworking, and paper machinery	0	7	7	18
Printing machinery and equipment manufacturing	0	25	26	49
All other industrial machinery manufacturing	0	13	15	35
Optical instrument and lens manufacturing	0	24,884	33,636	72,066
Photographic and photocopying equipment manufacturing	0	28	32	86



## APPENDIX

Other commercial service industry machinery manufacturing	0	32	48	140
Air purification and ventilation equipment manufacturing	0	32	39	76
Heating equipment (except warm air furnaces) manufacturing	0	31	38	91
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	80	113	383
Industrial mold manufacturing	0	61	65	112
Special tool, die, jig, and fixture manufacturing	0	70	76	129
Cutting tool and machine tool accessory manufacturing	0	66	69	139
Machine tool manufacturing	0	19	20	42
Rolling mill and other metalworking machinery manufacturing	0	1	1	3
Turbine and turbine generator set units manufacturing	0	2	2	6
Speed changer, industrial high-speed drive, and gear manufacturing	0	15	18	49
Mechanical power transmission equipment manufacturing	0	33	38	91
Other engine equipment manufacturing	0	3	3	19
Pump and pumping equipment manufacturing	0	13	18	44
Air and gas compressor manufacturing	0	1	1	2
Elevator and moving stairway manufacturing	0	17	23	53
Conveyor and conveying equipment manufacturing	0	18	19	44
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	1
Industrial truck, trailer, and stacker manufacturing	0	4	5	16
Power-driven handtool manufacturing	0	9	16	52
Welding and soldering equipment manufacturing	0	2	2	4
Packaging machinery manufacturing	0	40	49	119

## APPENDIX

Industrial process furnace and oven manufacturing	0	153	162	311
Fluid power cylinder and actuator manufacturing	0	2	3	8
Fluid power pump and motor manufacturing	0	4	5	8
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	23	26	61
Electronic computer manufacturing	0	28	62	124
Computer storage device manufacturing	0	6	18	83
Computer terminals and other computer peripheral equipment manufacturing	0	59,106	107,473	273,516
Telephone apparatus manufacturing	0	8	15	54
Broadcast and wireless communications equipment manufacturing	0	71	102	206
Other communications equipment manufacturing	0	40	63	151
Audio and video equipment manufacturing	0	8	15	51
Printed circuit assembly (electronic assembly) manufacturing	0	1,577	2,415	7,550
Bare printed circuit board manufacturing	0	220	291	836
Semiconductor and related device manufacturing	0	1,016	1,781	5,782
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	281	395	859
Electronic connector manufacturing	0	157	238	656
Other electronic component manufacturing	0	3,246	3,764	9,398
Electromedical and electrotherapeutic apparatus manufacturing	0	29	59	126
Search, detection, and navigation instruments manufacturing	0	13,930	22,365	41,913
Automatic environmental control manufacturing	0	128	167	276

## APPENDIX

Industrial process variable instruments manufacturing	0	80	116	245
Totalizing fluid meter and counting device manufacturing	0	5	11	27
Electricity and signal testing instruments manufacturing	0	2,230	3,292	9,230
Analytical laboratory instrument manufacturing	0	56,973	102,929	189,062
Irradiation apparatus manufacturing	0	1	2	6
Watch, clock, and other measuring and controlling device manufacturing	0	53	90	225
Blank magnetic and optical recording media manufacturing	0	1	3	14
Software and other prerecorded and record reproducing	0	49	74	162
Electric lamp bulb and part manufacturing	0	111	190	272
Lighting fixture manufacturing	0	152	220	516
Small electrical appliance manufacturing	0	17	31	75
Household cooking appliance manufacturing	0	1	3	9
Household refrigerator and home freezer manufacturing	0	2	4	11
Household laundry equipment manufacturing	0	3	6	23
Other major household appliance manufacturing	0	1	2	4
Power, distribution, and specialty transformer manufacturing	0	27	42	102
Motor and generator manufacturing	0	78	118	298
Switchgear and switchboard apparatus manufacturing	0	50	81	187
Relay and industrial control manufacturing	0	473	644	1,457
Storage battery manufacturing	0	35	53	127
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	64	105	292
Other communication and energy wire manufacturing	0	65	115	363
Wiring device manufacturing	0	1,032	2,083	4,253

## APPENDIX

Carbon and graphite product manufacturing	0	11	16	48
All other miscellaneous electrical equipment and component manufacturing	0	68	79	223
Automobile manufacturing	0	6	14	83
Light truck and utility vehicle manufacturing	0	13	32	257
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	8	9	33
Truck trailer manufacturing	0	1	1	3
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	59	63	174
Motor vehicle gasoline engine and engine parts manufacturing	0	31	41	230
Motor vehicle electrical and electronic equipment manufacturing	0	91	116	568
Motor vehicle transmission and power train parts manufacturing	0	19	27	138
Motor vehicle seating and interior trim manufacturing	0	3	3	16
Motor vehicle metal stamping	0	21	25	79
Other motor vehicle parts manufacturing	0	285	339	1,723
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	68	97	328
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	9	20	58
Other aircraft parts and auxiliary equipment manufacturing	0	7	10	23
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	3
Ship building and repairing	0	39	49	130
Boat building	0	21	27	108
Motorcycle, bicycle, and parts manufacturing	0	1	1	11

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	4	6	27
All other transportation equipment manufacturing	0	46	84	327
Wood kitchen cabinet and countertop manufacturing	0	431	492	1,170
Upholstered household furniture manufacturing	0	45	56	195
Nonupholstered wood household furniture manufacturing	0	36	38	93
Other household nonupholstered furniture manufacturing	0	11	15	52
Institutional furniture manufacturing	0	2	2	5
Wood office furniture manufacturing	0	1	1	2
Custom architectural woodwork and millwork	0	9	9	20
Office furniture, except wood, manufacturing	0	8	11	35
Showcase, partition, shelving, and locker manufacturing	0	97	110	250
Mattress manufacturing	0	38	55	245
Blind and shade manufacturing	0	4	4	16
Surgical and medical instrument manufacturing	0	293	514	722
Surgical appliance and supplies manufacturing	0	1,305	2,399	3,935
Dental equipment and supplies manufacturing	0	27	43	99
Ophthalmic goods manufacturing	0	40	80	226
Dental laboratories	0	113	109	169
Jewelry and silverware manufacturing	0	229	292	488
Sporting and athletic goods manufacturing	0	26	34	107
Doll, toy, and game manufacturing	0	59	79	192
Office supplies (except paper) manufacturing	0	59	77	196
Sign manufacturing	0	165	143	282
Gasket, packing, and sealing device manufacturing	0	47	57	140
Musical instrument manufacturing	0	23	24	43
Fasteners, buttons, needles, and pins manufacturing	0	15	18	35

## APPENDIX

Broom, brush, and mop manufacturing	0	77	123	259
Burial casket manufacturing	0	15	17	30
All other miscellaneous manufacturing	0	122	146	314
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,882	4,294	8,688
Wholesale - Professional and commercial equipment and supplies	0	16,005	27,196	42,730
Wholesale - Household appliances and electrical and electronic goods	0	9,051	20,188	37,461
Wholesale - Machinery, equipment, and supplies	0	5,441	9,353	14,964
Wholesale - Other durable goods merchant wholesalers	0	10,565	16,535	29,514
Wholesale - Drugs and druggists' sundries	0	4,230	11,223	20,020
Wholesale - Grocery and related product wholesalers	0	9,931	13,257	23,390
Wholesale - Petroleum and petroleum products	0	2,682	46,341	50,544
Wholesale - Other nondurable goods merchant wholesalers	0	26,914	56,303	91,340
Wholesale - Wholesale electronic markets and agents and brokers	0	8,337	4,321	4,849
Retail - Motor vehicle and parts dealers	0	4,116	6,155	8,568
Retail - Furniture and home furnishings stores	0	2,764	3,675	5,564
Retail - Electronics and appliance stores	0	3,747	3,491	5,190
Retail - Building material and garden equipment and supplies stores	0	5,428	9,229	13,040
Retail - Food and beverage stores	0	9,636	12,555	19,383
Retail - Health and personal care stores	0	5,708	6,743	9,904
Retail - Gasoline stores	0	2,229	3,484	5,936
Retail - Clothing and clothing accessories stores	0	5,027	7,021	12,270
Retail - Sporting goods, hobby, musical instrument and book stores	0	3,150	3,613	4,550

## APPENDIX

Retail - General merchandise stores	0	6,054	8,954	14,208
Retail - Miscellaneous store retailers	0	4,576	5,143	7,098
Retail - Nonstore retailers	0	8,958	18,606	27,914
Air transportation	0	6,114	14,944	20,775
Rail transportation	0	4,117	4,659	11,268
Water transportation	0	1,254	1,916	5,026
Truck transportation	0	23,365	25,586	50,001
Transit and ground passenger transportation	0	6,867	7,635	10,387
Pipeline transportation	0	2,478	7,110	8,897
Scenic and sightseeing transportation and support activities for transportation	0	8,835	9,941	16,996
Couriers and messengers	0	4,487	6,252	10,480
Warehousing and storage	0	9,337	10,876	21,154
Newspaper publishers	0	1,569	2,418	2,823
Periodical publishers	0	2,640	3,785	4,635
Book publishers	0	806	2,453	3,253
Directory, mailing list, and other publishers	0	528	1,557	2,051
Greeting card publishing	0	12	24	45
Software publishers	0	32,118	65,680	71,773
Motion picture and video industries	0	3,294	5,638	8,257
Sound recording industries	0	395	1,082	1,427
Radio and television broadcasting	0	7,724	7,625	8,594
Cable and other subscription programming	0	1,501	5,308	8,711
Wired telecommunications carriers	0	8,099	16,135	25,953
Wireless telecommunications carriers (except satellite)	0	1,665	6,421	15,771
Satellite, telecommunications resellers, and all other telecommunications	0	2,079	2,107	4,723
Data processing, hosting, and related services	0	5,656	14,171	23,167
News syndicates, libraries, archives and all other information services	0	935	1,888	2,415
Internet publishing and broadcasting and web search portals	0	5,495	18,259	28,928

## APPENDIX

Nondepository credit intermediation and related activities	0	9,337	11,478	18,585
Securities and commodity contracts intermediation and brokerage	0	23,585	22,716	32,969
Monetary authorities and depository credit intermediation	0	20,981	31,846	55,346
Other financial investment activities	0	15,162	16,574	35,923
Direct life insurance carriers	0	4,416	7,541	9,474
Insurance carriers, except direct life	0	11,717	30,912	59,828
Insurance agencies, brokerages, and related activities	0	21,513	29,755	54,497
Funds, trusts, and other financial vehicles	0	1,912	3,374	16,737
Other real estate	1	18,573	55,299	117,485
Tenant-occupied housing	0	3,745	46,454	51,898
Owner-occupied dwellings	0	0	136,387	172,323
Automotive equipment rental and leasing	0	2,753	6,684	8,892
General and consumer goods rental except video tapes and discs	0	2,104	2,541	3,575
Video tape and disc rental	0	501	752	1,103
Commercial and industrial machinery and equipment rental and leasing	0	3,454	6,548	9,340
Lessors of nonfinancial intangible assets	0	339	6,437	7,328
Legal services	0	18,980	31,413	43,718
Accounting, tax preparation, bookkeeping, and payroll services	0	15,164	21,083	26,027
Architectural, engineering, and related services	0	6,182	7,527	12,280
Specialized design services	0	3,191	3,575	4,212
Custom computer programming services	2	226,727	261,107	349,054
Computer systems design services	0	35,108	37,849	47,464
Other computer related services, including facilities management	0	6,345	12,426	17,464
Management consulting services	0	42,699	42,986	59,385
Environmental and other technical consulting services	0	3,930	3,512	4,818



## APPENDIX

Scientific research and development services	0	76,786	101,655	153,113
Advertising, public relations, and related services	0	9,929	14,204	20,726
Photographic services	0	1,418	830	1,250
Veterinary services	0	1,157	1,714	2,446
Marketing research and all other miscellaneous professional, scientific, and technical services	0	10,285	9,091	11,821
Management of companies and enterprises	0	77,938	91,187	114,557
Office administrative services	0	13,881	6,500	10,220
Facilities support services	0	1,231	1,637	3,159
Employment services	1	25,575	42,183	61,517
Business support services	0	7,987	7,229	9,363
Travel arrangement and reservation services	0	2,161	2,912	5,469
Investigation and security services	0	6,100	6,403	8,460
Services to buildings	0	9,944	10,507	13,475
Landscape and horticultural services	0	5,683	6,116	8,271
Other support services	0	3,789	4,935	7,391
Waste management and remediation services	0	3,875	7,679	12,081
Elementary and secondary schools	0	7,454	7,078	8,191
Junior colleges, colleges, universities, and professional schools	0	7,426	11,344	14,547
Other educational services	0	6,350	6,393	10,312
Offices of physicians	0	28,681	33,226	47,328
Offices of dentists	0	6,444	7,792	11,505
Offices of other health practitioners	0	7,770	7,457	9,521
Outpatient care centers	0	6,669	7,065	12,184
Medical and diagnostic laboratories	0	2,413	3,577	5,395
Home health care services	0	8,046	5,657	7,924
Other ambulatory health care services	0	1,939	2,112	3,342
Hospitals	1	47,433	54,890	96,803
Nursing and community care facilities	0	8,624	9,467	14,886
Residential mental retardation, mental health, substance abuse and other facilities	0	4,380	4,609	6,561

## APPENDIX

Individual and family services	0	8,924	8,221	11,371
Child day care services	0	5,167	6,190	7,924
Community food, housing, and other relief services, including rehabilitation services	0	2,096	2,411	4,936
Performing arts companies	0	1,270	2,103	2,971
Commercial Sports Except Racing	0	2,734	2,942	3,710
Racing and Track Operation	0	204	444	661
Independent artists, writers, and performers	0	3,238	3,908	4,485
Promoters of performing arts and sports and agents for public figures	0	1,112	2,592	4,833
Museums, historical sites, zoos, and parks	0	241	302	515
Amusement parks and arcades	0	379	1,019	1,230
Gambling industries (except casino hotels)	0	1,762	3,243	4,858
Other amusement and recreation industries	0	2,344	2,630	3,962
Fitness and recreational sports centers	0	2,250	3,060	4,140
Bowling centers	0	194	265	410
Hotels and motels, including casino hotels	0	4,136	6,870	9,915
Other accommodations	0	1,174	1,558	1,956
Full-service restaurants	0	10,156	14,321	24,230
Limited-service restaurants	0	7,037	10,367	21,099
All other food and drinking places	0	8,373	10,512	15,256
Automotive repair and maintenance, except car washes	0	10,384	11,539	16,377
Car washes	0	4,966	7,227	10,372
Electronic and precision equipment repair and maintenance	0	2,051	2,922	4,069
Commercial and industrial machinery and equipment repair and maintenance	0	3,431	3,996	5,553
Personal and household goods repair and maintenance	0	3,155	2,405	2,915
Personal care services	0	6,320	3,453	4,888
Death care services	0	758	885	1,277
Dry-cleaning and laundry services	0	1,336	1,461	2,095
Other personal services	0	5,481	3,981	5,302
Religious organizations	0	11,176	3,738	17,756
Grantmaking, giving, and social advocacy organizations	0	2,280	5,454	8,108

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Business and professional associations	0	2,625	3,502	5,403
Labor and civic organizations	0	2,822	5,801	9,958
Private households	0	1,622	1,622	1,622
Postal service	0	5,721	5,725	6,282
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	114	143	491
State government passenger transit	0	24,851	(19,013)	22,441
State government electric utilities	0	0	0	0
Other state government enterprises	0	3,049	2,881	4,915
Local government passenger transit	0	93	(98)	71
Local government electric utilities	0	55	116	229
Other local government enterprises	0	2,801	3,492	7,487
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	185,923	504,740	1,055,395

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 33. New Mexico

**Table 433: Detailed NASA Impacts by Types of Impact, New Mexico.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,319</i>	<i>68,733,120</i>	<i>97,842,546</i>	<i>231,413,956</i>
Oilseed farming	0	71	90	126
Grain farming	0	18,035	27,568	65,828
Vegetable and melon farming	1	22,934	29,939	55,208
Fruit farming	0	2,992	4,131	6,547
Tree nut farming	1	41,386	42,658	46,366
Greenhouse, nursery, and floriculture production	0	10,555	12,710	20,896
Tobacco farming	0	0	0	0
Cotton farming	0	2,116	2,516	4,097
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	22,953	23,332	42,609
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	13,565	24,384	67,412
Dairy cattle and milk production	1	27,918	40,652	199,855
Poultry and egg production	0	2,093	2,446	25,047
Animal production, except cattle and poultry and eggs	1	33,782	46,400	70,262
Forestry, forest products, and timber tract production	0	767	851	1,113
Commercial logging	0	4,498	4,955	10,154
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	8,036	10,115	14,194
Support activities for agriculture and forestry	1	45,869	44,751	54,297
Oil and gas extraction	4	310,376	1,863,440	2,594,447
Coal mining	1	68,286	141,763	234,632
Copper, nickel, lead, and zinc mining	1	75,196	425,330	678,848
Iron ore mining	0	0	0	0
Gold ore mining	0	211	443	1,100
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	1,131	2,084	3,449
Stone mining and quarrying	0	1,002	2,347	5,539
Sand and gravel mining	0	3,581	5,790	13,520

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	1,099	1,688	3,272
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	265	475	864
Other nonmetallic minerals	0	1,443	2,022	4,184
Drilling oil and gas wells	0	51	106	256
Support activities for oil and gas operations	0	3,906	5,588	13,897
Metal mining services	0	2,276	14,706	23,278
Other nonmetallic minerals services	0	227	1,402	2,165
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	1	89,137	310,446	924,395
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	13,442	31,658	54,581
Electric power generation - Wind	0	10,660	71,065	119,792
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	4	471,443	1,589,534	4,760,522
Natural gas distribution	1	131,902	350,735	813,211
Water, sewage and other systems	1	25,875	57,912	164,029
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	3	135,392	182,541	489,358
Maintenance and repair construction of residential structures	2	80,781	120,285	322,207
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	162	92	269
Dog and cat food manufacturing	0	77	269	1,353
Other animal food manufacturing	0	2,783	4,591	43,154
Flour milling	0	857	1,729	13,867
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	29,197	74,459	246,821
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	252	353	1,771
Chocolate and confectionery manufacturing from cacao beans	0	202	420	3,962
Confectionery manufacturing from purchased chocolate	0	404	531	4,981
Frozen fruits, juices and vegetables manufacturing	0	7,618	13,924	91,383
Frozen specialties manufacturing	0	12,841	19,392	111,153
Canned fruits and vegetables manufacturing	0	10,579	19,310	117,011
Canned specialties	0	10,517	26,930	174,083
Dehydrated food products manufacturing	0	8,281	14,328	73,976
Cheese manufacturing	1	53,475	77,092	769,545

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Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	7,673	12,270	86,781
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	2,009	3,141	15,625
Frozen cakes and other pastries manufacturing	0	5,859	8,442	16,649
Poultry processing	0	107	125	821
Animal, except poultry, slaughtering	0	3,094	4,101	56,568
Meat processed from carcasses	0	2,904	3,270	40,905
Rendering and meat byproduct processing	0	305	350	1,919
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	1	22,827	30,793	86,093
Cookie and cracker manufacturing	0	928	1,045	7,446
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	5,408	6,480	26,543
Roasted nuts and peanut butter manufacturing	0	2,261	4,176	19,898
Other snack food manufacturing	0	2,040	2,685	16,462
Coffee and tea manufacturing	0	973	986	9,946
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	3,913	6,004	38,113
All other food manufacturing	0	7,090	9,279	60,410
Bottled and canned soft drinks & water	0	5,430	11,162	71,378
Manufactured ice	0	378	182	1,460
Breweries	1	20,998	57,731	238,128
Wineries	0	278	500	2,372
Distilleries	0	410	2,614	8,475
Tobacco product manufacturing	0	260	6,865	16,408
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	26	47	491
Narrow fabric mills and schiffli machine embroidery	0	53	65	399
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	7	10	167
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	54	151	2,103
Curtain and linen mills	0	15	29	278
Textile bag and canvas mills	0	355	559	1,608
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	122	185	1,155
Hosiery and sock mills	0	38	59	147
Other apparel knitting mills	0	216	214	856
Cut and sew apparel contractors	0	616	672	1,831
Mens and boys cut and sew apparel manufacturing	0	49	63	399
Womens and girls cut and sew apparel manufacturing	0	41	45	399
Other cut and sew apparel manufacturing	0	38	54	301
Apparel accessories and other apparel manufacturing	0	95	92	484
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	7	8	245
Other leather and allied product manufacturing	0	24	22	260
Sawmills	0	2,125	2,887	23,197
Wood preservation	0	213	528	3,817
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	405	518	2,612
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	5,795	7,499	28,732
Cut stock, resawing lumber, and planing	0	1,391	2,190	7,629
Other millwork, including flooring	0	1,959	2,603	10,981
Wood container and pallet manufacturing	0	1,349	1,536	5,763
Manufactured home (mobile home) manufacturing	0	21	33	108
Prefabricated wood building manufacturing	0	769	864	3,640
All other miscellaneous wood product manufacturing	0	1,519	1,802	8,645



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Pulp mills	0	0	0	0
Paper mills	0	5,641	18,137	79,285
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	4,827	8,539	37,171
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	403	663	2,895
Sanitary paper product manufacturing	0	7,718	33,150	95,080
All other converted paper product manufacturing	0	503	864	3,276
Printing	1	36,984	55,428	148,647
Support activities for printing	0	326	495	1,133
Petroleum refineries	0	47,693	453,207	2,614,050
Asphalt paving mixture and block manufacturing	0	173	622	7,223
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	7,765	34,454	110,441
All other petroleum and coal products manufacturing	0	2,669	10,268	31,925
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	1	63,835	107,638	520,616
Synthetic dye and pigment manufacturing	0	267	399	1,277
Other basic inorganic chemical manufacturing	0	3,318	4,982	15,703
Other basic organic chemical manufacturing	0	828	1,218	10,315
Plastics material and resin manufacturing	0	87	121	2,006
Synthetic rubber manufacturing	0	122	155	1,129
Artificial and synthetic fibers and filaments manufacturing	0	44	56	514
Nitrogenous fertilizer manufacturing	0	644	1,066	7,083
Phosphatic fertilizer manufacturing	0	107	196	1,746
Fertilizer mixing	0	16	23	335
Pesticide and other agricultural chemical manufacturing	0	62	165	4,475
Medicinal and botanical manufacturing	0	522	667	4,243

## APPENDIX

Pharmaceutical preparation manufacturing	0	1,759	4,183	22,306
In-vitro diagnostic substance manufacturing	0	0	1	1
Biological product (except diagnostic) manufacturing	0	17	28	84
Paint and coating manufacturing	0	272	385	3,064
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	197	511	14,528
Polish and other sanitation good manufacturing	0	227	324	2,840
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	883	1,735	10,491
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	44	63	713
Photographic film and chemical manufacturing	0	326	515	3,931
Other miscellaneous chemical product manufacturing	0	558	690	4,776
Plastics packaging materials and unlaminated film and sheet manufacturing	0	2,253	5,989	17,710
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	229	1,120	2,632
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	(44)	242	1,080
Polystyrene foam product manufacturing	0	250	1,628	6,718
Urethane and other foam product (except polystyrene) manufacturing	0	972	2,599	8,192
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	2,905	9,054	34,075
Tire manufacturing	0	63	275	2,178
Rubber and plastics hoses and belting manufacturing	0	388	1,017	2,286
Other rubber product manufacturing	0	4,036	9,241	26,269

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Pottery, ceramics, and plumbing fixture manufacturing	0	(4,912)	(4,967)	1,137
Brick, tile, and other structural clay product manufacturing	0	(9,705)	(7,702)	5,899
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	(12,242)	(12,040)	3,348
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	(11,815)	(9,699)	6,921
Cement manufacturing	0	1,098	6,403	12,867
Ready-mix concrete manufacturing	0	3,862	18,813	55,482
Concrete block and brick manufacturing	0	1,268	6,170	13,768
Concrete pipe manufacturing	0	108	713	1,608
Other concrete product manufacturing	0	(141)	2,113	6,829
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	3,003	18,963	32,679
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	(4,633)	(3,729)	2,836
Ground or treated mineral and earth manufacturing	0	701	9,141	16,629
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	(1,550)	3,998	11,512
Iron and steel mills and ferroalloy manufacturing	0	318	414	4,613
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	25	29	379
Alumina refining and primary aluminum production	0	55	87	1,174
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	112	225	1,349

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Copper rolling, drawing, extruding and alloying	0	618	700	8,586
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	143	263	3,256
Ferrous metal foundries	0	18	24	194
Nonferrous metal foundries	0	19	23	111
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	1,294	1,499	9,832
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	111	179	885
Handtool manufacturing	0	100	123	415
Prefabricated metal buildings and components manufacturing	0	43	50	307
Fabricated structural metal manufacturing	0	1,582	1,886	8,080
Plate work manufacturing	0	1,124	1,149	3,464
Metal window and door manufacturing	0	1,398	1,698	6,439
Sheet metal work manufacturing	0	1,169	1,303	4,835
Ornamental and architectural metal work manufacturing	0	1,832	2,059	7,416
Power boiler and heat exchanger manufacturing	0	33	38	147
Metal tank (heavy gauge) manufacturing	0	571	624	2,123
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	46	57	479
Spring and wire product manufacturing	0	16,567	19,023	65,257
Machine shops	0	3,434	3,660	9,606
Turned product and screw, nut, and bolt manufacturing	0	1,475	1,712	6,137
Metal heat treating	0	207	252	783
Metal coating and nonprecious engraving	0	246	313	1,255
Electroplating, anodizing, and coloring metal	0	1,165	1,223	2,916

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Valve and fittings, other than plumbing, manufacturing	0	71	87	375
Plumbing fixture fitting and trim manufacturing	0	72	126	1,149
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	75	83	232
Small arms, ordnance, and accessories manufacturing	0	18	23	299
Fabricated pipe and pipe fitting manufacturing	0	670	717	2,701
Other fabricated metal manufacturing	0	4,013	4,500	16,044
Farm machinery and equipment manufacturing	0	220	311	2,021
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	49	93	333
Mining machinery and equipment manufacturing	0	150	180	567
Oil and gas field machinery and equipment manufacturing	0	805	943	3,710
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	6
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	9	10	47
All other industrial machinery manufacturing	0	4	5	24
Optical instrument and lens manufacturing	0	14	21	71
Photographic and photocopying equipment manufacturing	0	7	10	99
Other commercial service industry machinery manufacturing	0	89	153	659
Air purification and ventilation equipment manufacturing	0	11	16	81

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Heating equipment (except warm air furnaces) manufacturing	0	152	217	927
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	5	6	23
Special tool, die, jig, and fixture manufacturing	0	24	30	68
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	11	13	59
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	102	144	476
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	46	81	530
Pump and pumping equipment manufacturing	0	6	10	53
Air and gas compressor manufacturing	0	29	43	195
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	10	19	69
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	18	23	70
Packaging machinery manufacturing	0	0	1	3
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0

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Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	60	74	158
Electronic computer manufacturing	0	29,945	70,189	195,131
Computer storage device manufacturing	0	25	76	371
Computer terminals and other computer peripheral equipment manufacturing	1	158,807	303,549	629,428
Telephone apparatus manufacturing	0	14	28	87
Broadcast and wireless communications equipment manufacturing	0	6	9	29
Other communications equipment manufacturing	0	15	27	129
Audio and video equipment manufacturing	0	138	266	1,142
Printed circuit assembly (electronic assembly) manufacturing	0	307	497	2,023
Bare printed circuit board manufacturing	0	242	325	810
Semiconductor and related device manufacturing	0	5,697	10,577	30,065
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	34	50	129
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	1,152	1,337	4,294
Electromedical and electrotherapeutic apparatus manufacturing	0	20	46	126
Search, detection, and navigation instruments manufacturing	0	19	34	74
Automatic environmental control manufacturing	0	1,135	1,532	2,503
Industrial process variable instruments manufacturing	0	42	64	148
Totalizing fluid meter and counting device manufacturing	0	135	316	964

## APPENDIX

Electricity and signal testing instruments manufacturing	0	87	134	583
Analytical laboratory instrument manufacturing	0	7,511	14,117	28,796
Irradiation apparatus manufacturing	0	37	79	229
Watch, clock, and other measuring and controlling device manufacturing	0	7	14	31
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	159	244	574
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	490	1,016	2,681
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	20	40	91
Motor and generator manufacturing	0	171	368	841
Switchgear and switchboard apparatus manufacturing	0	21	48	103
Relay and industrial control manufacturing	0	16	27	92
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	6,606	33,576	67,448
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	43	109	362
Wiring device manufacturing	0	23	69	191
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	1	32,337	42,384	155,519



## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	2	7
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	24	36	128
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	185	219	716
Motor vehicle gasoline engine and engine parts manufacturing	0	54	102	696
Motor vehicle electrical and electronic equipment manufacturing	0	342	609	2,753
Motor vehicle transmission and power train parts manufacturing	0	74	147	689
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	143	229	912
Other motor vehicle parts manufacturing	0	73	149	662
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	108	220	950
Aircraft manufacturing	0	38	43	183
Aircraft engine and engine parts manufacturing	0	14	17	88
Other aircraft parts and auxiliary equipment manufacturing	0	20	22	95
Guided missile and space vehicle manufacturing	0	37	38	115
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	4	5	140
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	105	137	1,249

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	2,836	3,323	14,897
Upholstered household furniture manufacturing	0	13	16	208
Nonupholstered wood household furniture manufacturing	0	478	499	3,685
Other household nonupholstered furniture manufacturing	0	84	107	910
Institutional furniture manufacturing	0	23	24	154
Wood office furniture manufacturing	0	3,461	4,074	13,446
Custom architectural woodwork and millwork	0	192	181	561
Office furniture, except wood, manufacturing	1	16,956	21,748	135,718
Showcase, partition, shelving, and locker manufacturing	0	657	764	2,761
Mattress manufacturing	0	68	100	1,000
Blind and shade manufacturing	0	6	6	52
Surgical and medical instrument manufacturing	0	106	169	778
Surgical appliance and supplies manufacturing	0	947	1,521	5,170
Dental equipment and supplies manufacturing	0	16	23	78
Ophthalmic goods manufacturing	0	10	15	188
Dental laboratories	0	643	598	1,242
Jewelry and silverware manufacturing	0	4,008	4,857	18,076
Sporting and athletic goods manufacturing	0	116	144	1,043
Doll, toy, and game manufacturing	0	182	229	2,420
Office supplies (except paper) manufacturing	0	165	197	1,033
Sign manufacturing	0	5,218	3,973	14,189
Gasket, packing, and sealing device manufacturing	0	297	344	2,025
Musical instrument manufacturing	0	84	86	486
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	230	266	2,573

## APPENDIX

All other miscellaneous manufacturing	0	3,255	3,756	18,578
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	40,458	88,131	233,349
Wholesale - Professional and commercial equipment and supplies	3	190,477	314,148	661,947
Wholesale - Household appliances and electrical and electronic goods	0	33,746	71,404	178,116
Wholesale - Machinery, equipment, and supplies	1	81,941	139,210	270,662
Wholesale - Other durable goods merchant wholesalers	4	234,690	366,825	877,146
Wholesale - Drugs and druggists' sundries	1	59,232	146,130	401,724
Wholesale - Grocery and related product wholesalers	4	221,073	290,515	655,245
Wholesale - Petroleum and petroleum products	1	41,006	522,720	626,005
Wholesale - Other nondurable goods merchant wholesalers	4	224,389	463,946	1,036,611
Wholesale - Wholesale electronic markets and agents and brokers	4	233,747	85,269	123,472
Retail - Motor vehicle and parts dealers	4	197,496	303,519	442,584
Retail - Furniture and home furnishings stores	2	80,603	108,200	183,695
Retail - Electronics and appliance stores	2	98,002	112,444	192,872
Retail - Building material and garden equipment and supplies stores	3	104,469	197,975	297,664
Retail - Food and beverage stores	9	274,454	394,265	663,224
Retail - Health and personal care stores	5	196,490	237,168	372,179
Retail - Gasoline stores	4	100,841	191,165	367,638
Retail - Clothing and clothing accessories stores	5	136,506	205,060	411,533
Retail - Sporting goods, hobby, musical instrument and book stores	3	76,354	102,695	177,605
Retail - General merchandise stores	11	344,452	484,141	792,806
Retail - Miscellaneous store retailers	7	167,818	196,184	327,901

## APPENDIX

Retail - Nonstore retailers	6	98,857	333,375	746,637
Air transportation	1	107,634	288,049	447,280
Rail transportation	0	48,535	223,107	287,728
Water transportation	0	8,323	8,443	33,450
Truck transportation	9	624,941	764,585	1,590,503
Transit and ground passenger transportation	4	88,475	118,226	171,857
Pipeline transportation	0	103,760	190,025	264,740
Scenic and sightseeing transportation and support activities for transportation	3	165,271	191,178	416,994
Couriers and messengers	3	139,709	190,875	337,203
Warehousing and storage	2	73,583	82,449	172,296
Newspaper publishers	2	70,545	126,880	173,213
Periodical publishers	1	33,510	51,769	110,191
Book publishers	0	13,607	42,736	99,084
Directory, mailing list, and other publishers	3	130,372	434,852	712,741
Greeting card publishing	0	1,155	4,259	6,316
Software publishers	1	96,641	260,953	337,372
Motion picture and video industries	1	91,796	365,852	508,528
Sound recording industries	0	13,283	285,306	302,836
Radio and television broadcasting	2	139,610	46,674	574,518
Cable and other subscription programming	0	2,134	8,906	53,276
Wired telecommunications carriers	1	121,061	205,168	555,803
Wireless telecommunications carriers (except satellite)	1	99,244	281,888	1,163,959
Satellite, telecommunications resellers, and all other telecommunications	0	45,144	49,919	152,811
Data processing, hosting, and related services	2	114,161	285,228	778,426
News syndicates, libraries, archives and all other information services	2	73,240	139,089	251,362
Internet publishing and broadcasting and web search portals	1	38,074	113,853	445,124
Nondepository credit intermediation and related activities	7	367,596	499,520	1,094,916
Securities and commodity contracts intermediation and brokerage	2	242,385	244,765	498,847

## APPENDIX

Monetary authorities and depository credit intermediation	9	582,326	1,320,027	2,683,945
Other financial investment activities	5	171,241	204,098	651,687
Direct life insurance carriers	0	18,363	38,107	68,639
Insurance carriers, except direct life	5	393,920	1,307,175	3,159,261
Insurance agencies, brokerages, and related activities	41	1,866,280	2,808,475	8,306,217
Funds, trusts, and other financial vehicles	2	107,858	129,007	781,581
Other real estate	29	539,017	2,217,592	5,555,350
Tenant-occupied housing	4	60,194	1,369,050	1,512,686
Owner-occupied dwellings	0	0	4,438,154	5,607,556
Automotive equipment rental and leasing	3	150,016	665,274	958,489
General and consumer goods rental except video tapes and discs	2	75,840	103,365	182,093
Video tape and disc rental	0	14,209	23,202	41,842
Commercial and industrial machinery and equipment rental and leasing	5	326,263	1,175,321	1,695,196
Lessors of nonfinancial intangible assets	0	4,216	43,770	84,692
Legal services	7	533,181	735,040	1,226,540
Accounting, tax preparation, bookkeeping, and payroll services	7	349,023	495,699	777,741
Architectural, engineering, and related services	6	482,844	608,108	1,113,384
Specialized design services	3	124,568	151,057	204,385
Custom computer programming services	2	137,494	174,405	270,328
Computer systems design services	2	119,919	131,303	189,671
Other computer related services, including facilities management	3	187,901	301,929	702,806
Management consulting services	5	284,121	294,673	528,976
Environmental and other technical consulting services	154	9,445,602	8,671,929	13,706,783
Scientific research and development services	80	8,598,303	10,800,067	20,885,415
Advertising, public relations, and related services	3	113,602	172,753	411,089
Photographic services	2	59,690	41,938	75,533
Veterinary services	1	52,580	81,248	127,784

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	10	432,118	405,957	665,141
Management of companies and enterprises	7	434,618	625,567	1,084,509
Office administrative services	3	159,395	60,652	168,849
Facilities support services	1	51,024	69,930	143,305
Employment services	15	672,595	1,066,999	1,626,086
Business support services	44	1,656,926	1,440,173	2,702,264
Travel arrangement and reservation services	1	24,490	33,980	91,072
Investigation and security services	4	143,083	150,154	223,709
Services to buildings	8	159,838	174,710	311,727
Landscape and horticultural services	55	1,651,045	1,828,243	3,142,472
Other support services	6	204,766	258,209	559,446
Waste management and remediation services	2	139,957	271,970	437,138
Elementary and secondary schools	4	164,364	161,448	195,803
Junior colleges, colleges, universities, and professional schools	1	41,184	64,835	104,791
Other educational services	5	118,681	120,981	236,522
Offices of physicians	11	960,741	1,156,077	1,779,564
Offices of dentists	4	274,096	355,523	544,153
Offices of other health practitioners	7	323,677	307,426	455,253
Outpatient care centers	5	316,075	334,250	614,607
Medical and diagnostic laboratories	1	97,896	157,988	250,523
Home health care services	13	355,302	265,241	422,584
Other ambulatory health care services	2	88,848	99,085	167,748
Hospitals	20	1,722,386	2,014,851	3,684,783
Nursing and community care facilities	7	266,136	301,698	526,585
Residential mental retardation, mental health, substance abuse and other facilities	3	89,763	95,173	152,720
Individual and family services	14	346,362	347,190	534,365
Child day care services	5	125,535	167,201	222,219
Community food, housing, and other relief services, including rehabilitation services	2	87,757	106,498	226,084
Performing arts companies	1	32,819	58,321	120,410

## APPENDIX

Commercial Sports Except Racing	2	29,732	35,289	112,090
Racing and Track Operation	0	1,936	2,796	9,152
Independent artists, writers, and performers	6	82,734	101,570	140,986
Promoters of performing arts and sports and agents for public figures	1	21,394	55,249	151,218
Museums, historical sites, zoos, and parks	1	22,297	27,940	50,558
Amusement parks and arcades	0	16,785	26,757	35,412
Gambling industries (except casino hotels)	2	50,888	125,944	226,324
Other amusement and recreation industries	2	62,623	71,856	126,219
Fitness and recreational sports centers	2	44,252	57,314	93,585
Bowling centers	0	9,089	12,180	23,145
Hotels and motels, including casino hotels	1	37,388	67,932	124,111
Other accommodations	0	5,481	6,990	10,366
Full-service restaurants	27	646,699	929,042	1,679,510
Limited-service restaurants	23	475,000	726,370	1,635,309
All other food and drinking places	13	390,899	510,282	782,144
Automotive repair and maintenance, except car washes	8	355,929	473,257	710,140
Car washes	4	188,533	293,034	447,483
Electronic and precision equipment repair and maintenance	2	105,113	149,484	282,609
Commercial and industrial machinery and equipment repair and maintenance	2	118,354	130,276	218,182
Personal and household goods repair and maintenance	2	97,134	78,277	111,777
Personal care services	6	158,099	129,923	174,167
Death care services	0	15,402	22,281	35,981
Dry-cleaning and laundry services	1	34,298	44,640	63,940
Other personal services	7	191,669	165,800	229,531
Religious organizations	7	301,319	81,037	572,852
Grantmaking, giving, and social advocacy organizations	2	113,845	287,038	495,674
Business and professional associations	2	132,386	199,286	368,966
Labor and civic organizations	3	83,613	180,724	332,844
Private households	4	56,052	56,052	56,052
Postal service	3	225,234	225,839	251,370
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	282	6,866,321	5,384,894	50,323,413
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	1	63,941	(29,157)	69,629
Local government electric utilities	1	55,434	151,527	319,856
Other local government enterprises	8	446,068	981,875	2,192,947
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	80	12,569,382	16,892,606	34,384,106

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 434: Detailed M2M Program Impacts by Types of Impact, New Mexico.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	258	12,748,884	18,550,891	49,449,151
Oilseed farming	0	11	21	34
Grain farming	0	3,069	5,229	11,501
Vegetable and melon farming	0	4,212	5,768	10,034
Fruit farming	0	839	1,171	1,766
Tree nut farming	0	15,102	15,517	16,656



## APPENDIX

Greenhouse, nursery, and floriculture production	0	2,652	3,313	5,335
Tobacco farming	0	0	0	0
Cotton farming	0	269	320	515
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	3,411	3,604	6,402
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2,220	3,867	9,668
Dairy cattle and milk production	0	7,369	10,950	47,742
Poultry and egg production	0	308	367	3,688
Animal production, except cattle and poultry and eggs	0	3,441	5,254	8,165
Forestry, forest products, and timber tract production	0	125	139	174
Commercial logging	0	856	940	1,789
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	2,074	2,584	3,189
Support activities for agriculture and forestry	0	6,655	6,438	7,783
Oil and gas extraction	1	54,812	440,722	581,240
Coal mining	0	8,265	14,851	27,416
Copper, nickel, lead, and zinc mining	0	7,350	29,070	48,677
Iron ore mining	0	0	0	0
Gold ore mining	0	20	35	94
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	134	195	346
Stone mining and quarrying	0	270	329	795
Sand and gravel mining	0	1,048	865	1,695
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	211	298	608
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	56	69	115
Other nonmetallic minerals	0	317	249	483
Drilling oil and gas wells	0	7	16	37
Support activities for oil and gas operations	0	556	831	2,031
Metal mining services	0	225	1,850	2,878

## APPENDIX

Other nonmetallic minerals services	0	20	156	234
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	17,373	56,150	162,995
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	2,360	5,248	8,740
Electric power generation - Wind	0	1,932	12,199	19,084
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	1	82,257	274,858	808,301
Natural gas distribution	0	41,364	114,035	229,682
Water, sewage and other systems	0	4,103	7,153	17,964
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	23,069	31,233	81,346

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Maintenance and repair construction of residential structures	0	14,190	21,280	55,105
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	26	15	42
Dog and cat food manufacturing	0	12	42	203
Other animal food manufacturing	0	489	845	7,551
Flour milling	0	242	489	3,931
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	4,291	10,718	35,331
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	66	92	424
Chocolate and confectionery manufacturing from cacao beans	0	84	176	1,528
Confectionery manufacturing from purchased chocolate	0	92	121	1,057
Frozen fruits, juices and vegetables manufacturing	0	2,711	4,918	29,468
Frozen specialties manufacturing	0	3,955	5,942	32,638
Canned fruits and vegetables manufacturing	0	3,998	7,377	43,470
Canned specialties	0	2,747	7,059	44,077
Dehydrated food products manufacturing	0	3,320	5,738	27,870
Cheese manufacturing	0	15,222	21,982	217,814
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	1,807	2,941	20,064
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	671	1,080	4,853
Frozen cakes and other pastries manufacturing	0	1,396	1,986	3,828
Poultry processing	0	22	27	169
Animal, except poultry, slaughtering	0	722	965	13,092
Meat processed from carcasses	0	522	597	7,229

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Rendering and meat byproduct processing	0	72	82	450
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	5,100	6,891	18,871
Cookie and cracker manufacturing	0	198	237	1,539
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	1,016	1,210	4,854
Roasted nuts and peanut butter manufacturing	0	549	1,130	4,678
Other snack food manufacturing	0	427	564	3,332
Coffee and tea manufacturing	0	339	340	3,516
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	1,610	2,522	14,665
All other food manufacturing	0	2,153	2,824	17,487
Bottled and canned soft drinks & water	0	1,162	2,470	15,158
Manufactured ice	0	81	43	286
Breweries	0	5,688	15,847	64,146
Wineries	0	107	192	891
Distilleries	0	126	819	2,427
Tobacco product manufacturing	0	42	1,466	3,056
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	5	9	93
Narrow fabric mills and schiffli machine embroidery	0	12	14	81
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	3	4	66
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	12	37	442
Curtain and linen mills	0	3	6	56
Textile bag and canvas mills	0	85	135	375
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	29	45	262
Hosiery and sock mills	0	7	12	27
Other apparel knitting mills	0	92	87	316
Cut and sew apparel contractors	0	370	399	1,023

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Mens and boys cut and sew apparel manufacturing	0	14	19	102
Womens and girls cut and sew apparel manufacturing	0	15	16	122
Other cut and sew apparel manufacturing	0	12	17	82
Apparel accessories and other apparel manufacturing	0	27	26	121
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	1	2	48
Other leather and allied product manufacturing	0	6	6	64
Sawmills	0	381	543	4,111
Wood preservation	0	34	93	630
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	70	94	459
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	921	1,236	4,605
Cut stock, resawing lumber, and planing	0	284	482	1,553
Other millwork, including flooring	0	340	475	1,870
Wood container and pallet manufacturing	0	336	395	1,444
Manufactured home (mobile home) manufacturing	0	3	5	16
Prefabricated wood building manufacturing	0	142	163	666
All other miscellaneous wood product manufacturing	0	351	432	1,875
Pulp mills	0	0	0	0
Paper mills	0	922	2,586	12,375
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	958	1,637	7,094
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	106	162	635
Sanitary paper product manufacturing	0	1,214	4,693	14,204

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All other converted paper product manufacturing	0	102	164	633
Printing	0	8,754	13,085	33,559
Support activities for printing	0	75	112	253
Petroleum refineries	0	14,154	119,233	699,811
Asphalt paving mixture and block manufacturing	0	31	104	1,127
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	102	484	1,394
All other petroleum and coal products manufacturing	0	301	1,102	3,444
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	12,251	22,094	102,364
Synthetic dye and pigment manufacturing	0	48	74	254
Other basic inorganic chemical manufacturing	0	470	754	2,303
Other basic organic chemical manufacturing	0	166	246	2,165
Plastics material and resin manufacturing	0	16	22	383
Synthetic rubber manufacturing	0	18	23	175
Artificial and synthetic fibers and filaments manufacturing	0	11	13	121
Nitrogenous fertilizer manufacturing	0	219	386	2,287
Phosphatic fertilizer manufacturing	0	21	39	359
Fertilizer mixing	0	5	7	101
Pesticide and other agricultural chemical manufacturing	0	12	32	870
Medicinal and botanical manufacturing	0	149	207	1,113
Pharmaceutical preparation manufacturing	0	506	1,273	6,114
In-vitro diagnostic substance manufacturing	0	0	0	1
Biological product (except diagnostic) manufacturing	0	6	11	30
Paint and coating manufacturing	0	69	104	805
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	32	102	2,395

## APPENDIX

Polish and other sanitation good manufacturing	0	45	75	545
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	198	445	2,440
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	7	10	114
Photographic film and chemical manufacturing	0	49	85	588
Other miscellaneous chemical product manufacturing	0	104	136	951
Plastics packaging materials and unlaminated film and sheet manufacturing	0	588	1,546	4,478
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	54	270	621
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	(11)	59	259
Polystyrene foam product manufacturing	0	48	309	1,266
Urethane and other foam product (except polystyrene) manufacturing	0	204	538	1,682
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	744	2,309	8,231
Tire manufacturing	0	7	33	278
Rubber and plastics hoses and belting manufacturing	0	55	139	307
Other rubber product manufacturing	0	517	1,174	3,432
Pottery, ceramics, and plumbing fixture manufacturing	0	(879)	(847)	203
Brick, tile, and other structural clay product manufacturing	0	(1,619)	(1,225)	978
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	(567)	(551)	155
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	(642)	(513)	367

## APPENDIX

Cement manufacturing	0	182	1,007	2,047
Ready-mix concrete manufacturing	0	635	2,975	8,810
Concrete block and brick manufacturing	0	211	973	2,194
Concrete pipe manufacturing	0	18	113	259
Other concrete product manufacturing	0	(27)	393	1,280
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	445	2,707	4,750
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	(670)	(535)	402
Ground or treated mineral and earth manufacturing	0	105	1,322	2,481
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	(90)	225	634
Iron and steel mills and ferroalloy manufacturing	0	62	71	834
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	6	5	72
Alumina refining and primary aluminum production	0	16	23	297
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	12	21	135
Copper rolling, drawing, extruding and alloying	0	128	137	1,628
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	27	31	495
Ferrous metal foundries	0	4	4	38
Nonferrous metal foundries	0	4	5	23
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0



## APPENDIX

Iron and steel forging	0	380	442	2,788
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	33	57	267
Handtool manufacturing	0	31	39	131
Prefabricated metal buildings and components manufacturing	0	8	9	55
Fabricated structural metal manufacturing	0	259	311	1,308
Plate work manufacturing	0	207	212	617
Metal window and door manufacturing	0	255	311	1,151
Sheet metal work manufacturing	0	229	257	919
Ornamental and architectural metal work manufacturing	0	364	411	1,410
Power boiler and heat exchanger manufacturing	0	8	9	36
Metal tank (heavy gauge) manufacturing	0	128	141	469
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	11	14	116
Spring and wire product manufacturing	0	77	87	295
Machine shops	0	699	747	1,918
Turned product and screw, nut, and bolt manufacturing	0	436	506	1,739
Metal heat treating	0	71	86	269
Metal coating and nonprecious engraving	0	61	78	314
Electroplating, anodizing, and coloring metal	0	333	350	818
Valve and fittings, other than plumbing, manufacturing	0	21	25	107
Plumbing fixture fitting and trim manufacturing	0	17	30	259
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	12	13	38
Small arms, ordnance, and accessories manufacturing	0	4	4	52

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	133	143	539
Other fabricated metal manufacturing	0	799	896	3,040
Farm machinery and equipment manufacturing	0	34	51	293
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	17	33	113
Mining machinery and equipment manufacturing	0	30	36	109
Oil and gas field machinery and equipment manufacturing	0	171	202	784
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	2
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	3	3	14
All other industrial machinery manufacturing	0	1	1	5
Optical instrument and lens manufacturing	0	3	5	16
Photographic and photocopying equipment manufacturing	0	4	5	49
Other commercial service industry machinery manufacturing	0	15	28	113
Air purification and ventilation equipment manufacturing	0	6	9	42
Heating equipment (except warm air furnaces) manufacturing	0	34	51	190
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	1	1	5
Special tool, die, jig, and fixture manufacturing	0	8	10	23
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	4	4	19

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	29	42	124
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	9	17	100
Pump and pumping equipment manufacturing	0	2	3	13
Air and gas compressor manufacturing	0	5	8	34
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	1	3	10
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	5	7	17
Packaging machinery manufacturing	0	0	0	1
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	16	20	40
Electronic computer manufacturing	0	7	18	50
Computer storage device manufacturing	0	10	32	150
Computer terminals and other computer peripheral equipment manufacturing	0	41,290	78,716	164,449

## APPENDIX

Telephone apparatus manufacturing	0	3	5	16
Broadcast and wireless communications equipment manufacturing	0	2	3	9
Other communications equipment manufacturing	0	3	5	26
Audio and video equipment manufacturing	0	49	93	372
Printed circuit assembly (electronic assembly) manufacturing	0	101	162	642
Bare printed circuit board manufacturing	0	63	84	224
Semiconductor and related device manufacturing	0	1,977	3,592	9,788
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	10	15	37
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	280	324	1,002
Electromedical and electrotherapeutic apparatus manufacturing	0	6	13	35
Search, detection, and navigation instruments manufacturing	0	4	8	17
Automatic environmental control manufacturing	0	420	557	839
Industrial process variable instruments manufacturing	0	12	18	41
Totalizing fluid meter and counting device manufacturing	0	26	60	183
Electricity and signal testing instruments manufacturing	0	8	12	52
Analytical laboratory instrument manufacturing	0	4	7	15
Irradiation apparatus manufacturing	0	13	27	75
Watch, clock, and other measuring and controlling device manufacturing	0	3	5	11
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	36	56	117
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	133	268	690
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	7	13	29
Motor and generator manufacturing	0	41	86	203
Switchgear and switchboard apparatus manufacturing	0	5	10	22
Relay and industrial control manufacturing	0	5	8	26
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	1,428	5,883	13,385
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	9	22	72
Wiring device manufacturing	0	8	24	61
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	18	24	91
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	1
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	5	7	24
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	40	47	155
Motor vehicle gasoline engine and engine parts manufacturing	0	13	25	179

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	79	140	579
Motor vehicle transmission and power train parts manufacturing	0	31	64	254
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	19	30	117
Other motor vehicle parts manufacturing	0	14	27	134
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	27	61	245
Aircraft manufacturing	0	7	8	33
Aircraft engine and engine parts manufacturing	0	7	8	44
Other aircraft parts and auxiliary equipment manufacturing	0	5	5	21
Guided missile and space vehicle manufacturing	0	3	3	10
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	1	1	33
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	20	27	243
Wood kitchen cabinet and countertop manufacturing	0	801	865	3,971
Upholstered household furniture manufacturing	0	4	5	66
Nonupholstered wood household furniture manufacturing	0	137	140	1,020
Other household nonupholstered furniture manufacturing	0	25	31	255
Institutional furniture manufacturing	0	8	8	51
Wood office furniture manufacturing	0	1,051	1,305	4,248

## APPENDIX

Custom architectural woodwork and millwork	0	37	35	103
Office furniture, except wood, manufacturing	0	7,399	9,548	62,061
Showcase, partition, shelving, and locker manufacturing	0	219	236	879
Mattress manufacturing	0	12	15	167
Blind and shade manufacturing	0	1	1	8
Surgical and medical instrument manufacturing	0	22	34	148
Surgical appliance and supplies manufacturing	0	255	414	1,317
Dental equipment and supplies manufacturing	0	4	5	17
Ophthalmic goods manufacturing	0	2	3	40
Dental laboratories	0	149	139	283
Jewelry and silverware manufacturing	0	789	942	3,369
Sporting and athletic goods manufacturing	0	21	25	177
Doll, toy, and game manufacturing	0	46	53	502
Office supplies (except paper) manufacturing	0	43	52	242
Sign manufacturing	0	944	737	2,449
Gasket, packing, and sealing device manufacturing	0	53	60	349
Musical instrument manufacturing	0	33	34	147
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	27	31	292
All other miscellaneous manufacturing	0	542	622	2,995
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	9,208	20,110	53,148
Wholesale - Professional and commercial equipment and supplies	1	54,943	90,786	186,641
Wholesale - Household appliances and electrical and electronic goods	0	6,252	13,168	32,439
Wholesale - Machinery, equipment, and supplies	0	13,682	23,340	45,159
Wholesale - Other durable goods merchant wholesalers	1	61,497	96,194	227,960

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	10,233	24,845	66,709
Wholesale - Grocery and related product wholesalers	1	57,103	74,593	167,705
Wholesale - Petroleum and petroleum products	0	10,445	149,363	176,042
Wholesale - Other nondurable goods merchant wholesalers	1	55,569	118,730	259,998
Wholesale - Wholesale electronic markets and agents and brokers	1	84,408	29,200	42,184
Retail - Motor vehicle and parts dealers	1	32,455	50,165	72,545
Retail - Furniture and home furnishings stores	0	13,582	18,225	30,427
Retail - Electronics and appliance stores	0	16,312	18,789	31,605
Retail - Building material and garden equipment and supplies stores	0	18,394	34,876	51,803
Retail - Food and beverage stores	2	48,813	69,372	113,936
Retail - Health and personal care stores	1	31,705	38,502	60,210
Retail - Gasoline stores	1	21,342	37,515	67,904
Retail - Clothing and clothing accessories stores	1	23,604	35,179	68,529
Retail - Sporting goods, hobby, musical instrument and book stores	1	12,557	16,938	28,751
Retail - General merchandise stores	2	54,279	76,874	124,993
Retail - Miscellaneous store retailers	1	29,047	33,638	54,276
Retail - Nonstore retailers	1	17,898	61,065	130,285
Air transportation	0	26,019	71,392	109,153
Rail transportation	0	11,678	47,591	65,315
Water transportation	0	1,791	1,768	6,848
Truck transportation	3	217,578	258,013	519,226
Transit and ground passenger transportation	1	26,366	35,513	48,346
Pipeline transportation	0	18,763	36,821	52,354
Scenic and sightseeing transportation and support activities for transportation	1	31,074	36,398	79,407
Couriers and messengers	1	35,861	50,704	87,490
Warehousing and storage	0	15,618	17,460	36,183



## APPENDIX

Newspaper publishers	0	16,181	28,108	37,807
Periodical publishers	0	10,987	16,580	32,551
Book publishers	0	3,553	10,399	24,305
Directory, mailing list, and other publishers	1	43,194	145,159	235,619
Greeting card publishing	0	492	1,860	2,734
Software publishers	0	27,595	66,066	83,206
Motion picture and video industries	0	24,948	100,589	115,082
Sound recording industries	0	5,136	102,936	102,642
Radio and television broadcasting	0	53,310	19,607	159,632
Cable and other subscription programming	0	865	2,859	14,106
Wired telecommunications carriers	0	28,465	45,093	118,459
Wireless telecommunications carriers (except satellite)	0	26,191	61,255	244,603
Satellite, telecommunications resellers, and all other telecommunications	0	14,928	15,519	43,169
Data processing, hosting, and related services	1	39,544	92,734	241,040
News syndicates, libraries, archives and all other information services	1	32,574	61,391	103,739
Internet publishing and broadcasting and web search portals	0	18,887	53,590	179,578
Nondepository credit intermediation and related activities	2	112,204	152,937	315,379
Securities and commodity contracts intermediation and brokerage	0	54,833	54,397	103,508
Monetary authorities and depository credit intermediation	2	107,937	252,342	498,414
Other financial investment activities	1	44,420	51,425	130,909
Direct life insurance carriers	0	3,255	6,896	12,198
Insurance carriers, except direct life	1	75,581	258,168	599,603
Insurance agencies, brokerages, and related activities	13	612,969	928,525	2,627,447
Funds, trusts, and other financial vehicles	0	25,863	29,764	154,571
Other real estate	4	95,763	390,897	851,610
Tenant-occupied housing	1	11,857	254,259	276,878

## APPENDIX

Owner-occupied dwellings	0	0	812,578	1,026,683
Automotive equipment rental and leasing	1	57,859	214,248	298,429
General and consumer goods rental except video tapes and discs	0	17,596	22,493	37,103
Video tape and disc rental	0	2,468	3,887	6,836
Commercial and industrial machinery and equipment rental and leasing	1	135,594	421,064	591,760
Lessors of nonfinancial intangible assets	0	755	7,728	14,857
Legal services	1	74,506	106,789	173,904
Accounting, tax preparation, bookkeeping, and payroll services	2	84,192	120,111	183,606
Architectural, engineering, and related services	1	93,785	118,647	213,969
Specialized design services	1	42,448	51,654	68,477
Custom computer programming services	0	39,196	49,380	74,752
Computer systems design services	0	32,116	35,057	49,767
Other computer related services, including facilities management	1	68,720	105,798	234,872
Management consulting services	1	40,514	42,082	73,414
Environmental and other technical consulting services	1	35,798	33,223	51,976
Scientific research and development services	6	800,431	1,018,814	1,821,783
Advertising, public relations, and related services	1	24,959	37,771	85,635
Photographic services	0	7,955	5,862	9,998
Veterinary services	0	8,792	13,778	21,095
Marketing research and all other miscellaneous professional, scientific, and technical services	1	35,548	33,382	54,015
Management of companies and enterprises	1	66,031	95,906	161,116
Office administrative services	0	29,890	11,582	29,201
Facilities support services	0	8,862	12,144	23,478
Employment services	2	97,295	158,315	232,417
Business support services	13	508,221	450,074	818,052
Travel arrangement and reservation services	0	3,706	5,182	13,353
Investigation and security services	1	24,902	26,198	37,831
Services to buildings	1	28,371	31,096	52,847

## APPENDIX

Landscape and horticultural services	17	543,098	602,001	1,001,611
Other support services	2	61,516	77,680	166,524
Waste management and remediation services	0	29,216	57,166	90,559
Elementary and secondary schools	1	35,488	34,702	41,392
Junior colleges, colleges, universities, and professional schools	0	9,904	15,450	23,722
Other educational services	1	23,377	23,911	45,067
Offices of physicians	2	158,062	191,696	292,765
Offices of dentists	1	47,318	62,028	93,620
Offices of other health practitioners	1	53,391	51,119	75,524
Outpatient care centers	1	57,494	61,045	110,566
Medical and diagnostic laboratories	0	16,602	27,509	42,220
Home health care services	2	58,182	43,932	70,478
Other ambulatory health care services	0	15,277	17,141	28,551
Hospitals	4	316,595	368,824	658,226
Nursing and community care facilities	1	46,367	52,644	89,491
Residential mental retardation, mental health, substance abuse and other facilities	0	17,548	18,616	29,266
Individual and family services	3	66,114	67,439	103,183
Child day care services	1	22,479	30,383	39,403
Community food, housing, and other relief services, including rehabilitation services	0	17,881	21,970	45,074
Performing arts companies	0	6,496	11,169	20,953
Commercial Sports Except Racing	0	6,211	7,346	22,779
Racing and Track Operation	0	365	500	1,575
Independent artists, writers, and performers	1	17,857	21,374	28,344
Promoters of performing arts and sports and agents for public figures	0	4,405	10,412	26,643
Museums, historical sites, zoos, and parks	0	4,231	5,242	9,192
Amusement parks and arcades	0	3,245	4,513	6,036
Gambling industries (except casino hotels)	0	9,374	21,869	38,807
Other amusement and recreation industries	0	10,283	11,311	19,812

## APPENDIX

Fitness and recreational sports centers	0	8,413	10,182	16,397
Bowling centers	0	1,535	1,983	3,726
Hotels and motels, including casino hotels	0	11,452	19,908	35,783
Other accommodations	0	1,346	1,689	2,453
Full-service restaurants	5	114,352	165,248	292,290
Limited-service restaurants	4	86,336	131,240	284,955
All other food and drinking places	2	78,202	100,419	149,489
Automotive repair and maintenance, except car washes	1	69,168	88,345	131,726
Car washes	1	34,039	52,693	79,847
Electronic and precision equipment repair and maintenance	1	33,128	47,226	84,221
Commercial and industrial machinery and equipment repair and maintenance	0	20,985	22,695	37,797
Personal and household goods repair and maintenance	0	17,544	12,623	18,029
Personal care services	1	29,615	22,273	30,188
Death care services	0	3,011	4,118	6,616
Dry-cleaning and laundry services	0	5,852	7,499	10,716
Other personal services	1	24,763	19,027	26,962
Religious organizations	1	61,425	12,859	107,164
Grantmaking, giving, and social advocacy organizations	0	26,722	57,800	99,804
Business and professional associations	1	37,557	50,666	91,181
Labor and civic organizations	1	17,019	32,533	61,174
Private households	1	10,863	10,863	10,863
Postal service	1	48,550	48,683	54,070
Federal electric utilities	0	0	0	0
Other federal government enterprises	94	3,809,372	3,621,506	20,084,447
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	15,660	(9,099)	11,478
Local government electric utilities	0	14,242	35,535	72,930
Other local government enterprises	1	91,464	186,204	411,683

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	7	1,006,073	1,456,295	3,039,010

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 34. New York

**Table 435: Detailed NASA Impacts by Types of Impact, New York.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,932</i>	<i>170,429,601</i>	<i>255,746,278</i>	<i>439,667,874</i>
Oilseed farming	0	25,996	72,911	102,860
Grain farming	1	34,490	84,740	228,711
Vegetable and melon farming	1	20,784	31,142	59,328
Fruit farming	1	19,486	32,387	52,976
Tree nut farming	0	308	320	336
Greenhouse, nursery, and floriculture production	1	22,025	28,310	45,729
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	19,020	24,030	38,026
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	9,528	31,055	103,049

## APPENDIX

Dairy cattle and milk production	1	23,589	49,562	253,955
Poultry and egg production	0	2,790	3,720	34,162
Animal production, except cattle and poultry and eggs	1	21,838	58,842	89,462
Forestry, forest products, and timber tract production	0	10,115	10,823	12,804
Commercial logging	0	20,271	21,023	35,533
Commercial fishing	0	5,372	3,807	5,206
Commercial hunting and trapping	0	3,772	2,858	3,533
Support activities for agriculture and forestry	2	91,595	79,814	97,859
Oil and gas extraction	1	254,776	102,041	254,993
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	19,176	83,128	324,410
Iron ore mining	0	0	0	0
Gold ore mining	0	3,138	4,272	11,670
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	498	732	2,813
Stone mining and quarrying	0	13,240	18,371	42,138
Sand and gravel mining	0	16,559	19,932	40,539
Other clay, ceramic, refractory minerals mining	0	67	85	240
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	4,451	5,974	9,876
Other nonmetallic minerals	0	5,099	5,433	9,650
Drilling oil and gas wells	0	24	7	36
Support activities for oil and gas operations	0	355	89	385
Metal mining services	0	6,257	2,885	8,035
Other nonmetallic minerals services	0	336	152	404
Electric power generation - Hydroelectric	0	18,183	46,202	120,386
Electric power generation - Fossil fuel	1	63,969	223,781	642,252
Electric power generation - Nuclear	0	103,845	223,258	480,071
Electric power generation - Solar	0	6,432	11,124	22,075
Electric power generation - Wind	0	6,505	29,939	77,092

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	2,147	5,955	13,584
Electric power generation - All other	0	1,406	1,396	4,823
Electric power transmission and distribution	3	498,743	1,693,604	4,080,016
Natural gas distribution	1	138,650	358,886	879,725
Water, sewage and other systems	0	11,276	23,372	38,674
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	8	619,708	844,698	1,795,483
Maintenance and repair construction of residential structures	2	146,560	221,008	468,316
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	410	261	564
Dog and cat food manufacturing	0	12,967	32,667	164,863
Other animal food manufacturing	0	29,566	53,704	307,210
Flour milling	0	9,608	13,405	111,079
Rice milling	0	0	0	0
Malt manufacturing	0	981	1,226	9,791

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	829	2,589	43,363
Fats and oils refining and blending	0	563	943	12,559
Breakfast cereal manufacturing	0	1,457	2,151	12,526
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	2,081	3,202	25,290
Nonchocolate confectionery manufacturing	0	5,245	6,344	30,294
Chocolate and confectionery manufacturing from cacao beans	0	1,159	1,743	13,722
Confectionery manufacturing from purchased chocolate	0	16,033	18,248	83,914
Frozen fruits, juices and vegetables manufacturing	0	4,765	5,988	31,330
Frozen specialties manufacturing	0	26,667	30,862	135,075
Canned fruits and vegetables manufacturing	0	22,937	28,598	134,893
Canned specialties	0	3,483	4,786	24,437
Dehydrated food products manufacturing	0	2,747	3,330	12,739
Cheese manufacturing	0	26,807	37,186	394,734
Dry, condensed, and evaporated dairy product manufacturing	0	5,734	8,883	94,482
Fluid milk manufacturing	0	31,375	38,859	249,749
Creamery butter manufacturing	0	110	218	2,127
Ice cream and frozen dessert manufacturing	0	5,376	6,858	37,209
Frozen cakes and other pastries manufacturing	1	30,160	43,820	79,576
Poultry processing	0	8,247	9,548	50,000
Animal, except poultry, slaughtering	0	10,819	14,931	116,603
Meat processed from carcasses	0	34,286	40,588	247,947
Rendering and meat byproduct processing	0	2,377	3,040	12,694
Seafood product preparation and packaging	0	20,176	21,360	58,318
Bread and bakery product, except frozen, manufacturing	2	117,957	138,995	341,919
Cookie and cracker manufacturing	0	19,471	21,973	76,647
Dry pasta, mixes, and dough manufacturing	0	4,412	6,497	42,355
Tortilla manufacturing	0	1,052	1,174	3,868



## APPENDIX

Roasted nuts and peanut butter manufacturing	0	12,901	14,686	60,914
Other snack food manufacturing	0	14,591	18,613	87,024
Coffee and tea manufacturing	0	8,234	9,485	46,159
Flavoring syrup and concentrate manufacturing	0	16,398	38,284	254,295
Mayonnaise, dressing, and sauce manufacturing	0	4,393	5,374	25,450
Spice and extract manufacturing	0	9,316	10,964	47,650
All other food manufacturing	0	27,188	30,905	127,538
Bottled and canned soft drinks & water	0	24,061	31,545	148,058
Manufactured ice	0	3,182	2,086	4,606
Breweries	0	65,809	125,844	255,028
Wineries	0	17,373	23,869	64,810
Distilleries	0	50,295	236,095	344,671
Tobacco product manufacturing	0	32,627	516,310	659,167
Fiber, yarn, and thread mills	0	1,993	3,095	12,892
Broadwoven fabric mills	0	5,943	8,739	23,360
Narrow fabric mills and schiffli machine embroidery	0	1,451	1,631	4,011
Nonwoven fabric mills	0	19,366	36,224	124,750
Knit fabric mills	0	848	1,051	2,391
Textile and fabric finishing mills	0	8,777	11,257	26,150
Fabric coating mills	0	4,795	6,414	22,732
Carpet and rug mills	0	4,220	7,239	14,196
Curtain and linen mills	0	6,431	9,643	23,952
Textile bag and canvas mills	0	5,606	7,330	21,573
Rope, cordage, twine, tire cord and tire fabric mills	0	3,088	5,234	14,356
Other textile product mills	0	6,297	7,976	17,754
Hosiery and sock mills	0	1,896	2,923	6,065
Other apparel knitting mills	0	4,615	6,438	12,907
Cut and sew apparel contractors	1	18,827	21,297	48,051
Mens and boys cut and sew apparel manufacturing	0	11,753	16,622	38,920
Womens and girls cut and sew apparel manufacturing	0	27,556	48,369	116,814
Other cut and sew apparel manufacturing	0	6,514	9,489	21,677
Apparel accessories and other apparel manufacturing	0	3,521	5,353	14,494
Leather and hide tanning and finishing	0	1,851	3,972	10,861

## APPENDIX

Footwear manufacturing	0	1,711	2,213	8,917
Other leather and allied product manufacturing	0	1,376	1,519	4,306
Sawmills	0	18,167	21,717	83,431
Wood preservation	0	497	806	4,087
Veneer and plywood manufacturing	0	930	1,163	4,594
Engineered wood member and truss manufacturing	0	1,669	1,923	5,935
Reconstituted wood product manufacturing	0	441	698	3,853
Wood windows and door manufacturing	0	20,611	23,796	62,984
Cut stock, resawing lumber, and planing	0	2,551	3,215	9,722
Other millwork, including flooring	0	15,480	17,501	47,559
Wood container and pallet manufacturing	0	9,778	10,399	27,082
Manufactured home (mobile home) manufacturing	0	4,440	5,451	16,614
Prefabricated wood building manufacturing	0	1,845	1,999	5,704
All other miscellaneous wood product manufacturing	0	5,838	6,204	18,682
Pulp mills	0	1,000	1,111	3,751
Paper mills	1	93,078	125,211	582,424
Paperboard mills	0	9,637	14,275	64,260
Paperboard container manufacturing	1	70,676	81,497	314,322
Paper bag and coated and treated paper manufacturing	0	41,615	48,761	151,768
Stationery product manufacturing	0	5,525	5,942	14,409
Sanitary paper product manufacturing	0	22,894	34,552	146,273
All other converted paper product manufacturing	0	5,762	6,234	14,944
Printing	3	178,224	278,777	523,006
Support activities for printing	0	8,173	12,602	18,760
Petroleum refineries	0	216	3,263	19,451
Asphalt paving mixture and block manufacturing	0	5,756	12,352	33,732
Asphalt shingle and coating materials manufacturing	0	212	1,181	2,216
Petroleum lubricating oil and grease manufacturing	0	9,396	57,533	121,228

## APPENDIX

All other petroleum and coal products manufacturing	0	2,859	14,449	31,713
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	10,192	23,932	66,901
Synthetic dye and pigment manufacturing	0	509	1,035	3,335
Other basic inorganic chemical manufacturing	0	7,585	15,335	52,176
Other basic organic chemical manufacturing	0	16,003	31,056	212,280
Plastics material and resin manufacturing	0	15,062	23,464	108,498
Synthetic rubber manufacturing	0	5,903	8,924	32,621
Artificial and synthetic fibers and filaments manufacturing	0	8,717	12,846	56,565
Nitrogenous fertilizer manufacturing	0	805	1,808	6,835
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	970	1,673	6,093
Pesticide and other agricultural chemical manufacturing	0	10,552	32,831	161,964
Medicinal and botanical manufacturing	0	2,165	3,522	12,830
Pharmaceutical preparation manufacturing	2	150,445	545,766	1,858,430
In-vitro diagnostic substance manufacturing	0	2,251	3,384	10,001
Biological product (except diagnostic) manufacturing	0	33,137	74,332	165,465
Paint and coating manufacturing	0	6,395	11,757	48,649
Adhesive manufacturing	0	1,754	2,772	13,109
Soap and other detergent manufacturing	0	5,527	17,151	83,876
Polish and other sanitation good manufacturing	0	10,316	19,628	91,952
Surface active agent manufacturing	0	180	543	3,540
Toilet preparation manufacturing	0	46,487	133,821	343,739
Printing ink manufacturing	0	2,821	3,064	13,110
Explosives manufacturing	0	93	110	560
Custom compounding of purchased resins	0	1,350	2,424	12,873
Photographic film and chemical manufacturing	0	62,054	127,223	368,642
Other miscellaneous chemical product manufacturing	0	7,364	10,878	41,569

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	13,868	36,511	98,106
Unlaminated plastics profile shape manufacturing	0	10,298	41,227	71,630
Plastics pipe and pipe fitting manufacturing	0	2,112	9,408	18,382
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,909	5,900	10,813
Polystyrene foam product manufacturing	0	9,380	25,055	59,275
Urethane and other foam product (except polystyrene) manufacturing	0	3,064	7,752	20,319
Plastics bottle manufacturing	0	1,076	2,852	9,550
Other plastics product manufacturing	1	94,138	208,065	488,031
Tire manufacturing	0	10,457	20,094	59,561
Rubber and plastics hoses and belting manufacturing	0	3,974	9,944	19,028
Other rubber product manufacturing	0	16,335	36,135	86,297
Pottery, ceramics, and plumbing fixture manufacturing	0	6,217	9,349	15,777
Brick, tile, and other structural clay product manufacturing	0	7,130	16,482	28,762
Flat glass manufacturing	0	1,846	5,172	10,416
Other pressed and blown glass and glassware manufacturing	0	11,203	19,965	42,856
Glass container manufacturing	0	4,068	9,232	20,366
Glass product manufacturing made of purchased glass	0	14,434	30,784	63,890
Cement manufacturing	0	1,981	6,768	15,385
Ready-mix concrete manufacturing	0	16,241	35,355	94,855
Concrete block and brick manufacturing	0	4,312	10,514	22,783
Concrete pipe manufacturing	0	631	1,319	2,351
Other concrete product manufacturing	0	6,524	11,748	25,561
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	4,400	16,599	36,360
Abrasive product manufacturing	0	6,882	31,366	45,104
Cut stone and stone product manufacturing	0	9,696	12,598	26,607

## APPENDIX

Ground or treated mineral and earth manufacturing	0	3,604	15,660	29,903
Mineral wool manufacturing	0	2,303	7,746	14,535
Miscellaneous nonmetallic mineral products manufacturing	0	1,601	5,588	10,502
Iron and steel mills and ferroalloy manufacturing	0	12,438	19,294	128,630
Iron, steel pipe and tube manufacturing from purchased steel	0	1,238	1,723	9,201
Rolled steel shape manufacturing	0	9,623	15,476	54,288
Steel wire drawing	0	140	185	923
Alumina refining and primary aluminum production	0	7,556	13,391	74,017
Secondary smelting and alloying of aluminum	0	2,321	3,618	30,780
Aluminum sheet, plate, and foil manufacturing	0	34,038	52,062	191,636
Other aluminum rolling, drawing and extruding	0	2,278	2,929	12,529
Nonferrous metal (exc aluminum) smelting and refining	0	317	920	4,401
Copper rolling, drawing, extruding and alloying	0	35,413	46,209	341,194
Nonferrous metal, except copper and aluminum, shaping	0	11,056	13,577	48,109
Secondary processing of other nonferrous metals	0	1,173	2,819	15,964
Ferrous metal foundries	0	4,685	6,733	16,548
Nonferrous metal foundries	0	2,795	3,779	10,034
Custom roll forming	0	448	678	3,242
Crown and closure manufacturing and metal stamping	0	13,857	19,203	53,307
Iron and steel forging	0	4,395	5,863	18,392
Nonferrous forging	0	687	844	2,392
Cutlery, utensil, pot, and pan manufacturing	0	17,029	45,370	99,505
Handtool manufacturing	0	4,894	7,544	15,906
Prefabricated metal buildings and components manufacturing	0	1,600	2,197	5,716
Fabricated structural metal manufacturing	0	15,808	22,402	61,843
Plate work manufacturing	0	6,135	6,446	16,274
Metal window and door manufacturing	0	12,593	18,425	42,989

## APPENDIX

Sheet metal work manufacturing	0	35,297	44,273	105,559
Ornamental and architectural metal work manufacturing	0	16,884	21,458	49,364
Power boiler and heat exchanger manufacturing	0	3,342	4,486	11,198
Metal tank (heavy gauge) manufacturing	0	1,688	2,027	4,978
Metal cans manufacturing	0	4,967	10,378	42,437
Metal barrels, drums and pails manufacturing	0	1,993	2,466	9,145
Hardware manufacturing	0	3,978	6,265	17,887
Spring and wire product manufacturing	0	24,901	33,049	93,274
Machine shops	2	113,638	129,724	248,240
Turned product and screw, nut, and bolt manufacturing	0	22,076	29,871	78,585
Metal heat treating	0	3,294	4,859	11,029
Metal coating and nonprecious engraving	0	8,625	14,015	30,481
Electroplating, anodizing, and coloring metal	0	12,422	13,817	27,885
Valve and fittings, other than plumbing, manufacturing	0	6,986	10,759	26,436
Plumbing fixture fitting and trim manufacturing	0	2,384	6,658	17,447
Ball and roller bearing manufacturing	1	74,622	129,439	294,763
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	92	111	182
Small arms, ordnance, and accessories manufacturing	0	4,129	9,424	20,628
Fabricated pipe and pipe fitting manufacturing	0	2,420	2,757	5,316
Other fabricated metal manufacturing	1	61,742	79,274	193,485
Farm machinery and equipment manufacturing	0	580	930	3,488
Lawn and garden equipment manufacturing	0	1,990	4,116	17,609
Construction machinery manufacturing	0	6,245	13,991	38,710
Mining machinery and equipment manufacturing	0	7	9	26

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	202	256	695
Semiconductor machinery manufacturing	0	731	862	2,266
Food product machinery manufacturing	0	49	64	189
Sawmill, woodworking, and paper machinery	0	1,611	1,866	5,096
Printing machinery and equipment manufacturing	0	362	430	1,056
All other industrial machinery manufacturing	0	404	552	1,378
Optical instrument and lens manufacturing	0	19,166	34,155	85,685
Photographic and photocopying equipment manufacturing	0	4,154	6,676	17,060
Other commercial service industry machinery manufacturing	0	893	1,851	5,275
Air purification and ventilation equipment manufacturing	0	1,029	1,635	4,077
Heating equipment (except warm air furnaces) manufacturing	0	5,079	8,230	19,785
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	2,774	5,832	15,892
Industrial mold manufacturing	0	1,085	1,294	2,601
Special tool, die, jig, and fixture manufacturing	0	1,487	2,007	3,591
Cutting tool and machine tool accessory manufacturing	0	1,273	1,434	2,831
Machine tool manufacturing	0	565	658	1,575
Rolling mill and other metalworking machinery manufacturing	0	402	528	1,116
Turbine and turbine generator set units manufacturing	0	2,321	3,374	9,692
Speed changer, industrial high-speed drive, and gear manufacturing	0	5,008	7,990	20,836
Mechanical power transmission equipment manufacturing	0	5,893	9,502	22,315
Other engine equipment manufacturing	0	8,752	21,025	67,721
Pump and pumping equipment manufacturing	0	978	1,897	4,033

## APPENDIX

Air and gas compressor manufacturing	1	58,102	112,027	292,229
Elevator and moving stairway manufacturing	0	318	548	1,859
Conveyor and conveying equipment manufacturing	0	245	264	695
Overhead cranes, hoists, and monorail systems manufacturing	0	45	97	276
Industrial truck, trailer, and stacker manufacturing	0	1,685	2,878	8,056
Power-driven handtool manufacturing	0	511	1,493	3,651
Welding and soldering equipment manufacturing	0	84	121	356
Packaging machinery manufacturing	0	612	983	2,266
Industrial process furnace and oven manufacturing	0	214	277	551
Fluid power cylinder and actuator manufacturing	0	2,152	3,201	7,578
Fluid power pump and motor manufacturing	0	3,272	5,445	12,077
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2,016	2,761	6,396
Electronic computer manufacturing	1	286,405	497,778	1,270,268
Computer storage device manufacturing	0	1,148	2,527	11,650
Computer terminals and other computer peripheral equipment manufacturing	1	113,389	173,905	378,596
Telephone apparatus manufacturing	0	734	1,234	5,889
Broadcast and wireless communications equipment manufacturing	0	2,527	3,335	8,400
Other communications equipment manufacturing	0	5,506	7,782	20,234
Audio and video equipment manufacturing	0	927	1,471	5,290
Printed circuit assembly (electronic assembly) manufacturing	0	27,866	37,693	132,102
Bare printed circuit board manufacturing	0	1,639	2,034	5,798



## APPENDIX

Semiconductor and related device manufacturing	0	47,688	72,239	237,931
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	11,282	14,895	37,984
Electronic connector manufacturing	1	74,629	100,354	242,346
Other electronic component manufacturing	0	15,003	17,087	56,493
Electromedical and electrotherapeutic apparatus manufacturing	0	601	1,058	3,104
Search, detection, and navigation instruments manufacturing	0	30,329	40,929	90,276
Automatic environmental control manufacturing	0	1,791	2,363	6,833
Industrial process variable instruments manufacturing	0	2,498	3,348	8,235
Totalizing fluid meter and counting device manufacturing	0	1,460	2,604	7,191
Electricity and signal testing instruments manufacturing	0	34,088	45,467	141,725
Analytical laboratory instrument manufacturing	7	655,450	1,014,067	2,715,946
Irradiation apparatus manufacturing	0	600	987	2,694
Watch, clock, and other measuring and controlling device manufacturing	0	1,683	2,516	6,535
Blank magnetic and optical recording media manufacturing	0	24	56	214
Software and other prerecorded and record reproducing	0	1,928	2,680	6,291
Electric lamp bulb and part manufacturing	0	1,815	2,225	5,810
Lighting fixture manufacturing	0	13,326	15,794	50,451
Small electrical appliance manufacturing	0	668	936	4,324
Household cooking appliance manufacturing	0	71	125	981
Household refrigerator and home freezer manufacturing	0	84	148	1,071
Household laundry equipment manufacturing	0	147	243	2,296

## APPENDIX

Other major household appliance manufacturing	0	24	45	374
Power, distribution, and specialty transformer manufacturing	0	405	495	1,711
Motor and generator manufacturing	0	4,053	5,075	21,637
Switchgear and switchboard apparatus manufacturing	0	1,494	1,896	6,293
Relay and industrial control manufacturing	0	23,808	26,985	68,182
Storage battery manufacturing	0	455	578	2,650
Primary battery manufacturing	0	8,860	8,732	41,048
Fiber optic cable manufacturing	0	2,208	2,983	21,235
Other communication and energy wire manufacturing	0	10,816	14,488	69,092
Wiring device manufacturing	0	16,129	20,187	56,862
Carbon and graphite product manufacturing	0	4,091	4,857	16,850
All other miscellaneous electrical equipment and component manufacturing	2	183,255	195,426	545,932
Automobile manufacturing	0	16	38	314
Light truck and utility vehicle manufacturing	0	6	9	129
Heavy duty truck manufacturing	0	18	34	188
Motor vehicle body manufacturing	0	395	488	2,076
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	441	495	2,269
Motor vehicle gasoline engine and engine parts manufacturing	0	9,558	12,324	54,892
Motor vehicle electrical and electronic equipment manufacturing	0	20,553	25,307	131,840
Motor vehicle transmission and power train parts manufacturing	0	34,817	46,880	200,583
Motor vehicle seating and interior trim manufacturing	0	105	126	612
Motor vehicle metal stamping	0	41,354	48,877	141,867
Other motor vehicle parts manufacturing	0	29,551	37,965	151,114
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	17,479	22,745	76,435

## APPENDIX

Aircraft manufacturing	0	45	110	244
Aircraft engine and engine parts manufacturing	0	359	971	2,221
Other aircraft parts and auxiliary equipment manufacturing	0	12,963	22,953	47,343
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	445	668	1,245
Railroad rolling stock manufacturing	0	978	1,718	6,373
Ship building and repairing	0	2,167	2,883	5,251
Boat building	0	3,906	5,028	13,052
Motorcycle, bicycle, and parts manufacturing	0	661	1,740	3,981
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	3,888	8,268	24,823
Wood kitchen cabinet and countertop manufacturing	0	15,346	19,708	45,325
Upholstered household furniture manufacturing	0	5,198	6,593	18,060
Nonupholstered wood household furniture manufacturing	0	11,441	12,651	32,258
Other household nonupholstered furniture manufacturing	0	2,111	2,961	10,068
Institutional furniture manufacturing	0	16,443	17,876	57,109
Wood office furniture manufacturing	0	8,511	11,105	30,299
Custom architectural woodwork and millwork	0	864	831	2,261
Office furniture, except wood, manufacturing	1	117,960	173,427	408,512
Showcase, partition, shelving, and locker manufacturing	0	4,906	6,292	16,860
Mattress manufacturing	0	2,578	4,568	16,305
Blind and shade manufacturing	0	2,157	2,256	6,778
Surgical and medical instrument manufacturing	0	5,118	7,491	21,923
Surgical appliance and supplies manufacturing	0	11,377	16,332	50,235

## APPENDIX

Dental equipment and supplies manufacturing	0	3,454	4,688	9,413
Ophthalmic goods manufacturing	0	6,137	8,738	20,594
Dental laboratories	0	15,795	14,823	23,335
Jewelry and silverware manufacturing	0	21,229	25,113	50,000
Sporting and athletic goods manufacturing	0	3,542	4,160	11,511
Doll, toy, and game manufacturing	0	5,580	6,259	18,602
Office supplies (except paper) manufacturing	0	9,238	10,592	25,144
Sign manufacturing	0	8,555	6,849	13,113
Gasket, packing, and sealing device manufacturing	0	9,112	10,139	23,349
Musical instrument manufacturing	0	4,270	4,336	7,624
Fasteners, buttons, needles, and pins manufacturing	0	1,426	1,554	2,973
Broom, brush, and mop manufacturing	0	4,951	5,433	17,556
Burial casket manufacturing	0	268	289	534
All other miscellaneous manufacturing	2	258,515	281,490	469,786
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	76,116	187,200	407,301
Wholesale - Professional and commercial equipment and supplies	4	497,385	888,072	1,412,616
Wholesale - Household appliances and electrical and electronic goods	2	218,772	517,549	991,595
Wholesale - Machinery, equipment, and supplies	2	209,892	388,998	648,196
Wholesale - Other durable goods merchant wholesalers	5	469,300	764,009	1,330,775
Wholesale - Drugs and druggists' sundries	2	236,548	694,241	1,396,034
Wholesale - Grocery and related product wholesalers	5	362,585	500,131	923,551
Wholesale - Petroleum and petroleum products	0	42,575	643,680	706,148
Wholesale - Other nondurable goods merchant wholesalers	6	733,247	1,525,437	2,379,461
Wholesale - Wholesale electronic markets and agents and brokers	4	524,433	280,175	316,093
Retail - Motor vehicle and parts dealers	4	252,445	411,299	568,539

## APPENDIX

Retail - Furniture and home furnishings stores	4	183,615	258,967	392,286
Retail - Electronics and appliance stores	4	246,789	256,802	397,880
Retail - Building material and garden equipment and supplies stores	4	189,033	356,952	500,088
Retail - Food and beverage stores	18	606,194	877,470	1,392,099
Retail - Health and personal care stores	8	439,581	535,195	759,359
Retail - Gasoline stores	3	107,358	205,291	356,918
Retail - Clothing and clothing accessories stores	8	361,943	551,298	915,167
Retail - Sporting goods, hobby, musical instrument and book stores	5	166,786	225,230	329,539
Retail - General merchandise stores	14	454,671	719,857	1,092,864
Retail - Miscellaneous store retailers	8	401,218	436,857	579,274
Retail - Nonstore retailers	10	524,037	1,351,801	2,024,516
Air transportation	4	584,010	1,150,886	1,720,100
Rail transportation	1	24,083	83,963	210,641
Water transportation	1	68,375	160,967	561,854
Truck transportation	14	953,827	1,126,625	2,341,961
Transit and ground passenger transportation	13	677,551	759,485	929,474
Pipeline transportation	0	81,816	103,450	119,846
Scenic and sightseeing transportation and support activities for transportation	11	664,501	763,908	1,626,725
Couriers and messengers	5	244,292	329,153	590,003
Warehousing and storage	4	171,518	201,544	410,158
Newspaper publishers	1	119,901	215,118	247,507
Periodical publishers	2	349,215	573,789	667,762
Book publishers	1	86,283	329,758	437,154
Directory, mailing list, and other publishers	1	49,569	182,998	249,856
Greeting card publishing	0	2,217	9,667	14,189
Software publishers	3	619,700	1,771,407	1,974,390
Motion picture and video industries	3	407,801	898,210	1,197,542
Sound recording industries	0	28,097	224,528	231,451
Radio and television broadcasting	2	1,204,779	1,129,448	1,464,530

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Cable and other subscription programming	0	224,865	1,411,199	1,894,048
Wired telecommunications carriers	4	473,772	1,403,890	2,332,344
Wireless telecommunications carriers (except satellite)	0	57,982	399,882	809,761
Satellite, telecommunications resellers, and all other telecommunications	1	98,225	137,884	241,749
Data processing, hosting, and related services	4	589,223	1,314,919	2,204,860
News syndicates, libraries, archives and all other information services	2	111,843	210,460	317,081
Internet publishing and broadcasting and web search portals	5	1,139,915	3,597,411	6,285,408
Nondepository credit intermediation and related activities	5	883,352	1,969,293	2,285,898
Securities and commodity contracts intermediation and brokerage	6	2,825,605	2,783,026	3,259,896
Monetary authorities and depository credit intermediation	7	1,209,301	9,073,171	9,560,785
Other financial investment activities	13	2,046,374	2,316,462	3,129,931
Direct life insurance carriers	2	429,600	978,877	1,170,264
Insurance carriers, except direct life	7	974,734	4,082,647	6,618,446
Insurance agencies, brokerages, and related activities	14	1,297,088	2,299,245	4,062,418
Funds, trusts, and other financial vehicles	4	207,200	341,002	1,529,235
Other real estate	116	5,240,400	10,949,324	24,314,397
Tenant-occupied housing	13	405,403	2,664,800	3,157,089
Owner-occupied dwellings	0	0	8,490,234	10,727,311
Automotive equipment rental and leasing	2	109,297	286,745	416,241
General and consumer goods rental except video tapes and discs	2	168,629	215,447	299,121
Video tape and disc rental	1	32,440	52,460	78,722
Commercial and industrial machinery and equipment rental and leasing	2	240,433	489,579	718,829
Lessors of nonfinancial intangible assets	0	50,298	645,482	781,431

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Legal services	28	4,177,575	7,909,765	9,705,778
Accounting, tax preparation, bookkeeping, and payroll services	13	1,495,549	1,697,906	2,198,138
Architectural, engineering, and related services	22	2,403,612	2,597,932	4,394,360
Specialized design services	3	285,438	302,124	339,916
Custom computer programming services	5	661,435	773,660	1,009,083
Computer systems design services	5	612,655	652,597	827,094
Other computer related services, including facilities management	1	148,186	287,130	428,265
Management consulting services	39	5,942,260	5,824,430	7,545,956
Environmental and other technical consulting services	5	531,686	439,084	592,123
Scientific research and development services	543	56,753,907	77,261,276	146,003,296
Advertising, public relations, and related services	9	1,367,938	1,637,090	2,260,370
Photographic services	3	263,360	61,088	111,531
Veterinary services	2	91,497	107,792	168,047
Marketing research and all other miscellaneous professional, scientific, and technical services	35	4,211,649	3,689,360	4,500,141
Management of companies and enterprises	39	6,060,659	6,953,326	9,409,268
Office administrative services	10	1,193,594	394,023	771,494
Facilities support services	1	39,829	53,627	120,473
Employment services	51	3,389,511	5,355,009	7,223,093
Business support services	14	866,027	775,229	1,174,869
Travel arrangement and reservation services	3	217,590	303,443	615,955
Investigation and security services	10	430,892	462,245	640,447
Services to buildings	21	845,773	924,952	1,302,633
Landscape and horticultural services	14	630,206	709,987	1,049,985
Other support services	4	252,644	328,609	564,158
Waste management and remediation services	3	231,367	447,289	748,901
Elementary and secondary schools	11	618,616	546,312	643,000
Junior colleges, colleges, universities, and professional schools	17	1,170,782	1,606,284	2,075,283
Other educational services	15	484,430	460,504	818,615
Offices of physicians	20	2,253,109	2,699,352	3,898,979
Offices of dentists	7	468,594	593,600	882,695

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Offices of other health practitioners	9	597,328	579,210	768,137
Outpatient care centers	5	397,347	419,938	748,477
Medical and diagnostic laboratories	2	170,124	271,668	404,545
Home health care services	19	759,902	553,813	796,530
Other ambulatory health care services	2	126,908	140,201	232,485
Hospitals	42	4,211,927	4,870,303	8,322,023
Nursing and community care facilities	13	683,349	740,983	1,170,081
Residential mental retardation, mental health, substance abuse and other facilities	8	372,751	390,641	557,224
Individual and family services	29	1,097,670	1,006,223	1,377,959
Child day care services	14	439,452	523,896	686,832
Community food, housing, and other relief services, including rehabilitation services	6	256,297	288,697	567,957
Performing arts companies	2	131,575	202,395	286,032
Commercial Sports Except Racing	2	206,217	224,351	294,210
Racing and Track Operation	0	26,237	45,450	63,039
Independent artists, writers, and performers	7	444,724	516,087	549,921
Promoters of performing arts and sports and agents for public figures	2	184,083	403,391	581,312
Museums, historical sites, zoos, and parks	1	86,872	103,667	152,335
Amusement parks and arcades	0	9,155	22,559	30,697
Gambling industries (except casino hotels)	2	118,597	318,916	444,287
Other amusement and recreation industries	4	124,714	156,335	253,111
Fitness and recreational sports centers	5	125,657	186,023	270,598
Bowling centers	1	14,479	22,849	37,598
Hotels and motels, including casino hotels	17	978,974	1,836,835	2,526,919
Other accommodations	6	365,055	506,662	632,993
Full-service restaurants	40	1,358,552	2,106,394	3,197,088
Limited-service restaurants	24	623,471	1,066,459	2,015,525
All other food and drinking places	26	978,012	1,345,579	1,884,166
Automotive repair and maintenance, except car washes	10	527,563	642,927	944,459
Car washes	5	266,449	424,167	613,932



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Electronic and precision equipment repair and maintenance	4	295,582	454,718	673,786
Commercial and industrial machinery and equipment repair and maintenance	2	147,352	184,075	267,970
Personal and household goods repair and maintenance	4	239,441	158,467	217,308
Personal care services	14	459,934	260,743	364,639
Death care services	1	47,791	60,406	88,306
Dry-cleaning and laundry services	3	103,462	123,080	176,518
Other personal services	14	541,553	300,279	427,358
Religious organizations	14	790,343	226,477	1,172,564
Grantmaking, giving, and social advocacy organizations	4	369,422	878,206	1,237,574
Business and professional associations	2	239,165	326,553	477,300
Labor and civic organizations	6	276,079	559,503	857,102
Private households	8	180,464	180,464	180,464
Postal service	5	440,679	441,222	484,053
Federal electric utilities	0	0	0	0
Other federal government enterprises	48	2,797,190	1,325,755	9,338,260
State government passenger transit	0	19,852	(16,742)	15,112
State government electric utilities	2	303,594	384,726	1,189,940
Other state government enterprises	2	275,502	259,942	450,134
Local government passenger transit	2	217,967	(204,998)	25,384
Local government electric utilities	0	286	630	1,360
Other local government enterprises	7	726,724	865,213	1,957,583
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	53	8,255,754	11,212,386	21,063,394

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 436: Detailed M2M Program Impacts by Types of Impact, New York.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>188</i>	<i>18,019,060</i>	<i>25,281,090</i>	<i>45,437,056</i>
Oilseed farming	0	2,279	9,536	15,566
Grain farming	0	3,051	8,342	20,723
Vegetable and melon farming	0	2,055	3,229	5,803
Fruit farming	0	2,847	4,786	7,433
Tree nut farming	0	62	64	66
Greenhouse, nursery, and floriculture production	0	2,203	2,934	4,635
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	1,473	1,933	2,974
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	739	2,329	7,000
Dairy cattle and milk production	0	3,731	8,049	36,341
Poultry and egg production	0	229	311	2,797
Animal production, except cattle and poultry and eggs	0	1,047	3,120	4,863
Forestry, forest products, and timber tract production	0	803	855	968
Commercial logging	0	1,491	1,540	2,414
Commercial fishing	0	920	489	667
Commercial hunting and trapping	0	553	407	440
Support activities for agriculture and forestry	0	5,605	4,827	5,913
Oil and gas extraction	0	40,403	21,903	51,286
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	922	2,770	11,321
Iron ore mining	0	0	0	0
Gold ore mining	0	118	135	399

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	24	28	116
Stone mining and quarrying	0	1,481	1,034	2,428
Sand and gravel mining	0	2,182	1,304	2,215
Other clay, ceramic, refractory minerals mining	0	6	6	17
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	502	460	695
Other nonmetallic minerals	0	487	283	467
Drilling oil and gas wells	0	2	0	2
Support activities for oil and gas operations	0	20	5	22
Metal mining services	0	305	179	489
Other nonmetallic minerals services	0	12	7	18
Electric power generation - Hydroelectric	0	3,901	8,771	21,044
Electric power generation - Fossil fuel	0	9,140	29,773	82,865
Electric power generation - Nuclear	0	13,588	29,468	62,258
Electric power generation - Solar	0	791	1,308	2,507
Electric power generation - Wind	0	823	3,617	8,700
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	601	1,256	2,782
Electric power generation - All other	0	410	305	909
Electric power transmission and distribution	0	63,294	214,096	504,349
Natural gas distribution	0	21,885	58,740	125,275
Water, sewage and other systems	0	2,241	3,644	5,388
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	38,385	52,553	108,463
Maintenance and repair construction of residential structures	0	14,007	21,257	43,575
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	35	22	47
Dog and cat food manufacturing	0	1,067	2,790	13,505
Other animal food manufacturing	0	2,398	4,555	24,765
Flour milling	0	1,941	2,738	22,811
Rice milling	0	0	0	0
Malt manufacturing	0	261	318	2,603
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	113	360	5,902
Fats and oils refining and blending	0	85	147	1,798
Breakfast cereal manufacturing	0	116	168	971
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	299	463	3,630
Nonchocolate confectionery manufacturing	0	716	856	3,749
Chocolate and confectionery manufacturing from cacao beans	0	250	379	2,751
Confectionery manufacturing from purchased chocolate	0	1,927	2,215	9,420
Frozen fruits, juices and vegetables manufacturing	0	1,396	1,739	8,279
Frozen specialties manufacturing	0	6,469	7,474	31,076
Canned fruits and vegetables manufacturing	0	8,286	10,431	47,651

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Canned specialties	0	868	1,208	5,807
Dehydrated food products manufacturing	0	1,004	1,214	4,323
Cheese manufacturing	0	7,184	9,989	105,179
Dry, condensed, and evaporated dairy product manufacturing	0	1,267	1,984	18,948
Fluid milk manufacturing	0	4,178	5,291	32,720
Creamery butter manufacturing	0	17	33	309
Ice cream and frozen dessert manufacturing	0	1,475	1,944	9,493
Frozen cakes and other pastries manufacturing	0	3,859	5,537	9,820
Poultry processing	0	973	1,184	5,897
Animal, except poultry, slaughtering	0	1,650	2,307	17,637
Meat processed from carcasses	0	3,240	3,891	23,004
Rendering and meat byproduct processing	0	318	400	1,669
Seafood product preparation and packaging	0	3,231	3,533	8,747
Bread and bakery product, except frozen, manufacturing	0	14,290	16,875	40,665
Cookie and cracker manufacturing	0	2,245	2,693	8,545
Dry pasta, mixes, and dough manufacturing	0	540	778	5,215
Tortilla manufacturing	0	105	116	375
Roasted nuts and peanut butter manufacturing	0	1,638	2,079	7,498
Other snack food manufacturing	0	1,605	2,056	9,253
Coffee and tea manufacturing	0	2,354	2,666	13,248
Flavoring syrup and concentrate manufacturing	0	2,453	5,397	36,797
Mayonnaise, dressing, and sauce manufacturing	0	1,283	1,546	6,977
Spice and extract manufacturing	0	2,774	3,341	13,245
All other food manufacturing	0	4,540	5,181	20,248
Bottled and canned soft drinks & water	0	2,692	3,662	16,458
Manufactured ice	0	360	259	476
Breweries	0	11,917	23,226	45,606
Wineries	0	3,522	4,832	12,822
Distilleries	0	7,129	34,642	45,807
Tobacco product manufacturing	0	2,894	60,533	67,380
Fiber, yarn, and thread mills	0	103	178	655
Broadwoven fabric mills	0	489	796	2,073

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Narrow fabric mills and schiffli machine embroidery	0	133	151	345
Nonwoven fabric mills	0	2,062	4,103	12,798
Knit fabric mills	0	191	243	547
Textile and fabric finishing mills	0	1,701	2,179	4,893
Fabric coating mills	0	729	948	3,067
Carpet and rug mills	0	517	956	1,604
Curtain and linen mills	0	733	1,147	2,662
Textile bag and canvas mills	0	589	781	2,214
Rope, cordage, twine, tire cord and tire fabric mills	0	219	389	994
Other textile product mills	0	675	871	1,826
Hosiery and sock mills	0	190	313	568
Other apparel knitting mills	0	964	1,286	2,341
Cut and sew apparel contractors	0	7,218	8,081	17,170
Mens and boys cut and sew apparel manufacturing	0	1,787	2,561	5,178
Womens and girls cut and sew apparel manufacturing	0	5,289	9,204	19,529
Other cut and sew apparel manufacturing	0	1,046	1,503	3,061
Apparel accessories and other apparel manufacturing	0	550	839	1,981
Leather and hide tanning and finishing	0	173	383	1,012
Footwear manufacturing	0	189	250	944
Other leather and allied product manufacturing	0	197	218	568
Sawmills	0	1,321	1,649	6,004
Wood preservation	0	33	59	285
Veneer and plywood manufacturing	0	82	105	415
Engineered wood member and truss manufacturing	0	137	164	492
Reconstituted wood product manufacturing	0	33	55	310
Wood windows and door manufacturing	0	1,191	1,423	3,665
Cut stock, resawing lumber, and planing	0	210	285	799
Other millwork, including flooring	0	1,028	1,216	3,092
Wood container and pallet manufacturing	0	1,148	1,255	3,190
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	146	160	442
All other miscellaneous wood product manufacturing	0	585	647	1,762
Pulp mills	0	63	68	235
Paper mills	0	7,262	8,530	43,413
Paperboard mills	0	711	978	4,644
Paperboard container manufacturing	0	7,955	8,858	34,002
Paper bag and coated and treated paper manufacturing	0	3,788	4,048	13,025
Stationery product manufacturing	0	642	641	1,400
Sanitary paper product manufacturing	0	1,886	2,565	11,447
All other converted paper product manufacturing	0	611	623	1,507
Printing	0	18,189	28,384	50,965
Support activities for printing	0	1,263	1,905	2,807
Petroleum refineries	0	33	447	2,715
Asphalt paving mixture and block manufacturing	0	437	896	2,272
Asphalt shingle and coating materials manufacturing	0	19	94	182
Petroleum lubricating oil and grease manufacturing	0	6,573	39,647	82,798
All other petroleum and coal products manufacturing	0	141	674	1,488
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	756	1,885	5,059
Synthetic dye and pigment manufacturing	0	40	83	288
Other basic inorganic chemical manufacturing	0	559	1,210	3,987
Other basic organic chemical manufacturing	0	1,375	2,697	19,103
Plastics material and resin manufacturing	0	1,239	1,969	9,495
Synthetic rubber manufacturing	0	319	484	1,843
Artificial and synthetic fibers and filaments manufacturing	0	1,143	1,633	7,218
Nitrogenous fertilizer manufacturing	0	130	313	1,067
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	147	265	961

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Pesticide and other agricultural chemical manufacturing	0	949	3,012	14,802
Medicinal and botanical manufacturing	0	330	586	1,803
Pharmaceutical preparation manufacturing	0	23,504	90,259	276,810
In-vitro diagnostic substance manufacturing	0	553	838	2,454
Biological product (except diagnostic) manufacturing	0	6,073	14,341	29,346
Paint and coating manufacturing	0	586	1,154	4,650
Adhesive manufacturing	0	197	338	1,478
Soap and other detergent manufacturing	0	429	1,648	6,664
Polish and other sanitation good manufacturing	0	925	2,056	7,928
Surface active agent manufacturing	0	10	34	198
Toilet preparation manufacturing	0	5,517	18,140	42,259
Printing ink manufacturing	0	507	558	2,335
Explosives manufacturing	0	6	7	38
Custom compounding of purchased resins	0	257	547	3,043
Photographic film and chemical manufacturing	0	3,695	8,328	21,913
Other miscellaneous chemical product manufacturing	0	688	1,083	4,165
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,740	4,536	11,933
Unlaminated plastics profile shape manufacturing	0	911	3,592	6,163
Plastics pipe and pipe fitting manufacturing	0	208	944	1,818
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	178	548	996
Polystyrene foam product manufacturing	0	836	2,202	5,169
Urethane and other foam product (except polystyrene) manufacturing	0	306	762	1,984
Plastics bottle manufacturing	0	168	441	1,445
Other plastics product manufacturing	0	10,999	24,224	53,837
Tire manufacturing	0	609	1,188	3,768



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Rubber and plastics hoses and belting manufacturing	0	263	642	1,203
Other rubber product manufacturing	0	917	2,012	4,948
Pottery, ceramics, and plumbing fixture manufacturing	0	496	712	1,264
Brick, tile, and other structural clay product manufacturing	0	513	1,132	2,060
Flat glass manufacturing	0	151	395	832
Other pressed and blown glass and glassware manufacturing	0	990	1,744	3,738
Glass container manufacturing	0	530	1,124	2,596
Glass product manufacturing made of purchased glass	0	1,135	2,353	4,879
Cement manufacturing	0	131	425	979
Ready-mix concrete manufacturing	0	1,041	2,184	5,891
Concrete block and brick manufacturing	0	281	652	1,430
Concrete pipe manufacturing	0	43	87	158
Other concrete product manufacturing	0	487	849	1,866
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	354	1,286	2,868
Abrasive product manufacturing	0	856	3,704	5,445
Cut stone and stone product manufacturing	0	697	898	1,875
Ground or treated mineral and earth manufacturing	0	282	1,186	2,336
Mineral wool manufacturing	0	203	637	1,204
Miscellaneous nonmetallic mineral products manufacturing	0	109	357	659
Iron and steel mills and ferroalloy manufacturing	0	634	865	6,036
Iron, steel pipe and tube manufacturing from purchased steel	0	119	148	790
Rolled steel shape manufacturing	0	674	1,000	3,877
Steel wire drawing	0	14	14	76
Alumina refining and primary aluminum production	0	1,243	1,999	10,557
Secondary smelting and alloying of aluminum	0	310	392	3,493
Aluminum sheet, plate, and foil manufacturing	0	3,221	4,325	17,710

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Other aluminum rolling, drawing and extruding	0	334	370	1,706
Nonferrous metal (exc aluminum) smelting and refining	0	15	38	199
Copper rolling, drawing, extruding and alloying	0	6,564	7,986	57,039
Nonferrous metal, except copper and aluminum, shaping	0	752	849	3,264
Secondary processing of other nonferrous metals	0	83	123	895
Ferrous metal foundries	0	292	344	942
Nonferrous metal foundries	0	266	321	883
Custom roll forming	0	71	107	466
Crown and closure manufacturing and metal stamping	0	2,441	3,406	9,231
Iron and steel forging	0	441	591	1,787
Nonferrous forging	0	73	91	242
Cutlery, utensil, pot, and pan manufacturing	0	2,487	7,096	14,723
Handtool manufacturing	0	788	1,221	2,575
Prefabricated metal buildings and components manufacturing	0	108	150	374
Fabricated structural metal manufacturing	0	927	1,320	3,592
Plate work manufacturing	0	489	514	1,253
Metal window and door manufacturing	0	930	1,365	3,117
Sheet metal work manufacturing	0	4,112	5,183	11,919
Ornamental and architectural metal work manufacturing	0	1,294	1,652	3,630
Power boiler and heat exchanger manufacturing	0	386	531	1,363
Metal tank (heavy gauge) manufacturing	0	171	207	496
Metal cans manufacturing	0	687	1,468	5,880
Metal barrels, drums and pails manufacturing	0	174	216	744
Hardware manufacturing	0	411	649	1,803
Spring and wire product manufacturing	0	386	506	1,410
Machine shops	0	7,705	8,834	16,520
Turned product and screw, nut, and bolt manufacturing	0	4,499	6,083	15,317
Metal heat treating	0	654	963	2,188

## APPENDIX

Metal coating and nonprecious engraving	0	1,304	2,122	4,621
Electroplating, anodizing, and coloring metal	0	1,998	2,226	4,402
Valve and fittings, other than plumbing, manufacturing	0	860	1,317	3,205
Plumbing fixture fitting and trim manufacturing	0	212	607	1,514
Ball and roller bearing manufacturing	0	2,413	4,174	9,148
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	8	9	15
Small arms, ordnance, and accessories manufacturing	0	425	953	1,948
Fabricated pipe and pipe fitting manufacturing	0	176	201	388
Other fabricated metal manufacturing	0	1,186	1,528	3,569
Farm machinery and equipment manufacturing	0	40	70	225
Lawn and garden equipment manufacturing	0	311	631	2,459
Construction machinery manufacturing	0	28	69	176
Mining machinery and equipment manufacturing	0	1	1	2
Oil and gas field machinery and equipment manufacturing	0	17	21	58
Semiconductor machinery manufacturing	0	145	171	408
Food product machinery manufacturing	0	8	10	29
Sawmill, woodworking, and paper machinery	0	138	162	400
Printing machinery and equipment manufacturing	0	53	64	140
All other industrial machinery manufacturing	0	47	66	158
Optical instrument and lens manufacturing	0	4,297	8,155	17,672
Photographic and photocopying equipment manufacturing	0	936	1,529	3,728

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Other commercial service industry machinery manufacturing	0	68	153	415
Air purification and ventilation equipment manufacturing	0	273	456	1,091
Heating equipment (except warm air furnaces) manufacturing	0	515	870	1,831
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	234	510	1,347
Industrial mold manufacturing	0	94	114	219
Special tool, die, jig, and fixture manufacturing	0	215	295	504
Cutting tool and machine tool accessory manufacturing	0	141	160	311
Machine tool manufacturing	0	74	87	197
Rolling mill and other metalworking machinery manufacturing	0	41	54	111
Turbine and turbine generator set units manufacturing	0	194	297	704
Speed changer, industrial high-speed drive, and gear manufacturing	0	582	964	2,250
Mechanical power transmission equipment manufacturing	0	377	612	1,427
Other engine equipment manufacturing	0	463	991	3,345
Pump and pumping equipment manufacturing	0	94	196	379
Air and gas compressor manufacturing	0	36	64	182
Elevator and moving stairway manufacturing	0	38	69	215
Conveyor and conveying equipment manufacturing	0	18	20	51
Overhead cranes, hoists, and monorail systems manufacturing	0	3	7	20
Industrial truck, trailer, and stacker manufacturing	0	139	244	680
Power-driven handtool manufacturing	0	123	365	794
Welding and soldering equipment manufacturing	0	15	21	51
Packaging machinery manufacturing	0	93	153	343

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Industrial process furnace and oven manufacturing	0	25	32	63
Fluid power cylinder and actuator manufacturing	0	125	192	468
Fluid power pump and motor manufacturing	0	304	538	1,061
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	250	353	756
Electronic computer manufacturing	0	1,341	2,322	6,302
Computer storage device manufacturing	0	175	382	1,729
Computer terminals and other computer peripheral equipment manufacturing	0	14,421	22,050	48,298
Telephone apparatus manufacturing	0	64	106	506
Broadcast and wireless communications equipment manufacturing	0	653	847	2,073
Other communications equipment manufacturing	0	560	781	2,141
Audio and video equipment manufacturing	0	176	273	921
Printed circuit assembly (electronic assembly) manufacturing	0	6,027	8,137	27,682
Bare printed circuit board manufacturing	0	195	241	737
Semiconductor and related device manufacturing	0	6,164	9,160	28,998
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,664	2,162	5,315
Electronic connector manufacturing	0	5,672	7,568	18,612
Other electronic component manufacturing	0	1,953	2,219	7,060
Electromedical and electrotherapeutic apparatus manufacturing	0	94	161	458
Search, detection, and navigation instruments manufacturing	0	134	185	398
Automatic environmental control manufacturing	0	269	349	933

## APPENDIX

Industrial process variable instruments manufacturing	0	393	519	1,264
Totalizing fluid meter and counting device manufacturing	0	115	207	568
Electricity and signal testing instruments manufacturing	0	9,941	13,266	38,864
Analytical laboratory instrument manufacturing	1	165,736	264,932	635,966
Irradiation apparatus manufacturing	0	99	159	424
Watch, clock, and other measuring and controlling device manufacturing	0	614	893	2,156
Blank magnetic and optical recording media manufacturing	0	12	28	82
Software and other prerecorded and record reproducing	0	231	322	678
Electric lamp bulb and part manufacturing	0	205	255	657
Lighting fixture manufacturing	0	1,361	1,560	4,890
Small electrical appliance manufacturing	0	86	119	516
Household cooking appliance manufacturing	0	7	12	97
Household refrigerator and home freezer manufacturing	0	8	15	113
Household laundry equipment manufacturing	0	14	25	234
Other major household appliance manufacturing	0	2	5	38
Power, distribution, and specialty transformer manufacturing	0	53	65	216
Motor and generator manufacturing	0	398	481	2,126
Switchgear and switchboard apparatus manufacturing	0	134	167	559
Relay and industrial control manufacturing	0	4,970	5,637	13,562
Storage battery manufacturing	0	49	59	274
Primary battery manufacturing	0	991	792	4,218
Fiber optic cable manufacturing	0	272	365	2,311
Other communication and energy wire manufacturing	0	10,699	13,829	63,006
Wiring device manufacturing	0	3,305	4,114	10,676

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Carbon and graphite product manufacturing	0	232	272	987
All other miscellaneous electrical equipment and component manufacturing	0	75	80	231
Automobile manufacturing	0	2	3	31
Light truck and utility vehicle manufacturing	0	0	1	7
Heavy duty truck manufacturing	0	1	2	12
Motor vehicle body manufacturing	0	38	47	205
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	53	59	273
Motor vehicle gasoline engine and engine parts manufacturing	0	1,047	1,354	6,379
Motor vehicle electrical and electronic equipment manufacturing	0	1,952	2,383	11,357
Motor vehicle transmission and power train parts manufacturing	0	7,961	10,964	40,130
Motor vehicle seating and interior trim manufacturing	0	8	10	45
Motor vehicle metal stamping	0	1,625	1,954	5,535
Other motor vehicle parts manufacturing	0	2,520	2,940	13,277
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,886	2,662	8,372
Aircraft manufacturing	0	4	11	23
Aircraft engine and engine parts manufacturing	0	89	234	568
Other aircraft parts and auxiliary equipment manufacturing	0	174	300	636
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	38	58	101
Railroad rolling stock manufacturing	0	400	720	2,458
Ship building and repairing	0	214	290	511
Boat building	0	295	383	972
Motorcycle, bicycle, and parts manufacturing	0	99	246	515

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Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	374	828	2,443
Wood kitchen cabinet and countertop manufacturing	0	2,689	3,161	7,452
Upholstered household furniture manufacturing	0	811	1,020	2,764
Nonupholstered wood household furniture manufacturing	0	2,254	2,399	6,035
Other household nonupholstered furniture manufacturing	0	332	455	1,493
Institutional furniture manufacturing	0	63	69	223
Wood office furniture manufacturing	0	5,566	7,657	20,613
Custom architectural woodwork and millwork	0	70	67	175
Office furniture, except wood, manufacturing	1	112,297	166,104	407,529
Showcase, partition, shelving, and locker manufacturing	0	1,587	1,871	5,182
Mattress manufacturing	0	245	384	1,495
Blind and shade manufacturing	0	167	172	567
Surgical and medical instrument manufacturing	0	568	807	2,222
Surgical appliance and supplies manufacturing	0	1,510	2,193	6,314
Dental equipment and supplies manufacturing	0	118	149	390
Ophthalmic goods manufacturing	0	687	1,001	2,363
Dental laboratories	0	2,006	1,883	2,915
Jewelry and silverware manufacturing	0	2,282	2,658	5,086
Sporting and athletic goods manufacturing	0	347	396	1,066
Doll, toy, and game manufacturing	0	718	755	2,002
Office supplies (except paper) manufacturing	0	1,245	1,436	3,130
Sign manufacturing	0	669	549	980
Gasket, packing, and sealing device manufacturing	0	604	660	1,486
Musical instrument manufacturing	0	925	933	1,263
Fasteners, buttons, needles, and pins manufacturing	0	182	198	341



## APPENDIX

Broom, brush, and mop manufacturing	0	560	704	1,854
Burial casket manufacturing	0	17	18	33
All other miscellaneous manufacturing	0	2,033	2,281	4,298
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	7,967	19,615	42,642
Wholesale - Professional and commercial equipment and supplies	1	73,916	132,223	205,254
Wholesale - Household appliances and electrical and electronic goods	0	22,561	53,288	100,637
Wholesale - Machinery, equipment, and supplies	0	16,761	31,185	51,721
Wholesale - Other durable goods merchant wholesalers	1	60,600	98,756	170,509
Wholesale - Drugs and druggists' sundries	0	21,371	61,696	121,201
Wholesale - Grocery and related product wholesalers	1	52,124	71,528	131,751
Wholesale - Petroleum and petroleum products	0	4,994	84,226	90,991
Wholesale - Other nondurable goods merchant wholesalers	1	91,066	195,876	299,423
Wholesale - Wholesale electronic markets and agents and brokers	1	164,048	83,563	94,083
Retail - Motor vehicle and parts dealers	0	21,832	35,774	49,043
Retail - Furniture and home furnishings stores	0	16,861	23,771	35,410
Retail - Electronics and appliance stores	0	22,393	23,392	35,542
Retail - Building material and garden equipment and supplies stores	0	16,667	31,476	43,573
Retail - Food and beverage stores	2	58,889	84,330	130,627
Retail - Health and personal care stores	1	38,884	47,631	67,345
Retail - Gasoline stores	0	10,891	19,330	31,663
Retail - Clothing and clothing accessories stores	1	34,298	51,829	83,511
Retail - Sporting goods, hobby, musical instrument and book stores	0	14,962	20,263	29,099

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Retail - General merchandise stores	1	38,981	62,185	93,738
Retail - Miscellaneous store retailers	1	37,831	40,804	52,231
Retail - Nonstore retailers	1	51,231	133,705	190,744
Air transportation	0	59,802	120,839	177,801
Rail transportation	0	2,604	8,052	21,473
Water transportation	0	6,456	14,781	50,575
Truck transportation	1	93,667	107,258	215,668
Transit and ground passenger transportation	2	93,518	105,951	121,272
Pipeline transportation	0	8,079	10,879	12,861
Scenic and sightseeing transportation and support activities for transportation	1	47,736	55,572	118,381
Couriers and messengers	1	28,510	39,678	69,510
Warehousing and storage	0	19,415	22,761	45,939
Newspaper publishers	0	12,404	21,541	24,420
Periodical publishers	0	65,526	105,186	112,851
Book publishers	0	13,961	49,707	66,443
Directory, mailing list, and other publishers	0	27,142	100,860	136,363
Greeting card publishing	0	267	1,209	1,756
Software publishers	0	106,518	269,787	292,465
Motion picture and video industries	0	59,956	133,584	146,674
Sound recording industries	0	7,776	58,209	55,987
Radio and television broadcasting	0	202,360	208,300	180,009
Cable and other subscription programming	0	43,424	215,895	239,173
Wired telecommunications carriers	0	55,525	153,025	246,383
Wireless telecommunications carriers (except satellite)	0	7,535	42,634	83,727
Satellite, telecommunications resellers, and all other telecommunications	0	17,231	21,958	34,304
Data processing, hosting, and related services	1	129,750	271,545	433,089
News syndicates, libraries, archives and all other information services	1	45,798	85,150	119,729
Internet publishing and broadcasting and web search portals	1	335,524	1,004,619	1,502,870

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Nondepository credit intermediation and related activities	1	157,844	354,569	386,763
Securities and commodity contracts intermediation and brokerage	1	374,668	362,480	396,582
Monetary authorities and depository credit intermediation	1	97,310	754,556	772,006
Other financial investment activities	1	283,004	311,246	335,273
Direct life insurance carriers	0	38,876	91,089	106,730
Insurance carriers, except direct life	1	88,473	381,283	594,502
Insurance agencies, brokerages, and related activities	5	463,837	823,994	1,403,603
Funds, trusts, and other financial vehicles	0	25,557	41,079	156,259
Other real estate	6	337,520	698,876	1,345,800
Tenant-occupied housing	1	43,822	271,593	317,119
Owner-occupied dwellings	0	0	852,739	1,077,426
Automotive equipment rental and leasing	0	28,044	59,767	83,192
General and consumer goods rental except video tapes and discs	0	20,699	24,762	32,105
Video tape and disc rental	0	3,088	4,817	7,050
Commercial and industrial machinery and equipment rental and leasing	1	88,282	153,775	219,408
Lessors of nonfinancial intangible assets	0	3,893	49,232	59,227
Legal services	2	249,174	490,385	587,205
Accounting, tax preparation, bookkeeping, and payroll services	1	168,015	191,605	241,774
Architectural, engineering, and related services	1	160,838	174,640	290,910
Specialized design services	1	62,312	66,225	72,792
Custom computer programming services	1	118,510	137,654	175,192
Computer systems design services	1	77,980	82,788	103,109
Other computer related services, including facilities management	0	33,729	62,737	89,107
Management consulting services	2	304,391	298,845	376,659
Environmental and other technical consulting services	0	40,928	34,109	45,333

## APPENDIX

Scientific research and development services	24	2,941,393	4,058,296	7,089,161
Advertising, public relations, and related services	1	125,919	149,859	197,279
Photographic services	0	22,229	5,423	9,358
Veterinary services	0	8,186	9,780	14,842
Marketing research and all other miscellaneous professional, scientific, and technical services	2	232,892	203,459	244,705
Management of companies and enterprises	3	428,105	495,752	649,958
Office administrative services	1	115,155	38,703	68,650
Facilities support services	0	3,364	4,541	9,636
Employment services	3	230,750	373,937	485,760
Business support services	4	230,854	210,772	309,117
Travel arrangement and reservation services	0	17,517	24,621	48,042
Investigation and security services	1	37,073	39,866	53,579
Services to buildings	1	62,428	68,456	91,814
Landscape and horticultural services	5	244,612	275,909	394,773
Other support services	1	65,420	85,254	145,095
Waste management and remediation services	0	20,004	38,933	64,265
Elementary and secondary schools	1	73,281	64,426	74,577
Junior colleges, colleges, universities, and professional schools	2	153,826	209,127	256,680
Other educational services	1	41,809	39,825	68,333
Offices of physicians	2	203,341	245,531	351,867
Offices of dentists	1	44,382	56,820	83,319
Offices of other health practitioners	1	54,064	52,847	69,922
Outpatient care centers	1	39,649	42,072	73,863
Medical and diagnostic laboratories	0	15,825	25,947	37,396
Home health care services	2	68,282	50,334	72,896
Other ambulatory health care services	0	11,969	13,303	21,703
Hospitals	4	424,539	488,872	815,183
Nursing and community care facilities	1	65,362	70,984	109,171
Residential mental retardation, mental health, substance abuse and other facilities	1	39,972	41,913	58,572

## APPENDIX

Individual and family services	3	114,904	107,188	145,919
Child day care services	1	43,158	52,213	66,793
Community food, housing, and other relief services, including rehabilitation services	1	28,639	32,662	62,099
Performing arts companies	0	14,456	21,511	27,620
Commercial Sports Except Racing	0	21,592	23,407	30,014
Racing and Track Operation	0	2,708	4,457	5,946
Independent artists, writers, and performers	1	49,318	55,812	56,837
Promoters of performing arts and sports and agents for public figures	0	20,289	40,718	54,893
Museums, historical sites, zoos, and parks	0	9,042	10,668	15,192
Amusement parks and arcades	0	968	2,081	2,862
Gambling industries (except casino hotels)	0	11,974	30,350	41,753
Other amusement and recreation industries	0	11,166	13,417	21,664
Fitness and recreational sports centers	0	12,912	17,865	25,635
Bowling centers	0	1,341	2,040	3,319
Hotels and motels, including casino hotels	2	147,290	264,347	357,995
Other accommodations	1	50,157	68,483	83,779
Full-service restaurants	3	122,244	190,661	283,243
Limited-service restaurants	2	60,100	102,198	186,327
All other food and drinking places	2	94,852	128,390	174,727
Automotive repair and maintenance, except car washes	1	51,572	60,618	88,512
Car washes	0	25,424	40,337	57,947
Electronic and precision equipment repair and maintenance	1	51,194	78,992	110,525
Commercial and industrial machinery and equipment repair and maintenance	0	17,934	22,011	31,837
Personal and household goods repair and maintenance	0	21,302	12,650	17,348
Personal care services	1	47,261	24,520	34,669
Death care services	0	5,126	6,127	8,910
Dry-cleaning and laundry services	0	9,094	10,654	15,247
Other personal services	1	53,142	25,879	37,872
Religious organizations	2	88,357	19,708	120,295
Grantmaking, giving, and social advocacy organizations	0	47,534	96,940	136,598

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Business and professional associations	0	34,404	42,215	59,634
Labor and civic organizations	1	30,823	55,243	86,403
Private households	1	19,180	19,180	19,180
Postal service	0	44,143	44,200	48,392
Federal electric utilities	0	0	0	0
Other federal government enterprises	35	3,387,869	1,946,193	8,137,384
State government passenger transit	0	21,949	(18,948)	13,924
State government electric utilities	1	95,213	125,705	394,594
Other state government enterprises	0	14,340	13,190	21,393
Local government passenger transit	0	25,255	(30,206)	1,976
Local government electric utilities	0	41	82	173
Other local government enterprises	1	71,428	78,700	176,469
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	4	396,802	753,677	1,575,914

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 35. North Carolina

**Table 437: Detailed NASA Impacts by Types of Impact, North Carolina.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>408</i>	<i>27,914,679</i>	<i>45,928,423</i>	<i>83,991,253</i>
Oilseed farming	0	51,883	59,809	108,268
Grain farming	0	14,550	19,200	66,390
Vegetable and melon farming	0	9,275	9,988	31,512
Fruit farming	0	2,746	2,972	8,303
Tree nut farming	0	76	77	132
Greenhouse, nursery, and floriculture production	0	7,945	8,407	23,189
Tobacco farming	0	19,609	13,977	35,965
Cotton farming	0	849	873	2,433
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	5,052	4,788	13,709
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2,329	3,137	13,843
Dairy cattle and milk production	0	1,410	1,460	13,239
Poultry and egg production	0	8,665	8,156	155,111
Animal production, except cattle and poultry and eggs	1	60,331	96,013	156,438
Forestry, forest products, and timber tract production	0	1,009	1,102	1,460
Commercial logging	0	6,830	7,021	12,311
Commercial fishing	0	1,139	3,713	4,239
Commercial hunting and trapping	0	577	1,967	2,224
Support activities for agriculture and forestry	1	36,732	36,237	43,505
Oil and gas extraction	0	1,339	818	56,335
Coal mining	0	114	203	607
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	73	117	389
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	523	805	1,761
Stone mining and quarrying	0	5,252	8,168	17,323
Sand and gravel mining	0	1,374	1,716	3,463

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Other clay, ceramic, refractory minerals mining	0	329	404	841
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	430	511	1,197
Drilling oil and gas wells	0	1	1	6
Support activities for oil and gas operations	0	8	8	72
Metal mining services	0	19	13	1,000
Other nonmetallic minerals services	0	3	3	76
Electric power generation - Hydroelectric	0	1,502	4,013	9,165
Electric power generation - Fossil fuel	0	15,241	74,092	170,304
Electric power generation - Nuclear	0	42,914	116,895	240,222
Electric power generation - Solar	0	10,505	18,814	36,964
Electric power generation - Wind	0	379	2,045	4,458
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	2,461	5,117	15,557
Electric power generation - All other	0	291	160	381
Electric power transmission and distribution	1	67,370	307,286	724,816
Natural gas distribution	0	13,934	50,989	107,516
Water, sewage and other systems	0	4,997	10,630	19,010
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0



## APPENDIX

Construction of other new nonresidential structures	0	22,109	11,270	28,555
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	115,355	145,211	383,414
Maintenance and repair construction of residential structures	1	32,481	44,510	118,650
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	94	58	152
Dog and cat food manufacturing	0	1,275	6,139	26,608
Other animal food manufacturing	0	5,478	10,336	72,460
Flour milling	0	2,096	4,809	40,944
Rice milling	0	0	0	0
Malt manufacturing	0	588	1,516	14,278
Wet corn milling	0	2,978	8,837	45,433
Soybean and other oilseed processing	0	745	4,832	35,413
Fats and oils refining and blending	0	246	558	5,009
Breakfast cereal manufacturing	0	3,077	8,790	25,138
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	591	968	5,421
Chocolate and confectionery manufacturing from cacao beans	0	51	136	1,223
Confectionery manufacturing from purchased chocolate	0	200	314	2,376
Frozen fruits, juices and vegetables manufacturing	0	71	151	1,126
Frozen specialties manufacturing	0	776	1,272	5,899
Canned fruits and vegetables manufacturing	0	2,541	5,174	23,431
Canned specialties	0	2,830	7,878	30,297
Dehydrated food products manufacturing	0	68	141	667
Cheese manufacturing	0	79	148	3,812

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	20	61	983
Fluid milk manufacturing	0	1,218	2,185	16,865
Creamery butter manufacturing	0	47	278	3,872
Ice cream and frozen dessert manufacturing	0	640	1,105	5,204
Frozen cakes and other pastries manufacturing	0	4,312	6,203	12,776
Poultry processing	1	33,234	46,639	231,192
Animal, except poultry, slaughtering	0	20,124	30,369	248,850
Meat processed from carcasses	0	5,950	6,825	58,741
Rendering and meat byproduct processing	0	1,229	1,144	6,572
Seafood product preparation and packaging	0	1,423	1,937	13,907
Bread and bakery product, except frozen, manufacturing	0	15,250	21,284	56,524
Cookie and cracker manufacturing	0	15,035	22,367	48,962
Dry pasta, mixes, and dough manufacturing	0	361	973	3,977
Tortilla manufacturing	0	975	1,256	4,763
Roasted nuts and peanut butter manufacturing	0	1,684	4,157	15,440
Other snack food manufacturing	0	4,093	9,932	37,079
Coffee and tea manufacturing	0	1,391	2,965	14,563
Flavoring syrup and concentrate manufacturing	0	340	3,061	7,399
Mayonnaise, dressing, and sauce manufacturing	0	25	58	537
Spice and extract manufacturing	0	815	1,364	6,225
All other food manufacturing	0	3,943	5,806	31,185
Bottled and canned soft drinks & water	0	7,555	15,084	66,388
Manufactured ice	0	1,068	866	1,899
Breweries	0	18,519	33,097	79,039
Wineries	0	1,308	1,603	4,151
Distilleries	0	3,824	7,660	13,596
Tobacco product manufacturing	0	5,341	160,766	246,637
Fiber, yarn, and thread mills	1	40,000	66,990	270,054
Broadwoven fabric mills	0	14,987	24,569	74,671
Narrow fabric mills and schiffli machine embroidery	0	1,872	2,175	6,439
Nonwoven fabric mills	0	14,574	30,932	88,750
Knit fabric mills	0	3,910	5,782	16,327

## APPENDIX

Textile and fabric finishing mills	0	21,592	30,593	103,997
Fabric coating mills	0	650	947	3,957
Carpet and rug mills	0	2,706	5,371	18,879
Curtain and linen mills	0	688	1,090	3,660
Textile bag and canvas mills	0	976	1,296	3,698
Rope, cordage, twine, tire cord and tire fabric mills	0	2,149	4,019	10,250
Other textile product mills	0	2,290	2,994	8,031
Hosiery and sock mills	0	2,553	2,628	7,188
Other apparel knitting mills	0	176	226	658
Cut and sew apparel contractors	0	163	195	648
Mens and boys cut and sew apparel manufacturing	0	684	841	3,551
Womens and girls cut and sew apparel manufacturing	0	102	159	1,011
Other cut and sew apparel manufacturing	0	469	581	1,609
Apparel accessories and other apparel manufacturing	0	269	340	1,196
Leather and hide tanning and finishing	0	40	71	510
Footwear manufacturing	0	213	248	1,117
Other leather and allied product manufacturing	0	106	114	451
Sawmills	0	6,552	10,381	34,935
Wood preservation	0	367	1,318	3,949
Veneer and plywood manufacturing	0	2,280	3,714	11,945
Engineered wood member and truss manufacturing	0	1,073	1,583	4,596
Reconstituted wood product manufacturing	0	1,302	3,895	11,551
Wood windows and door manufacturing	0	12,756	19,039	37,923
Cut stock, resawing lumber, and planing	0	944	1,797	5,081
Other millwork, including flooring	0	2,970	4,628	11,576
Wood container and pallet manufacturing	0	3,971	4,953	13,235
Manufactured home (mobile home) manufacturing	0	10	20	49
Prefabricated wood building manufacturing	0	383	455	1,584
All other miscellaneous wood product manufacturing	0	3,361	4,494	10,818

## APPENDIX

Pulp mills	0	1,229	1,770	6,971
Paper mills	0	11,224	22,362	87,649
Paperboard mills	0	3,700	7,695	32,617
Paperboard container manufacturing	0	16,386	22,661	104,606
Paper bag and coated and treated paper manufacturing	0	10,351	16,362	64,047
Stationery product manufacturing	0	760	1,004	4,030
Sanitary paper product manufacturing	0	5,700	13,998	49,776
All other converted paper product manufacturing	0	3,318	4,498	15,565
Printing	1	40,326	66,071	135,458
Support activities for printing	0	4,094	6,698	9,958
Petroleum refineries	0	71	1,425	10,368
Asphalt paving mixture and block manufacturing	0	797	2,078	6,453
Asphalt shingle and coating materials manufacturing	0	289	1,879	3,458
Petroleum lubricating oil and grease manufacturing	0	2,037	15,086	31,061
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	290	3,737	13,923
Industrial gas manufacturing	0	431	1,555	3,925
Synthetic dye and pigment manufacturing	0	1,252	3,683	8,986
Other basic inorganic chemical manufacturing	0	1,861	5,653	16,022
Other basic organic chemical manufacturing	0	5,349	14,722	80,150
Plastics material and resin manufacturing	0	4,712	10,035	56,709
Synthetic rubber manufacturing	0	734	1,493	6,257
Artificial and synthetic fibers and filaments manufacturing	0	10,230	19,578	94,199
Nitrogenous fertilizer manufacturing	0	417	1,339	2,984
Phosphatic fertilizer manufacturing	0	1,240	4,601	11,537
Fertilizer mixing	0	211	475	1,348
Pesticide and other agricultural chemical manufacturing	0	4,906	23,770	56,341
Medicinal and botanical manufacturing	0	778	1,822	4,148

## APPENDIX

Pharmaceutical preparation manufacturing	0	41,774	248,189	552,683
In-vitro diagnostic substance manufacturing	0	42	80	198
Biological product (except diagnostic) manufacturing	0	8,581	30,649	53,619
Paint and coating manufacturing	0	3,653	9,588	28,019
Adhesive manufacturing	0	1,504	3,202	10,568
Soap and other detergent manufacturing	0	8,104	39,350	90,708
Polish and other sanitation good manufacturing	0	6,043	15,334	42,251
Surface active agent manufacturing	0	2,183	9,770	19,233
Toilet preparation manufacturing	0	8,452	40,238	83,237
Printing ink manufacturing	0	1,698	1,837	7,535
Explosives manufacturing	0	5	6	26
Custom compounding of purchased resins	0	2,065	4,933	18,101
Photographic film and chemical manufacturing	0	5,744	18,065	53,584
Other miscellaneous chemical product manufacturing	0	4,089	7,705	21,201
Plastics packaging materials and unlaminated film and sheet manufacturing	0	10,348	18,893	51,313
Unlaminated plastics profile shape manufacturing	0	2,640	6,748	21,440
Plastics pipe and pipe fitting manufacturing	0	1,758	4,840	12,542
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,559	3,247	8,190
Polystyrene foam product manufacturing	0	6,270	11,714	39,155
Urethane and other foam product (except polystyrene) manufacturing	0	5,338	9,585	37,864
Plastics bottle manufacturing	0	1,101	2,047	7,672
Other plastics product manufacturing	0	27,440	44,385	127,821
Tire manufacturing	0	10,275	15,364	58,623
Rubber and plastics hoses and belting manufacturing	0	2,657	4,692	11,664
Other rubber product manufacturing	0	7,267	11,826	37,921

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	1,136	1,362	3,308
Brick, tile, and other structural clay product manufacturing	0	2,198	3,688	9,295
Flat glass manufacturing	0	712	1,430	3,795
Other pressed and blown glass and glassware manufacturing	0	8,832	12,800	26,979
Glass container manufacturing	0	2,962	5,085	12,185
Glass product manufacturing made of purchased glass	0	1,632	2,658	7,521
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	5,762	9,308	34,541
Concrete block and brick manufacturing	0	2,508	4,491	9,786
Concrete pipe manufacturing	0	376	605	1,796
Other concrete product manufacturing	0	2,279	3,280	8,399
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	1,582	3,963	10,864
Abrasive product manufacturing	0	831	2,505	5,124
Cut stone and stone product manufacturing	0	2,080	2,415	5,352
Ground or treated mineral and earth manufacturing	0	804	2,296	5,624
Mineral wool manufacturing	0	42	87	271
Miscellaneous nonmetallic mineral products manufacturing	0	446	1,052	2,556
Iron and steel mills and ferroalloy manufacturing	0	31,742	47,296	257,706
Iron, steel pipe and tube manufacturing from purchased steel	0	294	409	2,016
Rolled steel shape manufacturing	0	514	909	4,626
Steel wire drawing	0	846	1,136	4,579
Alumina refining and primary aluminum production	0	9	21	261
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	1,804	2,974	14,502
Other aluminum rolling, drawing and extruding	0	223	295	1,425
Nonferrous metal (exc aluminum) smelting and refining	0	58	183	668

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	2,983	3,938	32,790
Nonferrous metal, except copper and aluminum, shaping	0	3,069	3,774	12,008
Secondary processing of other nonferrous metals	0	114	301	1,497
Ferrous metal foundries	0	1,320	2,004	4,299
Nonferrous metal foundries	0	1,541	2,123	5,338
Custom roll forming	0	214	377	1,641
Crown and closure manufacturing and metal stamping	0	1,837	2,977	8,101
Iron and steel forging	0	1,389	2,107	6,805
Nonferrous forging	0	233	317	1,082
Cutlery, utensil, pot, and pan manufacturing	0	217	839	1,803
Handtool manufacturing	0	3,504	6,547	11,107
Prefabricated metal buildings and components manufacturing	0	1,015	1,613	4,616
Fabricated structural metal manufacturing	0	6,615	11,136	32,955
Plate work manufacturing	0	1,866	1,960	6,317
Metal window and door manufacturing	0	2,205	3,851	9,405
Sheet metal work manufacturing	0	5,076	7,135	17,862
Ornamental and architectural metal work manufacturing	0	1,032	1,521	4,281
Power boiler and heat exchanger manufacturing	1	43,339	67,069	178,750
Metal tank (heavy gauge) manufacturing	0	363	476	1,420
Metal cans manufacturing	0	794	2,162	7,047
Metal barrels, drums and pails manufacturing	0	551	738	2,753
Hardware manufacturing	0	2,969	5,669	15,631
Spring and wire product manufacturing	0	1,109	1,684	5,388
Machine shops	0	11,743	14,342	30,137
Turned product and screw, nut, and bolt manufacturing	0	1,193	1,846	4,461
Metal heat treating	0	751	1,336	3,157
Metal coating and nonprecious engraving	0	1,986	4,128	9,030
Electroplating, anodizing, and coloring metal	0	1,296	1,511	3,481

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	2,645	4,931	12,421
Plumbing fixture fitting and trim manufacturing	0	1,859	7,241	19,550
Ball and roller bearing manufacturing	0	1,257	2,736	6,368
Small arms ammunition manufacturing	0	152	488	1,668
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	1,006	3,107	5,948
Fabricated pipe and pipe fitting manufacturing	0	1,345	1,654	4,223
Other fabricated metal manufacturing	0	2,709	3,956	9,970
Farm machinery and equipment manufacturing	0	141	221	989
Lawn and garden equipment manufacturing	0	1,047	2,151	8,150
Construction machinery manufacturing	0	484	1,108	2,912
Mining machinery and equipment manufacturing	0	8	10	27
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	22	26	78
Food product machinery manufacturing	0	24	30	84
Sawmill, woodworking, and paper machinery	0	389	439	1,235
Printing machinery and equipment manufacturing	0	84	99	321
All other industrial machinery manufacturing	0	166	228	633
Optical instrument and lens manufacturing	0	18	31	79
Photographic and photocopying equipment manufacturing	0	33	53	174
Other commercial service industry machinery manufacturing	0	628	1,317	3,432
Air purification and ventilation equipment manufacturing	0	676	1,071	2,870



## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	616	1,003	3,401
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	2,952	6,299	15,609
Industrial mold manufacturing	0	320	378	745
Special tool, die, jig, and fixture manufacturing	0	205	278	524
Cutting tool and machine tool accessory manufacturing	0	394	443	1,045
Machine tool manufacturing	0	153	176	457
Rolling mill and other metalworking machinery manufacturing	0	17	22	54
Turbine and turbine generator set units manufacturing	0	208	306	1,026
Speed changer, industrial high-speed drive, and gear manufacturing	0	485	782	2,309
Mechanical power transmission equipment manufacturing	0	1,218	2,003	4,306
Other engine equipment manufacturing	0	2,479	5,370	19,746
Pump and pumping equipment manufacturing	0	443	878	1,992
Air and gas compressor manufacturing	0	185	322	760
Elevator and moving stairway manufacturing	0	9	16	49
Conveyor and conveying equipment manufacturing	0	77	82	250
Overhead cranes, hoists, and monorail systems manufacturing	0	8	17	56
Industrial truck, trailer, and stacker manufacturing	0	245	424	1,296
Power-driven handtool manufacturing	0	346	1,055	2,829
Welding and soldering equipment manufacturing	0	16	23	71
Packaging machinery manufacturing	0	61	100	233
Industrial process furnace and oven manufacturing	0	38	50	110
Fluid power cylinder and actuator manufacturing	0	368	552	1,355

## APPENDIX

Fluid power pump and motor manufacturing	0	135	229	644
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	189	260	730
Electronic computer manufacturing	0	4,226	13,127	24,280
Computer storage device manufacturing	0	343	1,475	4,776
Computer terminals and other computer peripheral equipment manufacturing	0	60,800	147,378	245,856
Telephone apparatus manufacturing	0	799	2,022	4,487
Broadcast and wireless communications equipment manufacturing	0	210	382	763
Other communications equipment manufacturing	0	169	360	1,049
Audio and video equipment manufacturing	0	231	568	1,818
Printed circuit assembly (electronic assembly) manufacturing	0	1,458	2,924	9,469
Bare printed circuit board manufacturing	0	569	872	1,502
Semiconductor and related device manufacturing	0	11,913	28,133	69,007
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	312	542	1,386
Electronic connector manufacturing	0	1,989	3,729	7,417
Other electronic component manufacturing	0	503	641	2,202
Electromedical and electrotherapeutic apparatus manufacturing	0	111	334	661
Search, detection, and navigation instruments manufacturing	0	5	12	24
Automatic environmental control manufacturing	0	925	1,461	3,288
Industrial process variable instruments manufacturing	0	3,620	6,458	9,559
Totalizing fluid meter and counting device manufacturing	0	251	772	1,590

## APPENDIX

Electricity and signal testing instruments manufacturing	0	6,303	11,364	27,232
Analytical laboratory instrument manufacturing	1	88,685	212,325	436,050
Irradiation apparatus manufacturing	0	0	1	3
Watch, clock, and other measuring and controlling device manufacturing	0	263	626	1,434
Blank magnetic and optical recording media manufacturing	0	3	28	243
Software and other prerecorded and record reproducing	0	2,089	3,751	5,565
Electric lamp bulb and part manufacturing	0	3,865	7,707	12,863
Lighting fixture manufacturing	0	931	1,660	4,275
Small electrical appliance manufacturing	0	33	85	236
Household cooking appliance manufacturing	0	1,571	4,686	9,128
Household refrigerator and home freezer manufacturing	0	1,535	5,687	10,237
Household laundry equipment manufacturing	0	2,828	7,462	19,619
Other major household appliance manufacturing	0	537	1,813	3,199
Power, distribution, and specialty transformer manufacturing	0	237	410	1,013
Motor and generator manufacturing	0	2,386	4,414	12,113
Switchgear and switchboard apparatus manufacturing	0	1,892	3,754	7,859
Relay and industrial control manufacturing	0	6,751	10,205	24,246
Storage battery manufacturing	0	2,300	4,343	10,715
Primary battery manufacturing	0	5,428	18,639	44,291
Fiber optic cable manufacturing	0	6,585	12,439	45,566
Other communication and energy wire manufacturing	0	710	1,529	4,387
Wiring device manufacturing	0	4,412	11,019	25,991
Carbon and graphite product manufacturing	0	3,604	6,021	17,649
All other miscellaneous electrical equipment and component manufacturing	0	100	122	360

## APPENDIX

Automobile manufacturing	0	117	506	1,874
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	253	652	2,465
Motor vehicle body manufacturing	0	950	1,301	4,349
Truck trailer manufacturing	0	3	4	17
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	3,076	3,397	12,679
Motor vehicle gasoline engine and engine parts manufacturing	0	2,258	3,444	17,916
Motor vehicle electrical and electronic equipment manufacturing	0	999	1,473	7,157
Motor vehicle transmission and power train parts manufacturing	0	21,711	34,959	159,123
Motor vehicle seating and interior trim manufacturing	0	52	78	615
Motor vehicle metal stamping	0	1,112	1,513	4,772
Other motor vehicle parts manufacturing	0	19,876	32,183	132,671
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3,767	6,210	25,414
Aircraft manufacturing	0	58	424	606
Aircraft engine and engine parts manufacturing	0	569	5,052	6,075
Other aircraft parts and auxiliary equipment manufacturing	0	33,570	143,859	206,352
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	31	137	316
Ship building and repairing	0	4	9	22
Boat building	0	4,719	13,054	28,566
Motorcycle, bicycle, and parts manufacturing	0	199	3,052	3,945
Military armored vehicle, tank, and tank component manufacturing	0	14	114	217
All other transportation equipment manufacturing	0	2,858	15,681	24,334

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	4,109	5,989	13,917
Upholstered household furniture manufacturing	0	16,712	23,355	70,256
Nonupholstered wood household furniture manufacturing	0	2,345	2,754	7,443
Other household nonupholstered furniture manufacturing	0	818	1,310	4,450
Institutional furniture manufacturing	0	62	68	241
Wood office furniture manufacturing	0	71	108	266
Custom architectural woodwork and millwork	0	82	79	249
Office furniture, except wood, manufacturing	0	145	263	723
Showcase, partition, shelving, and locker manufacturing	0	1,355	1,985	5,694
Mattress manufacturing	0	2,392	5,456	16,420
Blind and shade manufacturing	0	326	342	1,123
Surgical and medical instrument manufacturing	0	1,761	3,796	8,583
Surgical appliance and supplies manufacturing	0	3,101	6,755	17,257
Dental equipment and supplies manufacturing	0	174	320	688
Ophthalmic goods manufacturing	0	35	83	191
Dental laboratories	0	941	907	1,821
Jewelry and silverware manufacturing	0	1,167	1,923	5,810
Sporting and athletic goods manufacturing	0	392	730	4,024
Doll, toy, and game manufacturing	0	(150)	11	1,897
Office supplies (except paper) manufacturing	0	849	1,214	3,308
Sign manufacturing	0	1,395	1,057	5,793
Gasket, packing, and sealing device manufacturing	0	825	1,113	3,043
Musical instrument manufacturing	0	156	165	851
Fasteners, buttons, needles, and pins manufacturing	0	1,301	1,702	3,312
Broom, brush, and mop manufacturing	0	1,264	2,163	6,703
Burial casket manufacturing	0	417	552	1,710

## APPENDIX

All other miscellaneous manufacturing	0	14,798	18,248	40,737
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	17,653	43,588	98,641
Wholesale - Professional and commercial equipment and supplies	1	101,841	182,904	301,217
Wholesale - Household appliances and electrical and electronic goods	0	40,388	96,298	190,591
Wholesale - Machinery, equipment, and supplies	1	50,254	93,097	157,446
Wholesale - Other durable goods merchant wholesalers	1	85,638	140,583	275,774
Wholesale - Drugs and druggists' sundries	0	44,281	145,453	278,994
Wholesale - Grocery and related product wholesalers	1	64,487	90,524	180,698
Wholesale - Petroleum and petroleum products	0	9,158	155,016	177,395
Wholesale - Other nondurable goods merchant wholesalers	1	107,574	236,076	433,434
Wholesale - Wholesale electronic markets and agents and brokers	1	117,857	57,411	66,019
Retail - Motor vehicle and parts dealers	2	91,428	128,183	190,931
Retail - Furniture and home furnishings stores	1	41,858	51,955	90,580
Retail - Electronics and appliance stores	1	48,080	47,990	82,873
Retail - Building material and garden equipment and supplies stores	1	50,841	86,589	131,827
Retail - Food and beverage stores	4	110,196	151,230	276,019
Retail - Health and personal care stores	2	91,723	107,810	170,455
Retail - Gasoline stores	1	46,129	71,860	143,758
Retail - Clothing and clothing accessories stores	2	52,194	77,830	182,536
Retail - Sporting goods, hobby, musical instrument and book stores	1	32,798	40,720	70,522
Retail - General merchandise stores	5	144,619	189,325	326,796
Retail - Miscellaneous store retailers	3	54,452	61,921	112,794

## APPENDIX

Retail - Nonstore retailers	3	69,070	207,362	403,688
Air transportation	1	68,105	138,606	224,862
Rail transportation	0	11,631	19,351	43,877
Water transportation	0	1,100	2,089	18,201
Truck transportation	2	133,790	161,367	355,320
Transit and ground passenger transportation	2	27,458	33,854	59,920
Pipeline transportation	0	6,180	16,030	21,368
Scenic and sightseeing transportation and support activities for transportation	2	128,088	143,075	294,359
Couriers and messengers	1	43,410	57,770	110,917
Warehousing and storage	2	84,878	96,973	200,012
Newspaper publishers	0	15,150	22,350	31,445
Periodical publishers	0	8,627	11,916	21,104
Book publishers	0	7,330	19,757	37,365
Directory, mailing list, and other publishers	0	2,441	6,563	12,329
Greeting card publishing	0	2,104	7,149	11,842
Software publishers	1	225,519	503,840	594,327
Motion picture and video industries	0	14,925	26,843	80,995
Sound recording industries	0	1,748	9,036	15,634
Radio and television broadcasting	1	44,687	17,990	157,595
Cable and other subscription programming	0	15,486	93,684	262,037
Wired telecommunications carriers	1	76,354	145,342	344,876
Wireless telecommunications carriers (except satellite)	0	29,933	112,721	388,501
Satellite, telecommunications resellers, and all other telecommunications	0	27,756	30,180	70,994
Data processing, hosting, and related services	1	97,241	208,116	408,221
News syndicates, libraries, archives and all other information services	0	3,593	5,452	9,074
Internet publishing and broadcasting and web search portals	0	33,163	83,283	260,568
Nondepository credit intermediation and related activities	1	111,990	190,923	280,945
Securities and commodity contracts intermediation and brokerage	1	192,479	185,422	374,998

## APPENDIX

Monetary authorities and depository credit intermediation	3	345,944	1,440,703	1,815,223
Other financial investment activities	3	178,378	195,969	410,323
Direct life insurance carriers	0	72,823	132,440	189,552
Insurance carriers, except direct life	1	143,724	422,083	936,951
Insurance agencies, brokerages, and related activities	3	191,354	276,793	681,642
Funds, trusts, and other financial vehicles	1	24,738	31,015	231,274
Other real estate	23	540,628	1,673,429	4,338,938
Tenant-occupied housing	1	26,106	398,878	446,716
Owner-occupied dwellings	0	0	1,563,318	1,975,234
Automotive equipment rental and leasing	0	18,865	63,099	96,048
General and consumer goods rental except video tapes and discs	1	29,725	38,156	61,867
Video tape and disc rental	0	6,576	10,757	17,839
Commercial and industrial machinery and equipment rental and leasing	1	49,006	117,021	179,995
Lessors of nonfinancial intangible assets	0	5,481	99,093	122,280
Legal services	5	401,677	659,251	1,002,704
Accounting, tax preparation, bookkeeping, and payroll services	3	180,898	263,311	363,568
Architectural, engineering, and related services	6	519,356	649,181	1,163,317
Specialized design services	1	35,392	38,995	48,225
Custom computer programming services	1	90,077	109,603	147,763
Computer systems design services	1	98,230	108,018	142,768
Other computer related services, including facilities management	0	30,348	88,444	128,642
Management consulting services	8	661,591	666,634	1,030,078
Environmental and other technical consulting services	1	72,964	66,121	96,389
Scientific research and development services	84	8,339,110	13,970,766	24,558,551
Advertising, public relations, and related services	2	124,731	188,405	320,296
Photographic services	1	28,464	14,652	26,397
Veterinary services	0	18,517	29,075	45,230



## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	22	1,263,441	1,196,623	1,761,923
Management of companies and enterprises	8	939,349	1,145,493	1,624,347
Office administrative services	2	154,605	42,135	130,745
Facilities support services	2	97,501	127,650	292,999
Employment services	14	610,997	932,811	1,440,786
Business support services	3	98,730	84,528	157,177
Travel arrangement and reservation services	0	16,125	21,711	63,558
Investigation and security services	2	58,892	61,890	95,550
Services to buildings	6	140,367	151,963	265,511
Landscape and horticultural services	3	81,669	89,613	158,287
Other support services	1	38,522	50,494	107,659
Waste management and remediation services	1	41,650	83,660	145,926
Elementary and secondary schools	1	53,131	44,692	56,523
Junior colleges, colleges, universities, and professional schools	2	86,613	110,306	154,731
Other educational services	5	140,319	128,034	259,113
Offices of physicians	5	488,367	573,235	842,432
Offices of dentists	2	110,366	137,051	201,184
Offices of other health practitioners	2	121,133	113,843	158,370
Outpatient care centers	1	60,541	64,539	131,051
Medical and diagnostic laboratories	0	40,683	61,136	95,344
Home health care services	3	134,997	99,951	142,191
Other ambulatory health care services	1	27,299	29,937	51,771
Hospitals	7	573,286	691,945	1,304,403
Nursing and community care facilities	3	120,193	140,381	252,132
Residential mental retardation, mental health, substance abuse and other facilities	1	36,419	39,223	64,095
Individual and family services	3	81,115	77,168	113,079
Child day care services	2	47,090	59,879	82,168
Community food, housing, and other relief services, including rehabilitation services	0	15,140	17,979	38,355
Performing arts companies	0	8,572	12,202	29,398

## APPENDIX

Commercial Sports Except Racing	1	50,945	53,787	82,359
Racing and Track Operation	0	3,820	8,003	10,919
Independent artists, writers, and performers	2	39,934	44,481	57,382
Promoters of performing arts and sports and agents for public figures	0	15,945	34,480	77,209
Museums, historical sites, zoos, and parks	0	5,194	5,864	9,007
Amusement parks and arcades	0	3,322	10,924	13,985
Gambling industries (except casino hotels)	1	21,230	42,202	72,690
Other amusement and recreation industries	1	25,165	29,019	54,219
Fitness and recreational sports centers	1	15,576	25,886	44,837
Bowling centers	0	2,297	3,377	6,440
Hotels and motels, including casino hotels	1	44,655	77,817	126,981
Other accommodations	0	18,704	23,793	31,757
Full-service restaurants	10	230,926	330,752	610,016
Limited-service restaurants	8	159,615	241,828	573,174
All other food and drinking places	5	180,957	227,244	339,517
Automotive repair and maintenance, except car washes	2	120,954	140,622	217,161
Car washes	1	63,935	89,889	140,173
Electronic and precision equipment repair and maintenance	3	256,191	350,158	556,625
Commercial and industrial machinery and equipment repair and maintenance	1	48,171	58,620	91,986
Personal and household goods repair and maintenance	1	57,229	43,273	61,604
Personal care services	3	72,587	59,753	79,155
Death care services	0	7,474	9,332	15,801
Dry-cleaning and laundry services	1	17,802	19,320	28,911
Other personal services	3	67,439	57,967	80,246
Religious organizations	1	30,484	14,831	62,604
Grantmaking, giving, and social advocacy organizations	0	9,379	26,956	46,761
Business and professional associations	1	29,498	43,872	86,570
Labor and civic organizations	1	16,636	38,568	76,685
Private households	1	18,453	18,453	18,453
Postal service	1	84,712	84,806	93,789
Federal electric utilities	0	598	1,237	5,673

## APPENDIX

Other federal government enterprises	0	4,265	2,352	19,689
State government passenger transit	0	297	(19)	1,153
State government electric utilities	0	0	0	0
Other state government enterprises	0	4,619	5,318	13,373
Local government passenger transit	0	10,251	(1,712)	9,382
Local government electric utilities	0	1,592	4,870	9,165
Other local government enterprises	1	35,934	74,970	177,466
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	26	3,554,071	5,289,745	9,879,599

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 438: Detailed M2M Program Impacts by Types of Impact, North Carolina.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	53	4,065,013	6,890,711	12,094,150
Oilseed farming	0	6,832	11,519	23,741
Grain farming	0	1,815	2,664	8,403
Vegetable and melon farming	0	1,376	1,554	4,626
Fruit farming	0	529	579	1,527
Tree nut farming	0	23	23	39

## APPENDIX

Greenhouse, nursery, and floriculture production	0	1,531	1,681	4,534
Tobacco farming	0	4,139	3,486	9,339
Cotton farming	0	101	104	287
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	610	601	1,673
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	326	424	1,658
Dairy cattle and milk production	0	239	255	2,022
Poultry and egg production	0	1,046	1,004	18,723
Animal production, except cattle and poultry and eggs	0	5,887	10,464	17,532
Forestry, forest products, and timber tract production	0	188	205	260
Commercial logging	0	1,146	1,175	1,919
Commercial fishing	0	215	527	607
Commercial hunting and trapping	0	85	273	273
Support activities for agriculture and forestry	0	5,185	5,073	6,071
Oil and gas extraction	0	122	98	6,530
Coal mining	0	10	15	50
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	7	9	33
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	68	82	193
Stone mining and quarrying	0	1,126	876	1,904
Sand and gravel mining	0	411	256	433
Other clay, ceramic, refractory minerals mining	0	43	42	87
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	119	76	165
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	1	1	6
Metal mining services	0	2	2	145

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Other nonmetallic minerals services	0	0	0	8
Electric power generation - Hydroelectric	0	316	761	1,618
Electric power generation - Fossil fuel	0	2,339	10,835	23,858
Electric power generation - Nuclear	0	6,447	18,325	36,661
Electric power generation - Solar	0	1,349	2,325	4,420
Electric power generation - Wind	0	47	245	502
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	698	1,122	3,394
Electric power generation - All other	0	86	36	75
Electric power transmission and distribution	0	9,043	42,057	96,118
Natural gas distribution	0	2,255	8,540	15,812
Water, sewage and other systems	0	875	1,621	2,604
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	13,446	17,000	43,598

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Maintenance and repair construction of residential structures	0	4,697	6,476	16,704
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	13	8	20
Dog and cat food manufacturing	0	160	797	3,315
Other animal food manufacturing	0	804	1,589	10,589
Flour milling	0	258	598	5,166
Rice milling	0	0	0	0
Malt manufacturing	0	79	227	1,623
Wet corn milling	0	506	1,629	8,435
Soybean and other oilseed processing	0	145	956	6,891
Fats and oils refining and blending	0	44	103	853
Breakfast cereal manufacturing	0	363	1,014	2,880
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	103	166	852
Chocolate and confectionery manufacturing from cacao beans	0	15	40	329
Confectionery manufacturing from purchased chocolate	0	33	51	361
Frozen fruits, juices and vegetables manufacturing	0	13	27	189
Frozen specialties manufacturing	0	135	220	959
Canned fruits and vegetables manufacturing	0	518	1,057	4,710
Canned specialties	0	434	1,191	4,572
Dehydrated food products manufacturing	0	15	30	130
Cheese manufacturing	0	13	25	649
Dry, condensed, and evaporated dairy product manufacturing	0	4	12	174
Fluid milk manufacturing	0	184	338	2,497
Creamery butter manufacturing	0	9	50	668
Ice cream and frozen dessert manufacturing	0	103	184	767
Frozen cakes and other pastries manufacturing	0	669	950	1,911
Poultry processing	0	4,036	5,980	28,060
Animal, except poultry, slaughtering	0	2,404	3,689	29,566
Meat processed from carcasses	0	880	1,024	8,534

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Rendering and meat byproduct processing	0	214	197	1,126
Seafood product preparation and packaging	0	183	259	1,659
Bread and bakery product, except frozen, manufacturing	0	2,289	3,201	8,330
Cookie and cracker manufacturing	0	2,431	3,845	7,642
Dry pasta, mixes, and dough manufacturing	0	61	160	672
Tortilla manufacturing	0	138	176	654
Roasted nuts and peanut butter manufacturing	0	299	824	2,665
Other snack food manufacturing	0	629	1,535	5,519
Coffee and tea manufacturing	0	229	496	2,310
Flavoring syrup and concentrate manufacturing	0	77	654	1,620
Mayonnaise, dressing, and sauce manufacturing	0	4	10	86
Spice and extract manufacturing	0	180	308	1,275
All other food manufacturing	0	734	1,086	5,496
Bottled and canned soft drinks & water	0	1,031	2,140	9,005
Manufactured ice	0	152	136	247
Breweries	0	2,673	4,935	11,349
Wineries	0	414	507	1,282
Distilleries	0	613	1,283	2,049
Tobacco product manufacturing	0	716	28,506	38,128
Fiber, yarn, and thread mills	0	6,098	11,419	41,224
Broadwoven fabric mills	0	1,333	2,416	7,157
Narrow fabric mills and schiffli machine embroidery	0	545	642	1,731
Nonwoven fabric mills	0	2,689	6,084	15,777
Knit fabric mills	0	993	1,501	4,188
Textile and fabric finishing mills	0	1,772	2,497	8,369
Fabric coating mills	0	148	210	799
Carpet and rug mills	0	511	1,092	3,282
Curtain and linen mills	0	122	202	633
Textile bag and canvas mills	0	147	198	545
Rope, cordage, twine, tire cord and tire fabric mills	0	221	433	1,028
Other textile product mills	0	387	515	1,301
Hosiery and sock mills	0	374	411	983
Other apparel knitting mills	0	39	48	127
Cut and sew apparel contractors	0	41	49	155

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	154	192	699
Womens and girls cut and sew apparel manufacturing	0	30	46	255
Other cut and sew apparel manufacturing	0	111	135	335
Apparel accessories and other apparel manufacturing	0	63	80	245
Leather and hide tanning and finishing	0	5	10	70
Footwear manufacturing	0	35	42	178
Other leather and allied product manufacturing	0	23	25	89
Sawmills	0	923	1,533	4,864
Wood preservation	0	40	156	443
Veneer and plywood manufacturing	0	273	455	1,464
Engineered wood member and truss manufacturing	0	132	203	574
Reconstituted wood product manufacturing	0	134	420	1,261
Wood windows and door manufacturing	0	1,541	2,383	4,615
Cut stock, resawing lumber, and planing	0	143	293	765
Other millwork, including flooring	0	386	631	1,475
Wood container and pallet manufacturing	0	520	666	1,738
Manufactured home (mobile home) manufacturing	0	1	2	5
Prefabricated wood building manufacturing	0	48	58	194
All other miscellaneous wood product manufacturing	0	477	663	1,447
Pulp mills	0	123	170	688
Paper mills	0	1,349	2,346	10,061
Paperboard mills	0	395	766	3,414
Paperboard container manufacturing	0	2,988	3,993	18,328
Paper bag and coated and treated paper manufacturing	0	1,468	2,117	8,563
Stationery product manufacturing	0	139	171	618
Sanitary paper product manufacturing	0	714	1,580	5,925



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All other converted paper product manufacturing	0	498	637	2,227
Printing	0	5,840	9,538	18,792
Support activities for printing	0	608	974	1,434
Petroleum refineries	0	11	192	1,422
Asphalt paving mixture and block manufacturing	0	100	247	715
Asphalt shingle and coating materials manufacturing	0	34	202	383
Petroleum lubricating oil and grease manufacturing	0	95	729	1,383
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	32	407	1,519
Industrial gas manufacturing	0	63	240	581
Synthetic dye and pigment manufacturing	0	207	626	1,648
Other basic inorganic chemical manufacturing	0	238	774	2,124
Other basic organic chemical manufacturing	0	669	1,860	10,486
Plastics material and resin manufacturing	0	755	1,642	9,674
Synthetic rubber manufacturing	0	150	308	1,351
Artificial and synthetic fibers and filaments manufacturing	0	2,098	3,898	18,814
Nitrogenous fertilizer manufacturing	0	72	247	507
Phosphatic fertilizer manufacturing	0	133	500	1,279
Fertilizer mixing	0	30	72	201
Pesticide and other agricultural chemical manufacturing	0	602	2,979	7,011
Medicinal and botanical manufacturing	0	186	475	910
Pharmaceutical preparation manufacturing	0	10,025	63,068	126,467
In-vitro diagnostic substance manufacturing	0	16	30	74
Biological product (except diagnostic) manufacturing	0	2,836	10,687	17,162
Paint and coating manufacturing	0	865	2,439	6,896
Adhesive manufacturing	0	267	617	1,882
Soap and other detergent manufacturing	0	1,095	6,700	12,614

## APPENDIX

Polish and other sanitation good manufacturing	0	1,028	3,074	6,950
Surface active agent manufacturing	0	229	1,205	2,131
Toilet preparation manufacturing	0	1,564	8,526	15,979
Printing ink manufacturing	0	323	354	1,423
Explosives manufacturing	0	1	1	3
Custom compounding of purchased resins	0	372	1,016	3,837
Photographic film and chemical manufacturing	0	776	2,692	7,231
Other miscellaneous chemical product manufacturing	0	606	1,217	3,373
Plastics packaging materials and unlaminated film and sheet manufacturing	0	2,432	4,394	11,695
Unlaminated plastics profile shape manufacturing	0	438	1,103	3,461
Plastics pipe and pipe fitting manufacturing	0	266	747	1,899
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	269	559	1,397
Polystyrene foam product manufacturing	0	898	1,654	5,488
Urethane and other foam product (except polystyrene) manufacturing	0	838	1,483	5,820
Plastics bottle manufacturing	0	208	382	1,404
Other plastics product manufacturing	0	4,499	7,252	19,791
Tire manufacturing	0	911	1,384	5,625
Rubber and plastics hoses and belting manufacturing	0	370	638	1,551
Other rubber product manufacturing	0	1,120	1,808	5,973
Pottery, ceramics, and plumbing fixture manufacturing	0	142	163	415
Brick, tile, and other structural clay product manufacturing	0	243	389	1,022
Flat glass manufacturing	0	93	175	486
Other pressed and blown glass and glassware manufacturing	0	1,677	2,402	5,042
Glass container manufacturing	0	438	703	1,766
Glass product manufacturing made of purchased glass	0	248	393	1,109

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Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	666	1,036	3,870
Concrete block and brick manufacturing	0	284	483	1,066
Concrete pipe manufacturing	0	36	56	171
Other concrete product manufacturing	0	267	372	960
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	135	328	914
Abrasive product manufacturing	0	238	680	1,424
Cut stone and stone product manufacturing	0	256	296	650
Ground or treated mineral and earth manufacturing	0	80	222	560
Mineral wool manufacturing	0	7	13	40
Miscellaneous nonmetallic mineral products manufacturing	0	63	139	332
Iron and steel mills and ferroalloy manufacturing	0	694	916	5,229
Iron, steel pipe and tube manufacturing from purchased steel	0	62	76	376
Rolled steel shape manufacturing	0	81	131	740
Steel wire drawing	0	162	162	743
Alumina refining and primary aluminum production	0	4	7	90
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	404	580	3,184
Other aluminum rolling, drawing and extruding	0	69	78	408
Nonferrous metal (exc aluminum) smelting and refining	0	5	14	54
Copper rolling, drawing, extruding and alloying	0	565	699	5,645
Nonferrous metal, except copper and aluminum, shaping	0	907	1,019	3,543
Secondary processing of other nonferrous metals	0	17	27	176
Ferrous metal foundries	0	264	322	775
Nonferrous metal foundries	0	383	471	1,226
Custom roll forming	0	42	74	295
Crown and closure manufacturing and metal stamping	0	351	572	1,520

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Iron and steel forging	0	296	451	1,405
Nonferrous forging	0	55	75	241
Cutlery, utensil, pot, and pan manufacturing	0	43	178	363
Handtool manufacturing	0	804	1,511	2,562
Prefabricated metal buildings and components manufacturing	0	115	184	505
Fabricated structural metal manufacturing	0	684	1,156	3,369
Plate work manufacturing	0	265	279	867
Metal window and door manufacturing	0	284	498	1,190
Sheet metal work manufacturing	0	808	1,141	2,757
Ornamental and architectural metal work manufacturing	0	131	194	520
Power boiler and heat exchanger manufacturing	0	33	53	152
Metal tank (heavy gauge) manufacturing	0	57	76	221
Metal cans manufacturing	0	114	316	1,013
Metal barrels, drums and pails manufacturing	0	90	121	419
Hardware manufacturing	0	507	971	2,604
Spring and wire product manufacturing	0	306	461	1,443
Machine shops	0	2,692	3,304	6,779
Turned product and screw, nut, and bolt manufacturing	0	370	572	1,324
Metal heat treating	0	170	301	713
Metal coating and nonprecious engraving	0	408	849	1,859
Electroplating, anodizing, and coloring metal	0	311	363	819
Valve and fittings, other than plumbing, manufacturing	0	537	996	2,480
Plumbing fixture fitting and trim manufacturing	0	277	1,106	2,840
Ball and roller bearing manufacturing	0	417	908	2,035
Small arms ammunition manufacturing	0	13	40	140
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	157	475	850

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Fabricated pipe and pipe fitting manufacturing	0	195	241	614
Other fabricated metal manufacturing	0	477	696	1,671
Farm machinery and equipment manufacturing	0	26	45	172
Lawn and garden equipment manufacturing	0	183	370	1,278
Construction machinery manufacturing	0	211	517	1,275
Mining machinery and equipment manufacturing	0	1	1	3
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	6	7	20
Food product machinery manufacturing	0	5	7	19
Sawmill, woodworking, and paper machinery	0	75	86	218
Printing machinery and equipment manufacturing	0	15	18	52
All other industrial machinery manufacturing	0	32	45	119
Optical instrument and lens manufacturing	0	5	8	19
Photographic and photocopying equipment manufacturing	0	11	19	58
Other commercial service industry machinery manufacturing	0	82	189	469
Air purification and ventilation equipment manufacturing	0	120	198	511
Heating equipment (except warm air furnaces) manufacturing	0	113	192	568
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	383	847	2,034
Industrial mold manufacturing	0	58	70	133
Special tool, die, jig, and fixture manufacturing	0	56	77	139
Cutting tool and machine tool accessory manufacturing	0	104	118	275
Machine tool manufacturing	0	33	39	95

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Rolling mill and other metalworking machinery manufacturing	0	3	3	8
Turbine and turbine generator set units manufacturing	0	33	51	141
Speed changer, industrial high-speed drive, and gear manufacturing	0	97	161	427
Mechanical power transmission equipment manufacturing	0	176	290	620
Other engine equipment manufacturing	0	421	906	3,064
Pump and pumping equipment manufacturing	0	80	170	350
Air and gas compressor manufacturing	0	28	52	118
Elevator and moving stairway manufacturing	0	2	3	8
Conveyor and conveying equipment manufacturing	0	10	10	31
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	6
Industrial truck, trailer, and stacker manufacturing	0	32	57	174
Power-driven handtool manufacturing	0	129	399	950
Welding and soldering equipment manufacturing	0	3	5	12
Packaging machinery manufacturing	0	17	29	66
Industrial process furnace and oven manufacturing	0	8	10	22
Fluid power cylinder and actuator manufacturing	0	45	70	177
Fluid power pump and motor manufacturing	0	42	77	189
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	40	57	148
Electronic computer manufacturing	0	20	61	126
Computer storage device manufacturing	0	74	318	1,011
Computer terminals and other computer peripheral equipment manufacturing	0	6,620	16,013	26,929

## APPENDIX

Telephone apparatus manufacturing	0	114	284	631
Broadcast and wireless communications equipment manufacturing	0	68	121	236
Other communications equipment manufacturing	0	23	48	149
Audio and video equipment manufacturing	0	68	165	494
Printed circuit assembly (electronic assembly) manufacturing	0	548	1,096	3,444
Bare printed circuit board manufacturing	0	98	149	276
Semiconductor and related device manufacturing	0	5,593	12,931	30,386
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	64	109	269
Electronic connector manufacturing	0	549	1,022	2,069
Other electronic component manufacturing	0	176	224	738
Electromedical and electrotherapeutic apparatus manufacturing	0	27	78	148
Search, detection, and navigation instruments manufacturing	0	1	3	5
Automatic environmental control manufacturing	0	164	254	529
Industrial process variable instruments manufacturing	0	799	1,403	2,056
Totalizing fluid meter and counting device manufacturing	0	37	116	237
Electricity and signal testing instruments manufacturing	0	2,225	4,013	9,038
Analytical laboratory instrument manufacturing	0	26,414	65,340	120,272
Irradiation apparatus manufacturing	0	0	0	1
Watch, clock, and other measuring and controlling device manufacturing	0	119	275	587
Blank magnetic and optical recording media manufacturing	0	3	19	134

## APPENDIX

Software and other prerecorded and record reproducing	0	229	411	559
Electric lamp bulb and part manufacturing	0	690	1,395	2,297
Lighting fixture manufacturing	0	148	255	644
Small electrical appliance manufacturing	0	7	17	44
Household cooking appliance manufacturing	0	225	702	1,373
Household refrigerator and home freezer manufacturing	0	224	874	1,642
Household laundry equipment manufacturing	0	424	1,165	3,050
Other major household appliance manufacturing	0	81	288	507
Power, distribution, and specialty transformer manufacturing	0	33	57	137
Motor and generator manufacturing	0	456	815	2,318
Switchgear and switchboard apparatus manufacturing	0	148	289	611
Relay and industrial control manufacturing	0	1,863	2,817	6,388
Storage battery manufacturing	0	429	766	1,920
Primary battery manufacturing	0	956	2,647	7,143
Fiber optic cable manufacturing	0	978	1,835	6,002
Other communication and energy wire manufacturing	0	104	218	609
Wiring device manufacturing	0	1,107	2,753	6,002
Carbon and graphite product manufacturing	0	217	360	1,100
All other miscellaneous electrical equipment and component manufacturing	0	20	24	69
Automobile manufacturing	0	18	69	274
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	26	67	240
Motor vehicle body manufacturing	0	129	178	612
Truck trailer manufacturing	0	0	0	2
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	373	413	1,545
Motor vehicle gasoline engine and engine parts manufacturing	0	328	501	2,751



## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	129	189	843
Motor vehicle transmission and power train parts manufacturing	0	4,069	6,694	26,374
Motor vehicle seating and interior trim manufacturing	0	6	10	76
Motor vehicle metal stamping	0	99	137	423
Other motor vehicle parts manufacturing	0	2,672	3,955	18,350
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	598	1,067	4,077
Aircraft manufacturing	0	14	102	153
Aircraft engine and engine parts manufacturing	0	1,356	11,646	15,040
Other aircraft parts and auxiliary equipment manufacturing	0	12,992	58,879	79,560
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	5	24	50
Ship building and repairing	0	1	2	4
Boat building	0	539	1,500	3,211
Motorcycle, bicycle, and parts manufacturing	0	45	655	773
Military armored vehicle, tank, and tank component manufacturing	0	2	19	31
All other transportation equipment manufacturing	0	434	2,481	3,788
Wood kitchen cabinet and countertop manufacturing	0	574	766	1,826
Upholstered household furniture manufacturing	0	3,811	5,298	15,730
Nonupholstered wood household furniture manufacturing	0	372	422	1,103
Other household nonupholstered furniture manufacturing	0	146	230	739
Institutional furniture manufacturing	0	9	10	34
Wood office furniture manufacturing	0	10	15	37

## APPENDIX

Custom architectural woodwork and millwork	0	11	11	33
Office furniture, except wood, manufacturing	0	24	40	118
Showcase, partition, shelving, and locker manufacturing	0	200	270	802
Mattress manufacturing	0	345	697	2,291
Blind and shade manufacturing	0	38	40	143
Surgical and medical instrument manufacturing	0	290	608	1,294
Surgical appliance and supplies manufacturing	0	635	1,401	3,350
Dental equipment and supplies manufacturing	0	34	62	127
Ophthalmic goods manufacturing	0	6	15	34
Dental laboratories	0	181	174	344
Jewelry and silverware manufacturing	0	190	308	895
Sporting and athletic goods manufacturing	0	58	105	561
Doll, toy, and game manufacturing	0	(29)	2	308
Office supplies (except paper) manufacturing	0	172	248	619
Sign manufacturing	0	159	123	631
Gasket, packing, and sealing device manufacturing	0	152	200	534
Musical instrument manufacturing	0	51	54	214
Fasteners, buttons, needles, and pins manufacturing	0	253	330	578
Broom, brush, and mop manufacturing	0	235	461	1,162
Burial casket manufacturing	0	40	53	161
All other miscellaneous manufacturing	0	17,480	19,651	43,482
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,622	6,474	14,650
Wholesale - Professional and commercial equipment and supplies	0	15,196	27,334	44,017
Wholesale - Household appliances and electrical and electronic goods	0	6,482	15,413	30,078
Wholesale - Machinery, equipment, and supplies	0	7,056	13,124	22,090
Wholesale - Other durable goods merchant wholesalers	0	12,369	20,329	39,560

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	6,306	20,389	38,195
Wholesale - Grocery and related product wholesalers	0	8,868	12,346	24,642
Wholesale - Petroleum and petroleum products	0	1,166	22,191	25,001
Wholesale - Other nondurable goods merchant wholesalers	0	15,506	35,149	63,242
Wholesale - Wholesale electronic markets and agents and brokers	0	16,148	7,459	8,581
Retail - Motor vehicle and parts dealers	0	12,197	17,198	25,406
Retail - Furniture and home furnishings stores	0	5,805	7,202	12,348
Retail - Electronics and appliance stores	0	6,594	6,607	11,190
Retail - Building material and garden equipment and supplies stores	0	6,853	11,674	17,559
Retail - Food and beverage stores	1	16,196	21,989	39,185
Retail - Health and personal care stores	0	12,269	14,508	22,859
Retail - Gasoline stores	0	7,039	10,205	19,278
Retail - Clothing and clothing accessories stores	0	7,476	11,059	25,176
Retail - Sporting goods, hobby, musical instrument and book stores	0	4,448	5,538	9,414
Retail - General merchandise stores	1	18,772	24,762	42,440
Retail - Miscellaneous store retailers	0	7,754	8,734	15,359
Retail - Nonstore retailers	0	10,204	30,989	57,477
Air transportation	0	9,590	20,013	31,968
Rail transportation	0	1,665	2,458	5,917
Water transportation	0	208	385	3,277
Truck transportation	0	20,478	24,202	51,886
Transit and ground passenger transportation	0	5,144	6,398	10,614
Pipeline transportation	0	617	1,725	2,348
Scenic and sightseeing transportation and support activities for transportation	0	19,237	21,767	44,810
Couriers and messengers	0	6,534	8,967	16,835
Warehousing and storage	0	13,027	14,860	30,371

## APPENDIX

Newspaper publishers	0	1,964	2,812	3,897
Periodical publishers	0	1,430	1,937	3,162
Book publishers	0	970	2,495	4,702
Directory, mailing list, and other publishers	0	275	753	1,410
Greeting card publishing	0	214	767	1,256
Software publishers	0	23,438	52,349	60,782
Motion picture and video industries	0	2,717	4,935	12,374
Sound recording industries	0	316	1,542	2,463
Radio and television broadcasting	0	8,931	3,935	23,266
Cable and other subscription programming	0	3,170	15,282	35,459
Wired telecommunications carriers	0	10,872	19,184	44,223
Wireless telecommunications carriers (except satellite)	0	5,641	17,384	58,132
Satellite, telecommunications resellers, and all other telecommunications	0	5,043	4,666	9,715
Data processing, hosting, and related services	0	14,585	29,318	54,854
News syndicates, libraries, archives and all other information services	0	654	987	1,544
Internet publishing and broadcasting and web search portals	0	6,978	16,715	45,205
Nondepository credit intermediation and related activities	0	17,159	29,645	41,068
Securities and commodity contracts intermediation and brokerage	0	28,215	26,713	50,558
Monetary authorities and depository credit intermediation	0	44,484	191,583	234,296
Other financial investment activities	0	33,849	36,151	60,363
Direct life insurance carriers	0	8,679	16,302	22,773
Insurance carriers, except direct life	0	18,799	56,767	121,274
Insurance agencies, brokerages, and related activities	0	24,823	36,096	86,214
Funds, trusts, and other financial vehicles	0	4,123	5,076	31,996
Other real estate	3	89,838	276,314	621,565
Tenant-occupied housing	0	4,269	61,500	67,881

## APPENDIX

Owner-occupied dwellings	0	0	237,320	299,850
Automotive equipment rental and leasing	0	3,317	9,106	13,281
General and consumer goods rental except video tapes and discs	0	4,519	5,434	8,226
Video tape and disc rental	0	946	1,492	2,414
Commercial and industrial machinery and equipment rental and leasing	0	4,942	10,193	15,225
Lessors of nonfinancial intangible assets	0	771	13,755	16,866
Legal services	1	57,114	97,593	144,724
Accounting, tax preparation, bookkeeping, and payroll services	0	25,071	36,633	49,342
Architectural, engineering, and related services	1	51,522	64,691	114,165
Specialized design services	0	4,988	5,507	6,673
Custom computer programming services	0	13,619	16,457	21,656
Computer systems design services	0	13,781	15,099	19,620
Other computer related services, including facilities management	0	4,681	13,133	18,232
Management consulting services	1	98,979	99,901	149,989
Environmental and other technical consulting services	0	11,307	10,337	14,840
Scientific research and development services	12	1,432,093	2,431,817	3,950,867
Advertising, public relations, and related services	0	17,030	25,595	41,520
Photographic services	0	3,598	1,947	3,317
Veterinary services	0	2,598	4,137	6,264
Marketing research and all other miscellaneous professional, scientific, and technical services	1	46,069	43,498	63,213
Management of companies and enterprises	1	141,894	174,672	239,950
Office administrative services	0	25,932	7,199	20,219
Facilities support services	0	1,808	2,393	5,177
Employment services	2	84,090	131,746	195,905
Business support services	0	12,361	10,795	19,434
Travel arrangement and reservation services	0	2,411	3,273	9,198
Investigation and security services	0	8,206	8,645	12,939
Services to buildings	1	21,195	23,013	38,268

## APPENDIX

Landscape and horticultural services	0	11,127	12,232	20,835
Other support services	0	5,096	6,694	14,165
Waste management and remediation services	0	5,841	11,811	20,310
Elementary and secondary schools	0	9,488	7,946	9,883
Junior colleges, colleges, universities, and professional schools	0	17,115	21,600	28,786
Other educational services	0	7,563	6,896	13,527
Offices of physicians	1	66,634	78,829	114,940
Offices of dentists	0	15,805	19,835	28,712
Offices of other health practitioners	0	16,575	15,703	21,794
Outpatient care centers	0	9,133	9,776	19,553
Medical and diagnostic laboratories	0	5,721	8,827	13,324
Home health care services	0	18,339	13,733	19,673
Other ambulatory health care services	0	3,876	4,277	7,276
Hospitals	1	87,360	105,007	193,172
Nursing and community care facilities	0	17,391	20,344	35,587
Residential mental retardation, mental health, substance abuse and other facilities	0	5,907	6,365	10,190
Individual and family services	0	12,832	12,422	18,096
Child day care services	0	6,985	9,013	12,069
Community food, housing, and other relief services, including rehabilitation services	0	2,557	3,074	6,338
Performing arts companies	0	1,415	1,949	4,266
Commercial Sports Except Racing	0	7,011	7,378	11,065
Racing and Track Operation	0	595	1,185	1,555
Independent artists, writers, and performers	0	6,777	7,361	9,075
Promoters of performing arts and sports and agents for public figures	0	2,608	5,167	10,825
Museums, historical sites, zoos, and parks	0	817	912	1,358
Amusement parks and arcades	0	527	1,513	1,958
Gambling industries (except casino hotels)	0	3,243	6,077	10,336
Other amusement and recreation industries	0	3,421	3,783	7,046

## APPENDIX

Fitness and recreational sports centers	0	2,431	3,775	6,449
Bowling centers	0	321	455	859
Hotels and motels, including casino hotels	0	8,111	13,529	21,747
Other accommodations	0	3,825	4,787	6,257
Full-service restaurants	1	31,906	45,969	82,977
Limited-service restaurants	1	23,253	35,023	80,080
All other food and drinking places	1	26,954	33,300	48,351
Automotive repair and maintenance, except car washes	0	18,118	20,281	31,128
Car washes	0	9,094	12,739	19,718
Electronic and precision equipment repair and maintenance	1	94,216	128,984	193,035
Commercial and industrial machinery and equipment repair and maintenance	0	6,370	7,616	11,889
Personal and household goods repair and maintenance	0	7,696	5,211	7,422
Personal care services	0	11,277	8,496	11,379
Death care services	0	1,212	1,432	2,411
Dry-cleaning and laundry services	0	2,741	2,927	4,372
Other personal services	0	10,433	7,868	11,196
Religious organizations	0	5,152	1,951	9,709
Grantmaking, giving, and social advocacy organizations	0	1,822	4,493	7,793
Business and professional associations	0	4,456	5,992	11,412
Labor and civic organizations	0	2,807	5,755	11,683
Private households	0	2,962	2,962	2,962
Postal service	0	12,099	12,114	13,370
Federal electric utilities	0	39	82	371
Other federal government enterprises	0	707	451	3,181
State government passenger transit	0	460	(31)	1,490
State government electric utilities	0	0	0	0
Other state government enterprises	0	358	401	946
Local government passenger transit	0	1,611	(338)	1,005
Local government electric utilities	0	237	662	1,214
Other local government enterprises	0	5,310	10,249	24,058

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	3	381,471	537,144	1,123,151

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 36. North Dakota

**Table 439: Detailed NASA Impacts by Types of Impact, North Dakota.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	18	1,214,490	1,757,870	3,170,496
Oilseed farming	0	(16)	10,507	43,239
Grain farming	0	208	1,733	11,346
Vegetable and melon farming	0	139	342	1,689
Fruit farming	0	1	3	11
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	11	17	70
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	99	222	1,115
All other crop farming	0	24	40	162
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(8)	410	2,515



## APPENDIX

Dairy cattle and milk production	0	6	42	403
Poultry and egg production	0	5	10	196
Animal production, except cattle and poultry and eggs	0	100	1,637	4,671
Forestry, forest products, and timber tract production	0	27	28	40
Commercial logging	0	5	5	8
Commercial fishing	0	53	44	65
Commercial hunting and trapping	0	114	76	111
Support activities for agriculture and forestry	0	616	493	589
Oil and gas extraction	0	4,074	24,630	40,439
Coal mining	0	2,525	3,765	6,403
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	3	21	61
Sand and gravel mining	0	181	291	468
Other clay, ceramic, refractory minerals mining	0	11	15	27
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(2)	32	76
Drilling oil and gas wells	0	1	3	5
Support activities for oil and gas operations	0	128	189	377
Metal mining services	0	17	116	209
Other nonmetallic minerals services	0	3	20	35
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	2,770	7,424	23,151
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	28	145	312

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	216	13	246
Electric power transmission and distribution	0	3,536	9,244	29,443
Natural gas distribution	0	1,625	3,476	7,372
Water, sewage and other systems	0	144	295	726
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	3,881	5,409	11,768
Maintenance and repair construction of residential structures	0	1,422	2,184	4,798
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	7	5	11
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	87	136	1,169
Flour milling	0	54	112	752
Rice milling	0	0	0	0
Malt manufacturing	0	34	72	312

## APPENDIX

Wet corn milling	0	367	1,019	6,283
Soybean and other oilseed processing	0	20	118	1,052
Fats and oils refining and blending	0	12	25	267
Breakfast cereal manufacturing	0	16	42	95
Beet sugar manufacturing	0	140	302	1,157
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	2	3	11
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	13	17	63
Frozen fruits, juices and vegetables manufacturing	0	115	223	842
Frozen specialties manufacturing	0	93	144	530
Canned fruits and vegetables manufacturing	0	4	8	28
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	10	17	58
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	143	238	1,223
Creamery butter manufacturing	0	16	71	350
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	30	41	86
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	85	112	1,168
Meat processed from carcasses	0	110	118	857
Rendering and meat byproduct processing	0	2	3	12
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	273	357	838
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	98	246	894
Tortilla manufacturing	0	0	0	0

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	78	203	603
Other snack food manufacturing	0	11	12	81
Coffee and tea manufacturing	0	2	2	8
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	2	3	15
All other food manufacturing	0	9	11	55
Bottled and canned soft drinks & water	0	161	350	1,770
Manufactured ice	0	3	2	10
Breweries	0	17	44	229
Wineries	0	0	0	3
Distilleries	0	4	21	91
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	19	24	113
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	1
Textile bag and canvas mills	0	30	33	85
Rope, cordage, twine, tire cord and tire fabric mills	0	1	2	14
Other textile product mills	0	2	2	10
Hosiery and sock mills	0	0	0	1
Other apparel knitting mills	0	0	0	1
Cut and sew apparel contractors	0	1	1	4
Mens and boys cut and sew apparel manufacturing	0	0	0	1
Womens and girls cut and sew apparel manufacturing	0	1	2	8
Other cut and sew apparel manufacturing	0	0	0	1
Apparel accessories and other apparel manufacturing	0	0	1	3
Leather and hide tanning and finishing	0	0	0	0

## APPENDIX

Footwear manufacturing	0	2	4	12
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	0	0	0
Wood preservation	0	3	7	35
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	17	23	66
Reconstituted wood product manufacturing	0	8	20	90
Wood windows and door manufacturing	0	444	639	1,627
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	6	7	19
Wood container and pallet manufacturing	0	47	54	130
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	7	8	25
All other miscellaneous wood product manufacturing	0	19	20	56
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	50	59	300
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	39	45	160
Printing	0	873	874	2,238
Support activities for printing	0	0	0	0
Petroleum refineries	0	1,189	5,506	49,312
Asphalt paving mixture and block manufacturing	0	0	0	0
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	2	8	16
Other basic organic chemical manufacturing	0	52	217	865
Plastics material and resin manufacturing	0	1	2	14
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	0
Pesticide and other agricultural chemical manufacturing	0	3	4	32
Medicinal and botanical manufacturing	0	2	9	20
Pharmaceutical preparation manufacturing	0	1	3	13
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	2	14	26
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	3	3	15
Soap and other detergent manufacturing	0	25	152	338
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	5	10	30
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	34	68	232
Other miscellaneous chemical product manufacturing	0	0	0	0

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	7	12	44
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	30	81	216
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	22	44	122
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	13	24	97
Other plastics product manufacturing	0	149	233	677
Tire manufacturing	0	7	9	38
Rubber and plastics hoses and belting manufacturing	0	63	111	294
Other rubber product manufacturing	0	0	0	0
Pottery, ceramics, and plumbing fixture manufacturing	0	1	1	3
Brick, tile, and other structural clay product manufacturing	0	41	77	171
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	119	212	488
Cement manufacturing	0	5	13	36
Ready-mix concrete manufacturing	0	240	416	1,232
Concrete block and brick manufacturing	0	22	45	108
Concrete pipe manufacturing	0	5	9	21
Other concrete product manufacturing	0	125	191	423
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	19	64	98
Cut stone and stone product manufacturing	0	61	72	154

## APPENDIX

Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	11	27	55
Miscellaneous nonmetallic mineral products manufacturing	0	3	9	18
Iron and steel mills and ferroalloy manufacturing	0	29	78	262
Iron, steel pipe and tube manufacturing from purchased steel	0	11	25	77
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	1	11	29
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	3	8	15
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	8	11	40
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	3	5	10
Prefabricated metal buildings and components manufacturing	0	4	5	20
Fabricated structural metal manufacturing	0	51	68	216
Plate work manufacturing	0	73	74	203
Metal window and door manufacturing	0	48	66	169



## APPENDIX

Sheet metal work manufacturing	0	8	10	26
Ornamental and architectural metal work manufacturing	0	17	21	70
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	8	9	29
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	1	2
Hardware manufacturing	0	2	3	10
Spring and wire product manufacturing	0	2	2	7
Machine shops	0	63	70	154
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	5	8	21
Electroplating, anodizing, and coloring metal	0	10	11	23
Valve and fittings, other than plumbing, manufacturing	0	0	1	2
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	9	10	30
Other fabricated metal manufacturing	0	10	12	38
Farm machinery and equipment manufacturing	0	52	112	316
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	11	40	95
Mining machinery and equipment manufacturing	0	1	2	6

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	8	13	42
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	1	1	2
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	(0)	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	3	9	19
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	5	9	32
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	1	7
Pump and pumping equipment manufacturing	0	0	1	2

## APPENDIX

Air and gas compressor manufacturing	0	0	0	1
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	1	2	7
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	1	2
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1	2	5
Electronic computer manufacturing	0	5	7	35
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	1
Audio and video equipment manufacturing	0	0	0	1
Printed circuit assembly (electronic assembly) manufacturing	0	7	9	39
Bare printed circuit board manufacturing	0	0	0	0

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Semiconductor and related device manufacturing	0	0	0	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	6	7	22
Electromedical and electrotherapeutic apparatus manufacturing	0	(0)	(0)	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	(0)	(0)	0
Industrial process variable instruments manufacturing	0	(0)	(0)	0
Totalizing fluid meter and counting device manufacturing	0	0	0	1
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	1
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0

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Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	2
Relay and industrial control manufacturing	0	(0)	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	1	1	13
Other communication and energy wire manufacturing	0	1	1	10
Wiring device manufacturing	0	3	7	27
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	2	1	23
Motor vehicle body manufacturing	0	11	10	57
Truck trailer manufacturing	0	2	1	6
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	14	14	54
Motor vehicle gasoline engine and engine parts manufacturing	0	1	1	12
Motor vehicle electrical and electronic equipment manufacturing	0	282	227	2,233
Motor vehicle transmission and power train parts manufacturing	0	47	39	380
Motor vehicle seating and interior trim manufacturing	0	2	1	17
Motor vehicle metal stamping	0	16	14	97
Other motor vehicle parts manufacturing	0	14	10	132
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	36	28	291

## APPENDIX

Aircraft manufacturing	0	0	1	4
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	2	4	8
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	5	36	86
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	23	20	59
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	17	16	48
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	3	3	11
Wood office furniture manufacturing	0	0	0	1
Custom architectural woodwork and millwork	0	0	0	1
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	1	0	2
Mattress manufacturing	0	3	2	22
Blind and shade manufacturing	0	1	1	3
Surgical and medical instrument manufacturing	0	8	9	35
Surgical appliance and supplies manufacturing	0	10	11	44

## APPENDIX

Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	3	3	6
Jewelry and silverware manufacturing	0	21	25	74
Sporting and athletic goods manufacturing	0	3	3	17
Doll, toy, and game manufacturing	0	19	18	62
Office supplies (except paper) manufacturing	0	3	3	14
Sign manufacturing	0	162	119	331
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	13	14	38
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	961	2,064	4,624
Wholesale - Professional and commercial equipment and supplies	0	1,634	2,729	4,682
Wholesale - Household appliances and electrical and electronic goods	0	1,205	2,597	5,549
Wholesale - Machinery, equipment, and supplies	0	2,263	3,799	6,443
Wholesale - Other durable goods merchant wholesalers	0	2,713	3,980	7,987
Wholesale - Drugs and druggists' sundries	0	1,040	2,597	5,283
Wholesale - Grocery and related product wholesalers	0	2,963	3,914	7,540
Wholesale - Petroleum and petroleum products	0	918	8,048	10,064
Wholesale - Other nondurable goods merchant wholesalers	0	7,212	12,383	23,644
Wholesale - Wholesale electronic markets and agents and brokers	0	526	260	301
Retail - Motor vehicle and parts dealers	0	3,721	5,421	7,991

## APPENDIX

Retail - Furniture and home furnishings stores	0	1,734	2,094	3,542
Retail - Electronics and appliance stores	0	2,107	1,956	3,436
Retail - Building material and garden equipment and supplies stores	0	2,060	3,509	5,160
Retail - Food and beverage stores	0	4,263	5,860	10,506
Retail - Health and personal care stores	0	3,661	4,262	6,699
Retail - Gasoline stores	0	2,072	3,453	6,750
Retail - Clothing and clothing accessories stores	0	1,635	2,527	5,931
Retail - Sporting goods, hobby, musical instrument and book stores	0	1,741	2,052	3,473
Retail - General merchandise stores	0	6,091	5,459	10,833
Retail - Miscellaneous store retailers	0	3,353	3,495	5,429
Retail - Nonstore retailers	0	2,706	7,660	19,168
Air transportation	0	703	1,204	1,794
Rail transportation	0	802	2,929	4,345
Water transportation	0	405	404	943
Truck transportation	0	8,118	9,543	17,231
Transit and ground passenger transportation	0	1,500	1,923	2,548
Pipeline transportation	0	2,784	4,608	6,398
Scenic and sightseeing transportation and support activities for transportation	0	6,171	6,791	13,529
Couriers and messengers	0	1,492	1,857	3,349
Warehousing and storage	0	1,087	1,213	2,579
Newspaper publishers	0	1,547	2,325	3,324
Periodical publishers	0	306	436	945
Book publishers	0	127	350	830
Directory, mailing list, and other publishers	0	105	293	544
Greeting card publishing	0	0	0	0
Software publishers	0	4,362	9,994	11,570
Motion picture and video industries	0	346	639	2,268
Sound recording industries	0	21	102	256
Radio and television broadcasting	0	3,900	3,154	14,570



## APPENDIX

Cable and other subscription programming	0	11	60	308
Wired telecommunications carriers	0	3,253	8,597	15,844
Wireless telecommunications carriers (except satellite)	0	70	147	499
Satellite, telecommunications resellers, and all other telecommunications	0	137	141	281
Data processing, hosting, and related services	0	1,128	2,343	6,671
News syndicates, libraries, archives and all other information services	0	11	22	84
Internet publishing and broadcasting and web search portals	0	(49)	24	952
Nondepository credit intermediation and related activities	0	3,224	4,076	8,098
Securities and commodity contracts intermediation and brokerage	0	4,007	4,140	10,844
Monetary authorities and depository credit intermediation	0	19,551	36,024	72,895
Other financial investment activities	0	1,393	1,730	8,888
Direct life insurance carriers	0	856	1,684	2,348
Insurance carriers, except direct life	0	5,249	17,697	39,665
Insurance agencies, brokerages, and related activities	0	7,949	12,225	31,068
Funds, trusts, and other financial vehicles	0	1,497	1,512	11,390
Other real estate	1	19,457	44,616	130,798
Tenant-occupied housing	0	1,918	18,963	21,984
Owner-occupied dwellings	0	0	56,518	71,410
Automotive equipment rental and leasing	0	1,006	2,261	3,251
General and consumer goods rental except video tapes and discs	0	1,538	1,862	2,525
Video tape and disc rental	0	360	573	854
Commercial and industrial machinery and equipment rental and leasing	0	1,730	4,769	6,075
Lessors of nonfinancial intangible assets	0	69	2,304	2,960

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Legal services	0	12,714	16,279	27,658
Accounting, tax preparation, bookkeeping, and payroll services	0	4,187	5,686	8,310
Architectural, engineering, and related services	0	9,684	11,480	18,962
Specialized design services	0	291	306	434
Custom computer programming services	0	1,418	1,632	2,533
Computer systems design services	0	1,246	1,288	1,934
Other computer related services, including facilities management	0	165	416	710
Management consulting services	0	7,465	7,343	12,544
Environmental and other technical consulting services	0	5,344	4,474	6,831
Scientific research and development services	5	341,629	454,922	1,090,523
Advertising, public relations, and related services	0	2,940	4,258	8,581
Photographic services	0	721	158	582
Veterinary services	0	759	1,078	1,671
Marketing research and all other miscellaneous professional, scientific, and technical services	0	10,781	8,669	14,014
Management of companies and enterprises	0	29,180	32,583	50,905
Office administrative services	0	4,799	2,057	4,737
Facilities support services	0	143	173	552
Employment services	0	11,995	19,504	28,451
Business support services	0	2,372	2,100	3,589
Travel arrangement and reservation services	0	1,161	1,631	4,345
Investigation and security services	0	983	1,000	1,389
Services to buildings	0	3,548	3,665	5,817
Landscape and horticultural services	0	2,430	2,558	4,070
Other support services	0	1,091	1,385	2,758
Waste management and remediation services	0	1,246	2,166	3,877
Elementary and secondary schools	0	1,345	1,083	1,323
Junior colleges, colleges, universities, and professional schools	0	1,400	1,732	3,269
Other educational services	0	981	863	2,244
Offices of physicians	0	21,835	24,842	36,547
Offices of dentists	0	4,841	5,807	8,355

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Offices of other health practitioners	0	5,311	4,664	6,660
Outpatient care centers	0	1,080	1,114	2,252
Medical and diagnostic laboratories	0	536	710	1,297
Home health care services	0	2,830	2,282	2,938
Other ambulatory health care services	0	1,624	1,739	3,242
Hospitals	0	38,527	43,039	79,675
Nursing and community care facilities	0	6,513	6,936	12,235
Residential mental retardation, mental health, substance abuse and other facilities	0	2,613	2,686	4,129
Individual and family services	0	4,628	3,716	5,452
Child day care services	0	2,459	2,504	3,780
Community food, housing, and other relief services, including rehabilitation services	0	1,644	1,643	4,161
Performing arts companies	0	167	245	728
Commercial Sports Except Racing	0	178	218	1,031
Racing and Track Operation	0	42	67	413
Independent artists, writers, and performers	0	250	324	632
Promoters of performing arts and sports and agents for public figures	0	333	586	2,365
Museums, historical sites, zoos, and parks	0	149	166	351
Amusement parks and arcades	0	21	32	63
Gambling industries (except casino hotels)	0	678	1,850	3,727
Other amusement and recreation industries	0	733	851	1,722
Fitness and recreational sports centers	0	686	914	1,687
Bowling centers	0	136	183	382
Hotels and motels, including casino hotels	0	145	279	539
Other accommodations	0	38	47	71
Full-service restaurants	0	7,192	10,482	19,406
Limited-service restaurants	0	5,661	8,754	19,931
All other food and drinking places	0	5,878	7,851	13,456
Automotive repair and maintenance, except car washes	0	6,957	7,904	11,875
Car washes	0	3,570	5,155	7,840

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Electronic and precision equipment repair and maintenance	0	830	1,065	1,961
Commercial and industrial machinery and equipment repair and maintenance	0	2,289	2,824	4,242
Personal and household goods repair and maintenance	0	1,726	1,704	2,169
Personal care services	0	3,127	2,032	2,799
Death care services	0	306	375	629
Dry-cleaning and laundry services	0	763	816	1,146
Other personal services	0	2,652	2,481	3,275
Religious organizations	0	7,453	3,013	14,389
Grantmaking, giving, and social advocacy organizations	0	1,917	5,247	9,489
Business and professional associations	0	1,550	2,229	4,208
Labor and civic organizations	0	1,010	2,251	4,751
Private households	0	375	375	375
Postal service	0	2,760	2,762	3,108
Federal electric utilities	0	312	544	2,647
Other federal government enterprises	0	289	(4,959)	408
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	3,575	4,217	6,666
Local government passenger transit	0	145	(96)	73
Local government electric utilities	0	14	35	115
Other local government enterprises	0	4,425	8,873	21,123
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	4	395,987	536,033	536,033

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 440: Detailed M2M Program Impacts by Types of Impact, North Dakota.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	0	0	0	0
Oilseed farming	0	0	0	0
Grain farming	0	0	0	0
Vegetable and melon farming	0	0	0	0
Fruit farming	0	0	0	0
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	0	0	0
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	0	0	0
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	0	0	0
Dairy cattle and milk production	0	0	0	0
Poultry and egg production	0	0	0	0
Animal production, except cattle and poultry and eggs	0	0	0	0
Forestry, forest products, and timber tract production	0	0	0	0
Commercial logging	0	0	0	0
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	0	0	0
Oil and gas extraction	0	0	0	0
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	0	0	0
Sand and gravel mining	0	0	0	0
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	0
Metal mining services	0	0	0	0
Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	0	0	0
Electric power generation - Fossil fuel	0	0	0	0
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	0	0	0
Natural gas distribution	0	0	0	0
Water, sewage and other systems	0	0	0	0
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

## APPENDIX

Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	0	0	0
Maintenance and repair construction of residential structures	0	0	0	0
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	0
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	0	0	0
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	0	0	0
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	0	0	0

## APPENDIX

Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	0	0	0
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	0	0	0
Meat processed from carcasses	0	0	0	0
Rendering and meat byproduct processing	0	0	0	0
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	0	0	0
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	0	0	0
Other snack food manufacturing	0	0	0	0
Coffee and tea manufacturing	0	0	0	0
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	0	0	0
Bottled and canned soft drinks & water	0	0	0	0
Manufactured ice	0	0	0	0
Breweries	0	0	0	0
Wineries	0	0	0	0
Distilleries	0	0	0	0
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0



## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	0	0	0
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	0	0	0
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	0
Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	0	0	0
Wood preservation	0	0	0	0
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	0	0	0
Cut stock, resawing lumber, and planing	0	0	0	0
Other millwork, including flooring	0	0	0	0
Wood container and pallet manufacturing	0	0	0	0
Manufactured home (mobile home) manufacturing	0	0	0	0

## APPENDIX

Prefabricated wood building manufacturing	0	0	0	0
All other miscellaneous wood product manufacturing	0	0	0	0
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	0	0	0
Support activities for printing	0	0	0	0
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	0	0	0
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	0	0	0
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	0

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	0	0	0
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	0	0	0
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	0	0	0
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	0	0	0
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	0	0	0
Tire manufacturing	0	0	0	0

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	0	0	0
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	0
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	0	0	0
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	0	0	0
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	0	0	0
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	0
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0

## APPENDIX

Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	0	0	0
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	0	0	0
Plate work manufacturing	0	0	0	0
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Ornamental and architectural metal work manufacturing	0	0	0	0
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	0	0
Machine shops	0	0	0	0
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0

## APPENDIX

Metal coating and nonprecious engraving	0	0	0	0
Electroplating, anodizing, and coloring metal	0	0	0	0
Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	0	0	0
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	0	0	0
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0

## APPENDIX

Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0



## APPENDIX

Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	0

## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0
Motor vehicle electrical and electronic equipment manufacturing	0	0	0	0
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	0	0

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	0	0	0
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	0	0	0
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	0	0	0
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	0
Dental laboratories	0	0	0	0
Jewelry and silverware manufacturing	0	0	0	0
Sporting and athletic goods manufacturing	0	0	0	0
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	0	0	0
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0

## APPENDIX

Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	0	0	0
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	0	0	0
Wholesale - Professional and commercial equipment and supplies	0	0	0	0
Wholesale - Household appliances and electrical and electronic goods	0	0	0	0
Wholesale - Machinery, equipment, and supplies	0	0	0	0
Wholesale - Other durable goods merchant wholesalers	0	0	0	0
Wholesale - Drugs and druggists' sundries	0	0	0	0
Wholesale - Grocery and related product wholesalers	0	0	0	0
Wholesale - Petroleum and petroleum products	0	0	0	0
Wholesale - Other nondurable goods merchant wholesalers	0	0	0	0
Wholesale - Wholesale electronic markets and agents and brokers	0	0	0	0
Retail - Motor vehicle and parts dealers	0	0	0	0
Retail - Furniture and home furnishings stores	0	0	0	0
Retail - Electronics and appliance stores	0	0	0	0
Retail - Building material and garden equipment and supplies stores	0	0	0	0
Retail - Food and beverage stores	0	0	0	0
Retail - Health and personal care stores	0	0	0	0
Retail - Gasoline stores	0	0	0	0
Retail - Clothing and clothing accessories stores	0	0	0	0
Retail - Sporting goods, hobby, musical instrument and book stores	0	0	0	0

## APPENDIX

Retail - General merchandise stores	0	0	0	0
Retail - Miscellaneous store retailers	0	0	0	0
Retail - Nonstore retailers	0	0	0	0
Air transportation	0	0	0	0
Rail transportation	0	0	0	0
Water transportation	0	0	0	0
Truck transportation	0	0	0	0
Transit and ground passenger transportation	0	0	0	0
Pipeline transportation	0	0	0	0
Scenic and sightseeing transportation and support activities for transportation	0	0	0	0
Couriers and messengers	0	0	0	0
Warehousing and storage	0	0	0	0
Newspaper publishers	0	0	0	0
Periodical publishers	0	0	0	0
Book publishers	0	0	0	0
Directory, mailing list, and other publishers	0	0	0	0
Greeting card publishing	0	0	0	0
Software publishers	0	0	0	0
Motion picture and video industries	0	0	0	0
Sound recording industries	0	0	0	0
Radio and television broadcasting	0	0	0	0
Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	0	0	0
Wireless telecommunications carriers (except satellite)	0	0	0	0
Satellite, telecommunications resellers, and all other telecommunications	0	0	0	0
Data processing, hosting, and related services	0	0	0	0
News syndicates, libraries, archives and all other information services	0	0	0	0
Internet publishing and broadcasting and web search portals	0	0	0	0

## APPENDIX

Nondepository credit intermediation and related activities	0	0	0	0
Securities and commodity contracts intermediation and brokerage	0	0	0	0
Monetary authorities and depository credit intermediation	0	0	0	0
Other financial investment activities	0	0	0	0
Direct life insurance carriers	0	0	0	0
Insurance carriers, except direct life	0	0	0	0
Insurance agencies, brokerages, and related activities	0	0	0	0
Funds, trusts, and other financial vehicles	0	0	0	0
Other real estate	0	0	0	0
Tenant-occupied housing	0	0	0	0
Owner-occupied dwellings	0	0	0	0
Automotive equipment rental and leasing	0	0	0	0
General and consumer goods rental except video tapes and discs	0	0	0	0
Video tape and disc rental	0	0	0	0
Commercial and industrial machinery and equipment rental and leasing	0	0	0	0
Lessors of nonfinancial intangible assets	0	0	0	0
Legal services	0	0	0	0
Accounting, tax preparation, bookkeeping, and payroll services	0	0	0	0
Architectural, engineering, and related services	0	0	0	0
Specialized design services	0	0	0	0
Custom computer programming services	0	0	0	0
Computer systems design services	0	0	0	0
Other computer related services, including facilities management	0	0	0	0
Management consulting services	0	0	0	0
Environmental and other technical consulting services	0	0	0	0

## APPENDIX

Scientific research and development services	0	0	0	0
Advertising, public relations, and related services	0	0	0	0
Photographic services	0	0	0	0
Veterinary services	0	0	0	0
Marketing research and all other miscellaneous professional, scientific, and technical services	0	0	0	0
Management of companies and enterprises	0	0	0	0
Office administrative services	0	0	0	0
Facilities support services	0	0	0	0
Employment services	0	0	0	0
Business support services	0	0	0	0
Travel arrangement and reservation services	0	0	0	0
Investigation and security services	0	0	0	0
Services to buildings	0	0	0	0
Landscape and horticultural services	0	0	0	0
Other support services	0	0	0	0
Waste management and remediation services	0	0	0	0
Elementary and secondary schools	0	0	0	0
Junior colleges, colleges, universities, and professional schools	0	0	0	0
Other educational services	0	0	0	0
Offices of physicians	0	0	0	0
Offices of dentists	0	0	0	0
Offices of other health practitioners	0	0	0	0
Outpatient care centers	0	0	0	0
Medical and diagnostic laboratories	0	0	0	0
Home health care services	0	0	0	0
Other ambulatory health care services	0	0	0	0
Hospitals	0	0	0	0
Nursing and community care facilities	0	0	0	0
Residential mental retardation, mental health, substance abuse and other facilities	0	0	0	0

## APPENDIX

Individual and family services	0	0	0	0
Child day care services	0	0	0	0
Community food, housing, and other relief services, including rehabilitation services	0	0	0	0
Performing arts companies	0	0	0	0
Commercial Sports Except Racing	0	0	0	0
Racing and Track Operation	0	0	0	0
Independent artists, writers, and performers	0	0	0	0
Promoters of performing arts and sports and agents for public figures	0	0	0	0
Museums, historical sites, zoos, and parks	0	0	0	0
Amusement parks and arcades	0	0	0	0
Gambling industries (except casino hotels)	0	0	0	0
Other amusement and recreation industries	0	0	0	0
Fitness and recreational sports centers	0	0	0	0
Bowling centers	0	0	0	0
Hotels and motels, including casino hotels	0	0	0	0
Other accommodations	0	0	0	0
Full-service restaurants	0	0	0	0
Limited-service restaurants	0	0	0	0
All other food and drinking places	0	0	0	0
Automotive repair and maintenance, except car washes	0	0	0	0
Car washes	0	0	0	0
Electronic and precision equipment repair and maintenance	0	0	0	0
Commercial and industrial machinery and equipment repair and maintenance	0	0	0	0
Personal and household goods repair and maintenance	0	0	0	0
Personal care services	0	0	0	0
Death care services	0	0	0	0
Dry-cleaning and laundry services	0	0	0	0
Other personal services	0	0	0	0
Religious organizations	0	0	0	0
Grantmaking, giving, and social advocacy organizations	0	0	0	0



## APPENDIX

Business and professional associations	0	0	0	0
Labor and civic organizations	0	0	0	0
Private households	0	0	0	0
Postal service	0	0	0	0
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	0	0	0
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	0	0	0
Local government electric utilities	0	0	0	0
Other local government enterprises	0	0	0	0
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 37. Ohio

**Table 441: Detailed NASA Impacts by Types of Impact, Ohio.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>11,139</i>	<i>805,335,340</i>	<i>1,188,442,926</i>	<i>2,300,329,150</i>
Oilseed farming	24	(14,644)	2,114,079	9,381,642
Grain farming	31	155,609	797,057	5,101,515
Vegetable and melon farming	3	31,264	59,340	248,298
Fruit farming	1	5,444	14,393	55,671
Tree nut farming	0	553	579	1,053
Greenhouse, nursery, and floriculture production	7	118,153	157,430	452,015
Tobacco farming	0	562	584	1,570
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	14	43,488	57,975	173,881
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	15	(10,825)	120,778	936,115
Dairy cattle and milk production	3	14,301	69,128	751,911
Poultry and egg production	4	56,793	83,106	1,297,955
Animal production, except cattle and poultry and eggs	31	72,853	722,118	2,212,855
Forestry, forest products, and timber tract production	0	37,629	39,148	47,989
Commercial logging	3	330,524	326,986	441,241
Commercial fishing	1	5,061	11,594	12,772
Commercial hunting and trapping	1	9,250	(24,418)	11,788
Support activities for agriculture and forestry	10	364,148	210,314	289,006
Oil and gas extraction	17	141,763	9,967,583	13,305,428
Coal mining	1	301,918	230,907	401,997
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	3	434,427	246,832	548,219
Sand and gravel mining	1	378,015	318,994	424,583

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Other clay, ceramic, refractory minerals mining	0	6,506	5,531	10,007
Potash, soda, and borate mineral mining	0	3,730	4,333	7,194
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	30,332	26,184	44,080
Other nonmetallic minerals	0	9,292	7,452	8,520
Drilling oil and gas wells	0	66	520	992
Support activities for oil and gas operations	0	8,695	26,544	52,402
Metal mining services	0	1,286	90,022	134,783
Other nonmetallic minerals services	0	1,134	14,736	22,213
Electric power generation - Hydroelectric	1	17,589	60,728	194,885
Electric power generation - Fossil fuel	7	1,065,292	4,640,653	10,812,624
Electric power generation - Nuclear	3	651,510	1,629,105	3,333,619
Electric power generation - Solar	1	33,449	79,076	160,389
Electric power generation - Wind	0	18,846	127,601	382,779
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	8,501	29,583	83,995
Electric power generation - All other	0	15,037	6,487	22,803
Electric power transmission and distribution	16	2,144,622	9,150,262	21,867,824
Natural gas distribution	6	711,816	2,282,831	4,723,832
Water, sewage and other systems	13	741,499	1,606,592	3,060,725
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	571	38,775,361	20,552,364	46,678,936
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	33	2,136,617	2,705,663	6,533,378
Maintenance and repair construction of residential structures	17	1,019,504	1,434,755	3,490,720
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	3,958	2,552	5,964
Dog and cat food manufacturing	1	100,320	546,971	1,637,000
Other animal food manufacturing	2	131,724	281,504	1,853,139
Flour milling	1	43,802	110,242	664,348
Rice milling	0	0	0	0
Malt manufacturing	0	8,903	24,702	123,241
Wet corn milling	1	96,105	319,373	1,365,029
Soybean and other oilseed processing	0	34,908	263,259	1,736,265
Fats and oils refining and blending	0	19,639	49,549	374,055
Breakfast cereal manufacturing	2	181,479	575,978	1,562,074
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	4,192	12,672	76,451
Nonchocolate confectionery manufacturing	1	27,740	49,365	245,665
Chocolate and confectionery manufacturing from cacao beans	0	3,294	8,917	30,238
Confectionery manufacturing from purchased chocolate	1	37,222	62,559	348,480
Frozen fruits, juices and vegetables manufacturing	0	9,390	20,686	76,845
Frozen specialties manufacturing	4	226,210	394,056	1,435,760
Canned fruits and vegetables manufacturing	2	172,700	373,394	1,044,039
Canned specialties	2	135,758	417,306	1,561,921
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	1	75,527	133,371	1,206,277

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	2	249,479	749,662	2,629,465
Fluid milk manufacturing	2	117,109	229,018	1,344,977
Creamery butter manufacturing	0	222	1,385	9,456
Ice cream and frozen dessert manufacturing	1	36,182	67,257	252,555
Frozen cakes and other pastries manufacturing	4	113,201	186,978	344,780
Poultry processing	4	191,573	287,319	1,308,560
Animal, except poultry, slaughtering	2	88,269	147,931	1,253,342
Meat processed from carcasses	8	493,154	590,092	4,114,947
Rendering and meat byproduct processing	0	16,844	19,003	90,478
Seafood product preparation and packaging	0	188	1,017	25,560
Bread and bakery product, except frozen, manufacturing	10	357,531	544,796	1,415,130
Cookie and cracker manufacturing	3	214,521	349,768	1,141,198
Dry pasta, mixes, and dough manufacturing	1	44,674	132,654	453,908
Tortilla manufacturing	0	1,328	1,929	10,746
Roasted nuts and peanut butter manufacturing	1	58,396	166,776	516,020
Other snack food manufacturing	2	105,262	290,338	1,094,533
Coffee and tea manufacturing	0	5,290	12,917	74,022
Flavoring syrup and concentrate manufacturing	0	101,402	1,009,614	1,743,801
Mayonnaise, dressing, and sauce manufacturing	1	38,910	90,396	322,640
Spice and extract manufacturing	1	58,663	106,084	430,334
All other food manufacturing	2	114,947	181,221	839,244
Bottled and canned soft drinks & water	3	223,771	585,770	2,530,147
Manufactured ice	0	15,759	10,293	44,176
Breweries	3	196,082	807,649	1,730,545
Wineries	0	6,125	19,749	100,069
Distilleries	0	16,394	283,465	469,883
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	808	1,225	5,339
Broadwoven fabric mills	0	11,236	16,489	51,356
Narrow fabric mills and schiffli machine embroidery	0	7,028	7,893	22,807
Nonwoven fabric mills	0	32,770	58,502	202,551
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	36,598	46,884	114,480
Fabric coating mills	0	12,099	15,825	60,027
Carpet and rug mills	0	1,393	2,414	8,013
Curtain and linen mills	0	21,816	32,016	93,033
Textile bag and canvas mills	1	26,869	33,844	88,221
Rope, cordage, twine, tire cord and tire fabric mills	0	1,553	2,539	6,990
Other textile product mills	0	15,376	19,332	60,790
Hosiery and sock mills	0	1,770	2,732	6,591
Other apparel knitting mills	0	1,436	2,477	5,916
Cut and sew apparel contractors	0	4,320	5,292	14,071
Mens and boys cut and sew apparel manufacturing	1	26,388	33,431	99,284
Womens and girls cut and sew apparel manufacturing	0	2,144	3,453	21,976
Other cut and sew apparel manufacturing	0	6,001	8,120	25,952
Apparel accessories and other apparel manufacturing	0	3,015	4,264	13,087
Leather and hide tanning and finishing	0	2,671	4,587	19,291
Footwear manufacturing	0	268	317	1,929
Other leather and allied product manufacturing	0	8,999	9,488	26,283
Sawmills	4	220,844	269,296	1,062,286
Wood preservation	0	28,616	48,780	216,447
Veneer and plywood manufacturing	1	67,135	86,808	320,504
Engineered wood member and truss manufacturing	1	49,996	60,273	188,040
Reconstituted wood product manufacturing	0	25,661	50,911	221,186
Wood windows and door manufacturing	3	192,945	235,305	607,454
Cut stock, resawing lumber, and planing	1	59,647	79,010	206,119
Other millwork, including flooring	2	135,629	165,098	448,829
Wood container and pallet manufacturing	2	141,850	152,687	369,672
Manufactured home (mobile home) manufacturing	0	248	337	862
Prefabricated wood building manufacturing	2	116,973	128,099	326,047
All other miscellaneous wood product manufacturing	1	71,508	77,450	211,047

## APPENDIX

Pulp mills	0	4,066	4,634	15,842
Paper mills	2	244,357	409,910	1,720,982
Paperboard mills	1	67,577	119,419	580,944
Paperboard container manufacturing	6	484,017	611,641	2,879,847
Paper bag and coated and treated paper manufacturing	4	415,018	577,934	1,934,946
Stationery product manufacturing	0	36,188	44,584	194,486
Sanitary paper product manufacturing	1	92,884	186,611	869,784
All other converted paper product manufacturing	1	73,747	89,675	310,737
Printing	26	1,506,915	2,474,113	4,697,831
Support activities for printing	1	71,253	115,180	166,654
Petroleum refineries	2	454,976	5,649,345	18,828,910
Asphalt paving mixture and block manufacturing	0	71,044	132,380	430,559
Asphalt shingle and coating materials manufacturing	0	42,658	180,624	364,419
Petroleum lubricating oil and grease manufacturing	14	2,098,015	8,643,680	19,480,793
All other petroleum and coal products manufacturing	0	46,579	174,715	362,737
Petrochemical manufacturing	0	2,325	21,127	94,955
Industrial gas manufacturing	3	358,027	976,097	2,758,880
Synthetic dye and pigment manufacturing	1	112,829	265,101	733,819
Other basic inorganic chemical manufacturing	1	103,225	239,699	777,092
Other basic organic chemical manufacturing	3	324,316	712,615	4,219,619
Plastics material and resin manufacturing	2	243,329	430,491	2,442,665
Synthetic rubber manufacturing	0	39,387	63,518	302,005
Artificial and synthetic fibers and filaments manufacturing	0	5,430	8,538	44,146
Nitrogenous fertilizer manufacturing	1	151,662	384,429	853,634
Phosphatic fertilizer manufacturing	0	1,416	2,683	10,273
Fertilizer mixing	0	15,670	29,202	78,284
Pesticide and other agricultural chemical manufacturing	0	4,323	15,606	70,813
Medicinal and botanical manufacturing	0	1,348	1,862	6,510

## APPENDIX

Pharmaceutical preparation manufacturing	3	277,537	1,198,164	3,411,793
In-vitro diagnostic substance manufacturing	0	8,119	13,458	38,296
Biological product (except diagnostic) manufacturing	0	2,036	5,439	13,657
Paint and coating manufacturing	2	252,034	523,113	1,606,887
Adhesive manufacturing	1	120,341	210,406	683,950
Soap and other detergent manufacturing	2	765,545	2,726,094	4,547,906
Polish and other sanitation good manufacturing	1	108,855	214,734	652,013
Surface active agent manufacturing	0	12,371	41,070	91,803
Toilet preparation manufacturing	2	235,988	808,097	1,875,363
Printing ink manufacturing	0	49,670	53,792	200,243
Explosives manufacturing	0	4,597	5,529	20,181
Custom compounding of purchased resins	3	334,538	655,618	2,066,375
Photographic film and chemical manufacturing	0	53,799	123,911	328,335
Other miscellaneous chemical product manufacturing	1	125,102	196,693	624,058
Plastics packaging materials and unlaminated film and sheet manufacturing	3	212,054	366,008	1,239,520
Unlaminated plastics profile shape manufacturing	1	87,531	205,066	597,174
Plastics pipe and pipe fitting manufacturing	2	108,065	268,573	800,397
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	43,566	83,864	221,759
Polystyrene foam product manufacturing	1	79,881	140,044	422,265
Urethane and other foam product (except polystyrene) manufacturing	1	58,555	98,758	373,899
Plastics bottle manufacturing	2	135,855	237,411	918,478
Other plastics product manufacturing	15	794,128	1,226,332	4,147,268
Tire manufacturing	3	200,125	284,382	1,025,449
Rubber and plastics hoses and belting manufacturing	1	75,064	125,524	307,302
Other rubber product manufacturing	4	220,995	341,844	1,141,452



## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	1	49,414	62,320	144,282
Brick, tile, and other structural clay product manufacturing	2	118,707	193,175	463,231
Flat glass manufacturing	0	15,640	28,740	79,621
Other pressed and blown glass and glassware manufacturing	1	93,204	129,872	300,623
Glass container manufacturing	0	16,754	27,009	78,027
Glass product manufacturing made of purchased glass	2	90,082	141,352	375,224
Cement manufacturing	0	39,528	83,211	253,507
Ready-mix concrete manufacturing	4	284,663	439,173	1,621,811
Concrete block and brick manufacturing	2	123,488	206,265	598,222
Concrete pipe manufacturing	0	18,907	28,459	88,243
Other concrete product manufacturing	5	335,156	456,302	1,204,801
Lime manufacturing	0	13,043	28,253	81,278
Gypsum product manufacturing	0	33,522	77,259	237,681
Abrasive product manufacturing	1	65,739	176,578	328,169
Cut stone and stone product manufacturing	1	56,347	64,491	147,639
Ground or treated mineral and earth manufacturing	0	9,846	24,941	68,339
Mineral wool manufacturing	1	86,590	178,909	363,476
Miscellaneous nonmetallic mineral products manufacturing	1	103,319	217,714	524,664
Iron and steel mills and ferroalloy manufacturing	3	363,749	712,441	2,863,515
Iron, steel pipe and tube manufacturing from purchased steel	1	62,526	106,441	351,778
Rolled steel shape manufacturing	1	116,691	297,412	879,763
Steel wire drawing	0	26,277	46,635	172,615
Alumina refining and primary aluminum production	0	11,792	30,806	257,582
Secondary smelting and alloying of aluminum	0	5,790	12,179	95,069
Aluminum sheet, plate, and foil manufacturing	0	60,355	137,194	436,226
Other aluminum rolling, drawing and extruding	1	39,440	63,260	269,579
Nonferrous metal (exc aluminum) smelting and refining	0	5,724	33,212	75,255

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Copper rolling, drawing, extruding and alloying	2	174,061	272,107	1,517,005
Nonferrous metal, except copper and aluminum, shaping	0	37,963	54,455	158,536
Secondary processing of other nonferrous metals	0	2,183	10,838	38,605
Ferrous metal foundries	1	102,595	229,014	426,040
Nonferrous metal foundries	2	148,662	261,045	561,016
Custom roll forming	0	6,449	11,120	61,255
Crown and closure manufacturing and metal stamping	2	131,942	206,994	552,401
Iron and steel forging	1	66,607	98,078	284,114
Nonferrous forging	0	29,467	38,887	88,033
Cutlery, utensil, pot, and pan manufacturing	1	54,571	196,945	424,409
Handtool manufacturing	2	139,081	251,483	454,975
Prefabricated metal buildings and components manufacturing	3	180,478	275,965	794,546
Fabricated structural metal manufacturing	2	161,507	259,466	779,402
Plate work manufacturing	1	53,410	55,728	165,874
Metal window and door manufacturing	3	174,100	294,697	687,055
Sheet metal work manufacturing	2	112,389	153,336	372,998
Ornamental and architectural metal work manufacturing	2	112,774	159,766	371,795
Power boiler and heat exchanger manufacturing	0	16,898	25,316	52,912
Metal tank (heavy gauge) manufacturing	2	159,448	204,551	522,115
Metal cans manufacturing	1	89,963	236,207	900,157
Metal barrels, drums and pails manufacturing	1	33,698	44,172	167,009
Hardware manufacturing	1	34,998	64,480	188,974
Spring and wire product manufacturing	1	43,567	63,951	177,961
Machine shops	7	439,147	523,521	1,008,497
Turned product and screw, nut, and bolt manufacturing	2	126,602	190,827	477,240
Metal heat treating	1	51,971	89,039	218,152
Metal coating and nonprecious engraving	2	112,359	221,184	448,047
Electroplating, anodizing, and coloring metal	2	140,972	162,018	347,321

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	2	128,810	232,338	564,239
Plumbing fixture fitting and trim manufacturing	1	69,654	256,927	588,637
Ball and roller bearing manufacturing	1	88,758	185,517	346,674
Small arms ammunition manufacturing	1	56,199	147,074	310,396
Ammunition, except for small arms, manufacturing	0	364	466	902
Small arms, ordnance, and accessories manufacturing	0	26,907	78,093	144,975
Fabricated pipe and pipe fitting manufacturing	1	52,975	64,156	165,703
Other fabricated metal manufacturing	9	549,256	776,957	1,932,103
Farm machinery and equipment manufacturing	0	10,852	15,799	53,828
Lawn and garden equipment manufacturing	0	29,030	52,420	225,894
Construction machinery manufacturing	0	6,247	12,345	39,711
Mining machinery and equipment manufacturing	0	1,040	1,269	3,885
Oil and gas field machinery and equipment manufacturing	0	1,723	2,061	6,652
Semiconductor machinery manufacturing	0	459	522	1,623
Food product machinery manufacturing	0	2,288	2,798	8,182
Sawmill, woodworking, and paper machinery	0	4,971	5,560	19,657
Printing machinery and equipment manufacturing	0	5,558	6,290	17,004
All other industrial machinery manufacturing	0	8,067	10,217	27,480
Optical instrument and lens manufacturing	0	2,192	3,512	10,240
Photographic and photocopying equipment manufacturing	0	1,022	1,517	5,539
Other commercial service industry machinery manufacturing	1	42,956	80,989	241,587
Air purification and ventilation equipment manufacturing	0	30,169	44,453	114,258

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Heating equipment (except warm air furnaces) manufacturing	1	41,685	61,457	162,878
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	113,341	210,434	555,598
Industrial mold manufacturing	0	22,420	25,399	49,885
Special tool, die, jig, and fixture manufacturing	0	40,186	50,243	86,905
Cutting tool and machine tool accessory manufacturing	0	14,966	16,296	36,249
Machine tool manufacturing	0	11,206	12,498	30,875
Rolling mill and other metalworking machinery manufacturing	0	5,533	6,722	14,323
Turbine and turbine generator set units manufacturing	0	2,178	2,936	8,960
Speed changer, industrial high-speed drive, and gear manufacturing	1	37,803	54,742	151,742
Mechanical power transmission equipment manufacturing	0	22,937	33,222	81,888
Other engine equipment manufacturing	1	62,502	118,395	549,347
Pump and pumping equipment manufacturing	0	21,650	38,366	104,457
Air and gas compressor manufacturing	1	97,022	167,207	444,027
Elevator and moving stairway manufacturing	0	916	1,417	4,305
Conveyor and conveying equipment manufacturing	0	12,048	12,628	33,590
Overhead cranes, hoists, and monorail systems manufacturing	0	6,827	13,162	39,670
Industrial truck, trailer, and stacker manufacturing	0	29,612	45,711	138,299
Power-driven handtool manufacturing	0	12,849	32,035	74,972
Welding and soldering equipment manufacturing	0	38,352	50,112	119,112
Packaging machinery manufacturing	0	4,631	6,662	16,344
Industrial process furnace and oven manufacturing	0	6,059	7,345	16,295
Fluid power cylinder and actuator manufacturing	0	27,130	36,981	99,413

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Fluid power pump and motor manufacturing	0	6,469	9,810	28,353
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	11,597	14,793	38,134
Electronic computer manufacturing	0	565	990	6,409
Computer storage device manufacturing	0	150	339	4,058
Computer terminals and other computer peripheral equipment manufacturing	2	202,211	299,056	1,037,570
Telephone apparatus manufacturing	0	2,183	3,178	11,001
Broadcast and wireless communications equipment manufacturing	0	2,081	2,647	8,022
Other communications equipment manufacturing	0	12,204	16,404	50,184
Audio and video equipment manufacturing	0	812	1,235	7,080
Printed circuit assembly (electronic assembly) manufacturing	4	186,455	240,834	1,115,887
Bare printed circuit board manufacturing	0	4,091	4,874	17,082
Semiconductor and related device manufacturing	3	332,194	470,446	1,777,168
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	8,522	10,806	30,257
Electronic connector manufacturing	1	40,167	52,892	196,866
Other electronic component manufacturing	2	122,188	135,591	485,668
Electromedical and electrotherapeutic apparatus manufacturing	0	6,717	10,590	27,969
Search, detection, and navigation instruments manufacturing	0	39,860	50,865	120,254
Automatic environmental control manufacturing	2	144,450	174,942	414,238
Industrial process variable instruments manufacturing	0	18,555	23,481	54,705
Totalizing fluid meter and counting device manufacturing	0	3,330	5,429	15,176

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Electricity and signal testing instruments manufacturing	0	16,950	21,968	100,086
Analytical laboratory instrument manufacturing	5	391,269	565,885	1,794,678
Irradiation apparatus manufacturing	0	750	1,141	3,265
Watch, clock, and other measuring and controlling device manufacturing	0	5,049	7,094	20,652
Blank magnetic and optical recording media manufacturing	0	262	517	2,371
Software and other prerecorded and record reproducing	0	20,207	25,501	52,857
Electric lamp bulb and part manufacturing	0	52,096	98,353	195,104
Lighting fixture manufacturing	1	78,862	132,746	306,639
Small electrical appliance manufacturing	1	43,859	103,438	271,190
Household cooking appliance manufacturing	1	96,851	263,797	598,451
Household refrigerator and home freezer manufacturing	1	107,204	359,950	765,287
Household laundry equipment manufacturing	3	234,100	567,099	1,784,242
Other major household appliance manufacturing	1	49,029	148,402	307,269
Power, distribution, and specialty transformer manufacturing	0	6,036	9,948	26,129
Motor and generator manufacturing	1	52,382	91,090	242,248
Switchgear and switchboard apparatus manufacturing	0	24,725	46,917	134,763
Relay and industrial control manufacturing	1	127,542	183,774	398,009
Storage battery manufacturing	1	68,863	122,500	309,747
Primary battery manufacturing	0	3,097	7,383	24,740
Fiber optic cable manufacturing	0	13,896	24,845	115,916
Other communication and energy wire manufacturing	0	11,065	22,959	100,455
Wiring device manufacturing	1	74,344	172,956	443,788
Carbon and graphite product manufacturing	1	92,277	145,373	369,441
All other miscellaneous electrical equipment and component manufacturing	1	95,826	113,134	326,203

## APPENDIX

Automobile manufacturing	1	131,025	271,907	1,861,063
Light truck and utility vehicle manufacturing	1	126,934	220,105	2,584,792
Heavy duty truck manufacturing	0	8,028	13,902	82,963
Motor vehicle body manufacturing	0	11,363	13,049	53,759
Truck trailer manufacturing	0	501	545	2,372
Motor home manufacturing	0	24,099	32,122	114,014
Travel trailer and camper manufacturing	2	191,099	199,136	655,183
Motor vehicle gasoline engine and engine parts manufacturing	5	509,190	614,508	2,896,889
Motor vehicle electrical and electronic equipment manufacturing	3	239,139	267,326	1,488,485
Motor vehicle transmission and power train parts manufacturing	10	1,169,978	1,457,211	6,038,981
Motor vehicle seating and interior trim manufacturing	1	56,204	61,986	445,198
Motor vehicle metal stamping	8	694,213	794,133	3,164,000
Other motor vehicle parts manufacturing	7	543,603	648,228	3,623,010
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	2	206,056	252,696	1,257,232
Aircraft manufacturing	0	(17)	34	408
Aircraft engine and engine parts manufacturing	0	25,460	77,441	143,076
Other aircraft parts and auxiliary equipment manufacturing	0	14,387	27,398	55,799
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	5	9	46
Railroad rolling stock manufacturing	0	217	568	3,754
Ship building and repairing	0	859	1,265	3,466
Boat building	0	(8,958)	(3,646)	71,217
Motorcycle, bicycle, and parts manufacturing	0	8,639	48,673	93,307
Military armored vehicle, tank, and tank component manufacturing	0	35,482	105,560	268,721
All other transportation equipment manufacturing	0	(19,275)	(13,124)	70,530

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	3	137,871	183,435	395,805
Upholstered household furniture manufacturing	0	17,489	22,661	78,946
Nonupholstered wood household furniture manufacturing	2	96,248	108,152	275,521
Other household nonupholstered furniture manufacturing	0	19,149	28,029	88,085
Institutional furniture manufacturing	0	6,390	6,918	17,740
Wood office furniture manufacturing	0	3,404	4,528	12,407
Custom architectural woodwork and millwork	0	5,288	5,100	14,070
Office furniture, except wood, manufacturing	0	15,644	24,731	74,945
Showcase, partition, shelving, and locker manufacturing	0	18,764	25,096	63,422
Mattress manufacturing	0	20,848	40,361	135,484
Blind and shade manufacturing	0	1,742	1,817	6,288
Surgical and medical instrument manufacturing	0	29,628	44,403	134,044
Surgical appliance and supplies manufacturing	1	103,440	152,262	484,013
Dental equipment and supplies manufacturing	0	5,865	7,821	22,540
Ophthalmic goods manufacturing	0	35,104	52,054	127,935
Dental laboratories	1	30,504	29,049	49,236
Jewelry and silverware manufacturing	1	47,148	62,963	139,293
Sporting and athletic goods manufacturing	1	63,329	73,059	208,930
Doll, toy, and game manufacturing	1	59,304	67,484	208,221
Office supplies (except paper) manufacturing	0	18,468	20,578	58,154
Sign manufacturing	2	172,541	147,457	268,744
Gasket, packing, and sealing device manufacturing	1	41,766	46,188	119,906
Musical instrument manufacturing	0	21,632	21,765	41,048
Fasteners, buttons, needles, and pins manufacturing	0	11,062	11,932	20,968
Broom, brush, and mop manufacturing	1	45,216	50,965	160,392
Burial casket manufacturing	0	13,780	14,928	25,932



## APPENDIX

All other miscellaneous manufacturing	1	121,840	135,896	280,733
Wholesale - Motor vehicle and motor vehicle parts and supplies	6	402,417	972,372	2,130,323
Wholesale - Professional and commercial equipment and supplies	25	2,614,600	4,615,104	8,014,200
Wholesale - Household appliances and electrical and electronic goods	15	1,353,364	3,230,551	6,763,292
Wholesale - Machinery, equipment, and supplies	16	1,354,258	2,450,946	4,234,563
Wholesale - Other durable goods merchant wholesalers	35	2,588,891	4,228,393	8,187,394
Wholesale - Drugs and druggists' sundries	11	1,481,980	4,487,508	9,142,752
Wholesale - Grocery and related product wholesalers	25	1,892,837	2,672,150	5,018,709
Wholesale - Petroleum and petroleum products	4	334,528	4,635,036	5,353,960
Wholesale - Other nondurable goods merchant wholesalers	39	3,491,181	7,163,759	12,527,447
Wholesale - Wholesale electronic markets and agents and brokers	25	2,480,891	1,272,893	1,477,562
Retail - Motor vehicle and parts dealers	37	2,011,629	3,383,375	4,838,992
Retail - Furniture and home furnishings stores	25	1,016,759	1,418,858	2,284,300
Retail - Electronics and appliance stores	25	1,335,126	1,446,866	2,363,582
Retail - Building material and garden equipment and supplies stores	46	1,831,627	3,616,601	5,228,771
Retail - Food and beverage stores	117	3,049,611	4,683,792	8,011,082
Retail - Health and personal care stores	56	2,336,557	2,924,763	4,505,960
Retail - Gasoline stores	34	1,046,676	2,047,665	3,729,983
Retail - Clothing and clothing accessories stores	52	1,659,644	2,623,639	4,917,084
Retail - Sporting goods, hobby, musical instrument and book stores	36	937,953	1,286,574	2,062,037
Retail - General merchandise stores	119	3,272,174	5,324,203	8,560,484
Retail - Miscellaneous store retailers	72	1,700,591	2,160,619	3,495,198

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Retail - Nonstore retailers	80	2,661,508	7,842,677	13,542,254
Air transportation	14	1,891,455	2,893,620	4,642,903
Rail transportation	5	620,575	1,258,733	2,513,502
Water transportation	1	92,945	147,627	684,768
Truck transportation	70	4,885,040	5,812,117	12,018,744
Transit and ground passenger transportation	47	832,074	998,793	1,691,047
Pipeline transportation	2	1,201,670	2,835,411	2,959,860
Scenic and sightseeing transportation and support activities for transportation	34	3,055,076	3,313,054	6,087,760
Couriers and messengers	34	1,397,729	1,745,191	3,346,895
Warehousing and storage	53	2,786,885	3,191,543	6,297,440
Newspaper publishers	10	577,966	962,312	1,244,712
Periodical publishers	6	595,300	928,378	1,357,508
Book publishers	3	335,701	1,132,537	1,765,375
Directory, mailing list, and other publishers	5	457,689	1,529,911	2,077,184
Greeting card publishing	0	37,804	147,203	185,196
Software publishers	14	1,536,794	4,000,820	4,989,663
Motion picture and video industries	10	400,197	770,787	2,151,361
Sound recording industries	1	54,940	248,622	407,563
Radio and television broadcasting	11	1,272,158	1,108,434	3,909,654
Cable and other subscription programming	0	18,743	80,901	338,214
Wired telecommunications carriers	20	1,876,578	5,868,639	10,872,704
Wireless telecommunications carriers (except satellite)	3	240,920	1,889,332	5,297,523
Satellite, telecommunications resellers, and all other telecommunications	4	514,367	755,441	1,576,667
Data processing, hosting, and related services	16	1,386,910	2,907,781	6,556,548
News syndicates, libraries, archives and all other information services	2	140,510	240,124	381,920
Internet publishing and broadcasting and web search portals	13	1,406,200	4,090,053	12,086,796
Nondepository credit intermediation and related activities	44	3,695,915	6,958,408	10,463,983
Securities and commodity contracts intermediation and brokerage	37	4,381,506	4,426,433	9,412,665

## APPENDIX

Monetary authorities and depository credit intermediation	81	6,789,696	36,015,747	46,864,894
Other financial investment activities	97	3,204,344	3,790,705	11,829,210
Direct life insurance carriers	18	2,059,577	4,353,506	6,420,870
Insurance carriers, except direct life	51	5,700,101	20,773,693	39,830,104
Insurance agencies, brokerages, and related activities	64	3,922,320	6,521,698	14,963,745
Funds, trusts, and other financial vehicles	22	748,018	917,946	6,741,782
Other real estate	325	6,218,184	20,698,325	58,005,649
Tenant-occupied housing	59	917,353	14,098,357	16,376,101
Owner-occupied dwellings	0	0	43,140,681	54,507,744
Automotive equipment rental and leasing	12	734,894	2,415,766	3,421,256
General and consumer goods rental except video tapes and discs	13	808,443	1,041,321	1,627,515
Video tape and disc rental	5	204,524	341,178	548,629
Commercial and industrial machinery and equipment rental and leasing	13	1,268,920	2,761,450	4,249,166
Lessors of nonfinancial intangible assets	1	75,823	1,836,184	2,243,987
Legal services	90	7,093,196	11,935,192	18,037,863
Accounting, tax preparation, bookkeeping, and payroll services	63	4,804,883	6,217,988	8,674,889
Architectural, engineering, and related services	71	5,867,222	6,810,766	12,506,058
Specialized design services	17	1,329,090	1,394,164	1,656,814
Custom computer programming services	39	3,589,993	4,138,423	6,128,117
Computer systems design services	23	2,291,207	2,392,718	3,229,238
Other computer related services, including facilities management	8	696,995	1,230,102	2,183,385
Management consulting services	465	38,545,407	38,056,256	59,566,018
Environmental and other technical consulting services	16	1,181,799	1,022,811	1,560,487
Scientific research and development services	851	69,484,043	95,780,600	203,114,538
Advertising, public relations, and related services	36	2,609,246	3,475,263	6,259,576
Photographic services	16	788,890	263,889	558,756
Veterinary services	14	649,225	886,619	1,425,672

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	426	27,553,455	24,505,551	35,378,547
Management of companies and enterprises	174	22,360,461	25,782,224	36,730,640
Office administrative services	52	3,713,842	1,621,303	3,555,444
Facilities support services	6	274,038	385,947	916,798
Employment services	278	10,391,374	17,356,363	27,407,773
Business support services	59	2,847,633	2,564,396	4,274,205
Travel arrangement and reservation services	8	395,620	561,299	1,409,454
Investigation and security services	40	1,354,701	1,443,454	2,152,678
Services to buildings	153	4,378,827	4,796,397	7,563,518
Landscape and horticultural services	59	2,134,134	2,375,247	3,765,223
Other support services	19	877,904	1,186,688	2,204,630
Waste management and remediation services	16	1,191,626	2,402,619	3,923,176
Elementary and secondary schools	62	2,185,609	1,881,732	2,429,972
Junior colleges, colleges, universities, and professional schools	57	2,572,296	3,410,712	4,996,141
Other educational services	79	1,776,395	1,634,617	3,514,726
Offices of physicians	133	15,878,002	18,948,173	26,748,594
Offices of dentists	46	2,871,629	3,679,315	5,615,035
Offices of other health practitioners	63	3,298,743	3,076,855	4,453,415
Outpatient care centers	45	2,615,164	2,753,002	5,412,330
Medical and diagnostic laboratories	18	1,345,778	2,118,985	3,433,797
Home health care services	117	4,716,631	3,574,828	5,056,596
Other ambulatory health care services	17	871,886	962,895	1,705,807
Hospitals	338	25,349,012	29,634,764	57,463,389
Nursing and community care facilities	109	4,019,348	4,669,038	8,257,988
Residential mental retardation, mental health, substance abuse and other facilities	50	1,729,174	1,851,135	2,956,863
Individual and family services	120	3,901,848	3,643,838	5,192,155
Child day care services	70	1,747,527	2,114,743	2,909,330
Community food, housing, and other relief services, including rehabilitation services	31	980,756	1,114,349	2,601,244
Performing arts companies	10	297,500	476,827	949,937

## APPENDIX

Commercial Sports Except Racing	12	1,177,789	1,290,951	1,802,632
Racing and Track Operation	3	78,733	130,434	288,984
Independent artists, writers, and performers	46	639,610	822,741	1,097,646
Promoters of performing arts and sports and agents for public figures	13	609,651	1,399,864	2,564,188
Museums, historical sites, zoos, and parks	9	356,628	433,860	782,140
Amusement parks and arcades	6	197,122	335,352	457,994
Gambling industries (except casino hotels)	21	881,237	2,613,489	3,734,658
Other amusement and recreation industries	28	1,127,627	1,256,681	1,907,975
Fitness and recreational sports centers	24	975,419	1,152,583	1,546,470
Bowling centers	5	171,824	202,438	328,415
Hotels and motels, including casino hotels	25	879,212	1,552,131	2,584,461
Other accommodations	10	424,138	542,503	741,102
Full-service restaurants	255	5,676,143	8,476,434	15,463,438
Limited-service restaurants	212	4,023,248	6,493,213	14,889,476
All other food and drinking places	143	4,079,438	5,153,372	8,088,953
Automotive repair and maintenance, except car washes	84	4,399,095	5,630,621	8,251,414
Car washes	45	2,243,729	3,730,605	5,476,172
Electronic and precision equipment repair and maintenance	441	31,421,912	46,451,130	73,289,259
Commercial and industrial machinery and equipment repair and maintenance	21	1,716,379	1,963,516	2,977,134
Personal and household goods repair and maintenance	23	1,284,819	1,145,244	1,468,212
Personal care services	80	2,291,159	1,738,992	2,311,744
Death care services	6	219,385	283,928	461,498
Dry-cleaning and laundry services	15	621,990	689,277	955,082
Other personal services	62	1,825,467	1,536,437	2,077,536
Religious organizations	135	6,013,999	2,857,609	11,948,080
Grantmaking, giving, and social advocacy organizations	19	956,188	2,834,081	4,437,017
Business and professional associations	13	837,168	1,280,210	2,271,738
Labor and civic organizations	53	1,039,192	2,542,184	5,162,038
Private households	28	388,205	388,205	388,205
Postal service	28	2,467,212	2,469,331	2,730,918
Federal electric utilities	0	0	0	0

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Other federal government enterprises	9	508,269	(945,113)	458,093
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	3	254,505	264,979	605,070
Local government passenger transit	8	626,431	(458,510)	342,329
Local government electric utilities	1	135,618	330,241	708,716
Other local government enterprises	25	2,166,020	3,734,241	7,634,967
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1,514	239,149,822	312,750,220	652,914,225

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 442: Detailed M2M Program Impacts by Types of Impact, Ohio.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,258</i>	<i>104,369,351</i>	<i>156,724,084</i>	<i>302,225,910</i>
Oilseed farming	4	(1,498)	316,757	1,594,064
Grain farming	4	17,512	99,819	580,558
Vegetable and melon farming	0	4,239	8,432	33,306
Fruit farming	0	957	2,559	9,342
Tree nut farming	0	152	159	285

## APPENDIX

Greenhouse, nursery, and floriculture production	1	13,582	18,708	52,455
Tobacco farming	0	114	138	386
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	4,417	6,123	17,831
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	2	(1,390)	14,955	102,379
Dairy cattle and milk production	0	2,248	11,219	106,651
Poultry and egg production	0	6,300	9,404	143,998
Animal production, except cattle and poultry and eggs	3	6,392	70,810	223,094
Forestry, forest products, and timber tract production	0	4,285	4,442	5,203
Commercial logging	0	21,506	21,173	26,385
Commercial fishing	0	859	1,491	1,663
Commercial hunting and trapping	0	1,257	(3,109)	1,327
Support activities for agriculture and forestry	1	45,650	26,181	35,819
Oil and gas extraction	1	8,073	726,362	966,072
Coal mining	0	14,867	9,864	19,106
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	43,565	12,664	28,651
Sand and gravel mining	0	36,312	15,547	17,290
Other clay, ceramic, refractory minerals mining	0	477	320	578
Potash, soda, and borate mineral mining	0	335	361	636
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	3,001	1,793	2,751
Other nonmetallic minerals	0	1,461	668	716
Drilling oil and gas wells	0	5	42	80
Support activities for oil and gas operations	0	528	1,671	3,282
Metal mining services	0	80	7,040	10,422

## APPENDIX

Other nonmetallic minerals services	0	41	658	974
Electric power generation - Hydroelectric	0	1,858	5,949	17,890
Electric power generation - Fossil fuel	1	90,233	385,145	849,162
Electric power generation - Nuclear	0	58,497	157,645	311,426
Electric power generation - Solar	0	2,361	5,371	10,559
Electric power generation - Wind	0	1,197	7,783	22,009
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	1,276	3,534	10,251
Electric power generation - All other	0	2,361	823	2,509
Electric power transmission and distribution	1	156,785	701,149	1,608,753
Natural gas distribution	1	100,287	332,478	607,074
Water, sewage and other systems	0	16,249	33,828	57,664
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	5	395,790	173,869	415,687
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	4	250,730	318,821	747,773



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Maintenance and repair construction of residential structures	2	134,892	190,997	449,654
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	492	307	716
Dog and cat food manufacturing	0	11,513	65,127	186,953
Other animal food manufacturing	0	17,562	39,302	246,006
Flour milling	0	4,942	12,577	76,885
Rice milling	0	0	0	0
Malt manufacturing	0	1,093	3,388	12,899
Wet corn milling	0	13,300	47,946	206,485
Soybean and other oilseed processing	0	4,856	37,329	241,614
Fats and oils refining and blending	0	1,849	4,854	33,789
Breakfast cereal manufacturing	0	19,623	60,961	164,213
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	725	2,208	13,212
Nonchocolate confectionery manufacturing	0	4,421	7,770	35,416
Chocolate and confectionery manufacturing from cacao beans	0	871	2,375	7,456
Confectionery manufacturing from purchased chocolate	0	5,547	9,420	48,489
Frozen fruits, juices and vegetables manufacturing	0	1,540	3,418	11,859
Frozen specialties manufacturing	1	36,138	62,482	214,173
Canned fruits and vegetables manufacturing	0	32,296	69,977	192,541
Canned specialties	0	19,066	57,778	215,979
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	11,570	20,405	188,389
Dry, condensed, and evaporated dairy product manufacturing	0	44,232	136,797	427,023
Fluid milk manufacturing	0	16,190	32,433	182,362
Creamery butter manufacturing	0	38	227	1,492
Ice cream and frozen dessert manufacturing	0	5,337	10,275	34,080
Frozen cakes and other pastries manufacturing	1	16,074	26,233	47,243
Poultry processing	0	21,302	33,748	145,447
Animal, except poultry, slaughtering	0	9,548	16,281	134,867
Meat processed from carcasses	1	66,748	81,048	547,155

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Rendering and meat byproduct processing	0	2,126	2,378	11,258
Seafood product preparation and packaging	0	22	124	2,778
Bread and bakery product, except frozen, manufacturing	1	49,161	75,039	191,016
Cookie and cracker manufacturing	0	31,812	55,164	163,370
Dry pasta, mixes, and dough manufacturing	0	6,891	20,015	70,324
Tortilla manufacturing	0	172	248	1,351
Roasted nuts and peanut butter manufacturing	0	9,496	30,253	81,479
Other snack food manufacturing	0	14,811	41,082	149,073
Coffee and tea manufacturing	0	796	1,979	10,743
Flavoring syrup and concentrate manufacturing	0	20,184	190,364	336,332
Mayonnaise, dressing, and sauce manufacturing	0	6,132	13,906	47,322
Spice and extract manufacturing	0	11,892	21,960	80,874
All other food manufacturing	0	19,624	31,073	135,592
Bottled and canned soft drinks & water	0	27,896	75,960	313,532
Manufactured ice	0	2,050	1,477	5,261
Breweries	0	25,918	110,301	227,524
Wineries	0	1,753	5,645	27,957
Distilleries	0	2,384	43,099	64,216
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	91	153	592
Broadwoven fabric mills	0	1,143	1,850	5,623
Narrow fabric mills and schiffli machine embroidery	0	1,215	1,383	3,702
Nonwoven fabric mills	0	5,145	9,782	30,665
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	4,371	5,590	13,399
Fabric coating mills	0	1,954	2,482	8,594
Carpet and rug mills	0	191	355	1,017
Curtain and linen mills	0	3,424	5,248	14,241
Textile bag and canvas mills	0	3,568	4,567	11,452
Rope, cordage, twine, tire cord and tire fabric mills	0	140	241	617
Other textile product mills	0	2,199	2,816	8,350
Hosiery and sock mills	0	238	392	826
Other apparel knitting mills	0	284	471	1,030
Cut and sew apparel contractors	0	937	1,138	2,887

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	5,247	6,741	17,340
Womens and girls cut and sew apparel manufacturing	0	568	906	5,068
Other cut and sew apparel manufacturing	0	1,272	1,698	4,851
Apparel accessories and other apparel manufacturing	0	647	917	2,456
Leather and hide tanning and finishing	0	330	587	2,381
Footwear manufacturing	0	41	49	282
Other leather and allied product manufacturing	0	1,749	1,848	4,707
Sawmills	0	10,948	13,770	52,233
Wood preservation	0	1,168	2,094	9,177
Veneer and plywood manufacturing	0	2,695	3,557	13,137
Engineered wood member and truss manufacturing	0	2,115	2,596	8,031
Reconstituted wood product manufacturing	0	1,000	2,017	8,453
Wood windows and door manufacturing	0	13,605	17,164	43,209
Cut stock, resawing lumber, and planing	0	3,830	5,383	13,226
Other millwork, including flooring	0	9,078	11,527	29,437
Wood container and pallet manufacturing	0	14,841	16,431	38,852
Manufactured home (mobile home) manufacturing	0	7	11	26
Prefabricated wood building manufacturing	0	2,956	3,258	7,894
All other miscellaneous wood product manufacturing	0	8,545	9,747	23,726
Pulp mills	0	342	376	1,318
Paper mills	0	23,666	34,748	159,434
Paperboard mills	0	6,064	10,100	51,206
Paperboard container manufacturing	1	58,529	71,954	336,392
Paper bag and coated and treated paper manufacturing	0	48,366	61,855	212,884
Stationery product manufacturing	0	5,538	6,359	25,158
Sanitary paper product manufacturing	0	10,230	18,574	91,159

## APPENDIX

All other converted paper product manufacturing	0	10,214	11,743	40,900
Printing	3	177,480	290,326	532,118
Support activities for printing	0	9,028	14,304	20,522
Petroleum refineries	0	47,023	524,615	1,783,371
Asphalt paving mixture and block manufacturing	0	4,061	7,429	22,133
Asphalt shingle and coating materials manufacturing	0	2,472	9,823	19,967
Petroleum lubricating oil and grease manufacturing	0	9,102	40,045	82,085
All other petroleum and coal products manufacturing	0	2,959	10,521	21,995
Petrochemical manufacturing	0	110	994	4,489
Industrial gas manufacturing	0	6,397	18,692	50,401
Synthetic dye and pigment manufacturing	0	11,877	28,561	84,809
Other basic inorganic chemical manufacturing	0	6,759	16,660	52,404
Other basic organic chemical manufacturing	0	30,491	67,691	414,084
Plastics material and resin manufacturing	0	25,294	45,645	270,833
Synthetic rubber manufacturing	0	3,688	5,973	29,528
Artificial and synthetic fibers and filaments manufacturing	0	1,003	1,530	7,939
Nitrogenous fertilizer manufacturing	0	15,160	41,047	84,905
Phosphatic fertilizer manufacturing	0	100	192	745
Fertilizer mixing	0	1,332	2,606	6,883
Pesticide and other agricultural chemical manufacturing	0	483	1,783	8,015
Medicinal and botanical manufacturing	0	295	445	1,311
Pharmaceutical preparation manufacturing	1	60,920	278,375	714,023
In-vitro diagnostic substance manufacturing	0	2,757	4,603	12,982
Biological product (except diagnostic) manufacturing	0	582	1,636	3,774
Paint and coating manufacturing	0	25,701	56,881	171,729
Adhesive manufacturing	0	12,428	23,246	69,985
Soap and other detergent manufacturing	0	88,480	389,628	537,161

## APPENDIX

Polish and other sanitation good manufacturing	0	15,752	36,216	90,733
Surface active agent manufacturing	0	1,144	4,431	8,929
Toilet preparation manufacturing	0	39,949	156,180	328,789
Printing ink manufacturing	0	7,397	8,116	29,715
Explosives manufacturing	0	381	463	1,730
Custom compounding of purchased resins	0	12,922	26,225	79,519
Photographic film and chemical manufacturing	0	5,916	14,979	36,063
Other miscellaneous chemical product manufacturing	0	14,393	23,962	76,853
Plastics packaging materials and unlaminated film and sheet manufacturing	0	30,386	51,785	172,017
Unlaminated plastics profile shape manufacturing	0	10,325	23,797	68,242
Plastics pipe and pipe fitting manufacturing	0	32,991	85,479	243,874
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	5,003	9,602	25,209
Polystyrene foam product manufacturing	0	8,241	14,229	42,672
Urethane and other foam product (except polystyrene) manufacturing	0	7,131	11,838	44,588
Plastics bottle manufacturing	0	17,321	30,000	113,939
Other plastics product manufacturing	2	90,046	138,617	444,709
Tire manufacturing	0	15,631	22,580	86,165
Rubber and plastics hoses and belting manufacturing	0	8,630	14,078	33,841
Other rubber product manufacturing	0	29,265	44,943	154,483
Pottery, ceramics, and plumbing fixture manufacturing	0	2,853	3,433	8,502
Brick, tile, and other structural clay product manufacturing	0	4,765	7,405	18,617
Flat glass manufacturing	0	811	1,403	4,099
Other pressed and blown glass and glassware manufacturing	0	14,786	20,336	46,950
Glass container manufacturing	0	2,226	3,356	10,172
Glass product manufacturing made of purchased glass	0	11,275	17,187	45,590

## APPENDIX

Cement manufacturing	0	1,399	2,829	8,772
Ready-mix concrete manufacturing	0	10,837	16,217	59,824
Concrete block and brick manufacturing	0	4,219	6,729	19,781
Concrete pipe manufacturing	0	246	361	1,149
Other concrete product manufacturing	0	7,606	10,108	26,979
Lime manufacturing	0	959	2,124	6,257
Gypsum product manufacturing	0	2,616	5,831	18,156
Abrasive product manufacturing	0	6,462	16,598	31,482
Cut stone and stone product manufacturing	0	5,029	5,706	12,912
Ground or treated mineral and earth manufacturing	0	568	1,397	3,938
Mineral wool manufacturing	0	5,039	9,855	20,001
Miscellaneous nonmetallic mineral products manufacturing	0	2,187	4,423	10,416
Iron and steel mills and ferroalloy manufacturing	0	30,790	54,241	230,519
Iron, steel pipe and tube manufacturing from purchased steel	0	6,287	9,754	31,900
Rolled steel shape manufacturing	0	8,152	19,409	63,319
Steel wire drawing	0	2,237	3,285	13,075
Alumina refining and primary aluminum production	0	2,477	5,920	47,414
Secondary smelting and alloying of aluminum	0	1,021	1,759	14,370
Aluminum sheet, plate, and foil manufacturing	0	5,182	10,616	37,195
Other aluminum rolling, drawing and extruding	0	5,450	7,774	34,932
Nonferrous metal (exc aluminum) smelting and refining	0	417	2,068	5,115
Copper rolling, drawing, extruding and alloying	0	18,414	27,282	147,696
Nonferrous metal, except copper and aluminum, shaping	0	6,377	8,464	26,611
Secondary processing of other nonferrous metals	0	289	906	4,118
Ferrous metal foundries	0	10,225	19,314	39,602
Nonferrous metal foundries	0	23,660	37,568	83,553
Custom roll forming	0	810	1,381	7,034
Crown and closure manufacturing and metal stamping	0	16,935	26,671	69,530

## APPENDIX

Iron and steel forging	0	9,415	13,898	39,226
Nonferrous forging	0	4,647	6,192	13,222
Cutlery, utensil, pot, and pan manufacturing	0	8,289	31,839	65,042
Handtool manufacturing	0	23,155	42,026	75,913
Prefabricated metal buildings and components manufacturing	0	2,541	3,918	10,931
Fabricated structural metal manufacturing	0	7,342	11,841	35,178
Plate work manufacturing	0	5,487	5,736	16,480
Metal window and door manufacturing	0	8,708	14,746	33,800
Sheet metal work manufacturing	0	11,234	15,373	36,149
Ornamental and architectural metal work manufacturing	0	5,579	7,926	17,793
Power boiler and heat exchanger manufacturing	0	1,527	2,339	5,055
Metal tank (heavy gauge) manufacturing	0	3,557	4,586	11,442
Metal cans manufacturing	0	7,877	21,049	79,360
Metal barrels, drums and pails manufacturing	0	2,164	2,844	10,078
Hardware manufacturing	0	3,645	6,730	19,202
Spring and wire product manufacturing	0	6,349	9,265	25,166
Machine shops	1	54,992	65,690	123,906
Turned product and screw, nut, and bolt manufacturing	0	18,981	28,547	68,787
Metal heat treating	0	6,541	11,172	27,382
Metal coating and nonprecious engraving	0	11,660	22,972	46,519
Electroplating, anodizing, and coloring metal	0	18,732	21,561	45,431
Valve and fittings, other than plumbing, manufacturing	0	8,423	15,062	36,773
Plumbing fixture fitting and trim manufacturing	0	4,577	17,257	37,937
Ball and roller bearing manufacturing	0	17,679	36,997	66,758
Small arms ammunition manufacturing	0	4,207	10,954	23,367
Ammunition, except for small arms, manufacturing	0	42	54	104
Small arms, ordnance, and accessories manufacturing	0	3,727	10,598	18,393

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	2,435	2,956	7,666
Other fabricated metal manufacturing	1	66,306	93,587	223,178
Farm machinery and equipment manufacturing	0	1,566	2,450	7,355
Lawn and garden equipment manufacturing	0	4,464	7,935	31,250
Construction machinery manufacturing	0	1,277	2,676	8,157
Mining machinery and equipment manufacturing	0	68	83	251
Oil and gas field machinery and equipment manufacturing	0	139	167	537
Semiconductor machinery manufacturing	0	109	124	352
Food product machinery manufacturing	0	393	482	1,382
Sawmill, woodworking, and paper machinery	0	824	935	3,009
Printing machinery and equipment manufacturing	0	785	898	2,192
All other industrial machinery manufacturing	0	1,321	1,679	4,428
Optical instrument and lens manufacturing	0	52	80	231
Photographic and photocopying equipment manufacturing	0	188	282	989
Other commercial service industry machinery manufacturing	0	1,717	3,373	9,702
Air purification and ventilation equipment manufacturing	0	1,367	2,020	4,976
Heating equipment (except warm air furnaces) manufacturing	0	4,494	6,883	16,032
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	9,550	17,860	46,285
Industrial mold manufacturing	0	2,771	3,190	6,009
Special tool, die, jig, and fixture manufacturing	0	5,863	7,393	12,276
Cutting tool and machine tool accessory manufacturing	0	2,247	2,455	5,406
Machine tool manufacturing	0	1,533	1,725	4,065



## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	763	934	1,925
Turbine and turbine generator set units manufacturing	0	241	341	863
Speed changer, industrial high-speed drive, and gear manufacturing	0	5,659	8,388	21,212
Mechanical power transmission equipment manufacturing	0	2,888	4,205	10,293
Other engine equipment manufacturing	0	9,536	17,879	76,703
Pump and pumping equipment manufacturing	0	1,012	1,821	4,704
Air and gas compressor manufacturing	0	1,054	1,923	4,783
Elevator and moving stairway manufacturing	0	86	136	403
Conveyor and conveying equipment manufacturing	0	1,075	1,134	2,990
Overhead cranes, hoists, and monorail systems manufacturing	0	64	128	392
Industrial truck, trailer, and stacker manufacturing	0	3,020	4,770	14,377
Power-driven handtool manufacturing	0	3,501	8,809	18,398
Welding and soldering equipment manufacturing	0	3,574	4,710	10,130
Packaging machinery manufacturing	0	1,009	1,482	3,559
Industrial process furnace and oven manufacturing	0	806	976	2,110
Fluid power cylinder and actuator manufacturing	0	1,820	2,544	7,069
Fluid power pump and motor manufacturing	0	887	1,394	3,715
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1,164	1,502	3,653
Electronic computer manufacturing	0	94	161	1,029
Computer storage device manufacturing	0	26	59	696
Computer terminals and other computer peripheral equipment manufacturing	0	27,475	40,510	141,365

## APPENDIX

Telephone apparatus manufacturing	0	241	345	1,200
Broadcast and wireless communications equipment manufacturing	0	394	491	1,447
Other communications equipment manufacturing	0	1,102	1,461	4,713
Audio and video equipment manufacturing	0	209	312	1,676
Printed circuit assembly (electronic assembly) manufacturing	0	15,981	20,607	93,153
Bare printed circuit board manufacturing	0	436	516	1,931
Semiconductor and related device manufacturing	0	25,088	35,043	127,651
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	971	1,211	3,277
Electronic connector manufacturing	0	3,079	4,023	15,249
Other electronic component manufacturing	0	9,157	10,138	35,045
Electromedical and electrotherapeutic apparatus manufacturing	0	1,455	2,234	5,709
Search, detection, and navigation instruments manufacturing	0	88	114	268
Automatic environmental control manufacturing	0	16,631	19,769	43,607
Industrial process variable instruments manufacturing	0	2,176	2,710	6,271
Totalizing fluid meter and counting device manufacturing	0	362	594	1,653
Electricity and signal testing instruments manufacturing	0	8,077	10,472	44,832
Analytical laboratory instrument manufacturing	2	165,843	247,817	704,408
Irradiation apparatus manufacturing	0	132	198	552
Watch, clock, and other measuring and controlling device manufacturing	0	1,529	2,093	5,704
Blank magnetic and optical recording media manufacturing	0	143	275	1,007

## APPENDIX

Software and other prerecorded and record reproducing	0	1,995	2,498	4,876
Electric lamp bulb and part manufacturing	0	7,025	13,447	26,359
Lighting fixture manufacturing	0	5,604	9,013	20,726
Small electrical appliance manufacturing	0	6,587	15,355	37,863
Household cooking appliance manufacturing	0	12,686	36,087	82,321
Household refrigerator and home freezer manufacturing	0	14,208	50,190	111,520
Household laundry equipment manufacturing	0	31,882	80,478	252,063
Other major household appliance manufacturing	0	5,425	17,632	35,868
Power, distribution, and specialty transformer manufacturing	0	714	1,182	3,017
Motor and generator manufacturing	0	5,944	10,005	27,691
Switchgear and switchboard apparatus manufacturing	0	1,523	2,817	8,218
Relay and industrial control manufacturing	0	21,959	31,677	65,701
Storage battery manufacturing	0	11,511	19,430	49,812
Primary battery manufacturing	0	508	973	3,711
Fiber optic cable manufacturing	0	1,644	2,915	12,270
Other communication and energy wire manufacturing	0	5,021	10,089	42,237
Wiring device manufacturing	0	7,658	17,824	42,750
Carbon and graphite product manufacturing	0	4,377	6,786	17,863
All other miscellaneous electrical equipment and component manufacturing	0	14,298	17,271	54,316
Automobile manufacturing	0	18,645	33,649	248,455
Light truck and utility vehicle manufacturing	0	9,589	18,506	200,731
Heavy duty truck manufacturing	0	671	1,171	6,580
Motor vehicle body manufacturing	0	1,342	1,552	6,595
Truck trailer manufacturing	0	47	50	217
Motor home manufacturing	0	1,823	2,546	8,443
Travel trailer and camper manufacturing	0	21,081	22,029	72,646
Motor vehicle gasoline engine and engine parts manufacturing	1	64,126	77,362	382,768

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	25,782	28,513	146,512
Motor vehicle transmission and power train parts manufacturing	1	176,565	224,211	811,371
Motor vehicle seating and interior trim manufacturing	0	4,688	5,390	37,226
Motor vehicle metal stamping	1	56,600	65,560	255,794
Other motor vehicle parts manufacturing	1	55,458	60,935	379,652
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	25,881	34,234	158,737
Aircraft manufacturing	0	(2)	5	55
Aircraft engine and engine parts manufacturing	0	9,609	29,515	55,331
Other aircraft parts and auxiliary equipment manufacturing	0	1,804	3,414	7,021
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	1	3
Railroad rolling stock manufacturing	0	26	70	424
Ship building and repairing	0	138	208	550
Boat building	0	(935)	(383)	7,318
Motorcycle, bicycle, and parts manufacturing	0	1,790	9,583	16,780
Military armored vehicle, tank, and tank component manufacturing	0	5,158	15,759	33,567
All other transportation equipment manufacturing	0	(2,647)	(1,877)	9,938
Wood kitchen cabinet and countertop manufacturing	0	13,168	16,069	35,578
Upholstered household furniture manufacturing	0	3,647	4,701	16,164
Nonupholstered wood household furniture manufacturing	0	13,910	15,091	37,212
Other household nonupholstered furniture manufacturing	0	3,086	4,460	13,216
Institutional furniture manufacturing	0	628	670	1,706
Wood office furniture manufacturing	0	121	166	451

## APPENDIX

Custom architectural woodwork and millwork	0	318	305	814
Office furniture, except wood, manufacturing	0	2,279	3,606	11,400
Showcase, partition, shelving, and locker manufacturing	0	1,897	2,352	6,147
Mattress manufacturing	0	2,740	4,702	17,213
Blind and shade manufacturing	0	186	192	728
Surgical and medical instrument manufacturing	0	4,528	6,591	18,728
Surgical appliance and supplies manufacturing	0	18,900	28,229	83,935
Dental equipment and supplies manufacturing	0	1,063	1,386	3,805
Ophthalmic goods manufacturing	0	5,473	8,305	20,455
Dental laboratories	0	5,373	5,118	8,531
Jewelry and silverware manufacturing	0	6,995	9,197	19,559
Sporting and athletic goods manufacturing	0	8,537	9,574	26,605
Doll, toy, and game manufacturing	0	10,412	11,125	30,621
Office supplies (except paper) manufacturing	0	3,062	3,427	8,988
Sign manufacturing	0	16,443	14,383	24,446
Gasket, packing, and sealing device manufacturing	0	4,673	5,081	12,919
Musical instrument manufacturing	0	6,310	6,313	9,184
Fasteners, buttons, needles, and pins manufacturing	0	1,928	2,071	3,279
Broom, brush, and mop manufacturing	0	6,555	8,476	21,764
Burial casket manufacturing	0	1,215	1,320	2,242
All other miscellaneous manufacturing	0	15,974	17,756	35,418
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	50,166	121,063	265,473
Wholesale - Professional and commercial equipment and supplies	3	328,210	580,155	985,899
Wholesale - Household appliances and electrical and electronic goods	1	105,252	252,448	522,705
Wholesale - Machinery, equipment, and supplies	1	113,682	206,312	355,200
Wholesale - Other durable goods merchant wholesalers	3	218,255	356,844	686,317

## APPENDIX

Wholesale - Drugs and druggists' sundries	1	188,503	561,272	1,117,247
Wholesale - Grocery and related product wholesalers	3	231,062	323,401	607,462
Wholesale - Petroleum and petroleum products	0	30,952	488,728	555,275
Wholesale - Other nondurable goods merchant wholesalers	4	400,062	847,241	1,451,960
Wholesale - Wholesale electronic markets and agents and brokers	3	280,214	136,154	158,182
Retail - Motor vehicle and parts dealers	4	242,088	409,492	580,897
Retail - Furniture and home furnishings stores	3	127,825	178,299	282,277
Retail - Electronics and appliance stores	3	166,173	180,781	289,613
Retail - Building material and garden equipment and supplies stores	4	147,920	291,680	416,965
Retail - Food and beverage stores	15	410,082	623,087	1,040,554
Retail - Health and personal care stores	7	286,353	360,627	553,650
Retail - Gasoline stores	4	142,360	259,127	445,673
Retail - Clothing and clothing accessories stores	6	217,626	341,309	620,888
Retail - Sporting goods, hobby, musical instrument and book stores	4	115,369	158,711	249,664
Retail - General merchandise stores	14	385,279	631,625	1,008,396
Retail - Miscellaneous store retailers	8	219,631	276,403	431,626
Retail - Nonstore retailers	10	355,773	1,060,550	1,744,539
Air transportation	2	235,494	369,421	583,534
Rail transportation	1	60,865	109,221	231,942
Water transportation	0	15,040	23,199	105,339
Truck transportation	7	545,080	635,480	1,279,161
Transit and ground passenger transportation	6	130,888	158,764	251,840
Pipeline transportation	0	79,533	205,611	219,352
Scenic and sightseeing transportation and support activities for transportation	4	370,611	406,536	746,348
Couriers and messengers	4	166,562	214,235	401,849
Warehousing and storage	6	337,734	386,307	754,954

## APPENDIX

Newspaper publishers	1	63,697	103,201	131,517
Periodical publishers	1	83,716	128,325	172,899
Book publishers	0	39,489	127,849	198,107
Directory, mailing list, and other publishers	1	44,024	149,856	202,865
Greeting card publishing	0	3,554	14,619	18,187
Software publishers	2	215,985	547,610	666,281
Motion picture and video industries	1	65,418	127,182	295,764
Sound recording industries	0	9,290	39,757	59,955
Radio and television broadcasting	1	212,653	201,864	488,895
Cable and other subscription programming	0	3,268	11,272	39,220
Wired telecommunications carriers	2	232,851	673,022	1,212,033
Wireless telecommunications carriers (except satellite)	0	39,235	250,852	683,832
Satellite, telecommunications resellers, and all other telecommunications	0	76,408	92,304	169,704
Data processing, hosting, and related services	2	170,088	335,144	721,725
News syndicates, libraries, archives and all other information services	0	21,914	37,289	55,849
Internet publishing and broadcasting and web search portals	2	243,058	676,587	1,737,464
Nondepository credit intermediation and related activities	5	501,006	957,338	1,355,504
Securities and commodity contracts intermediation and brokerage	4	562,549	558,582	1,112,678
Monetary authorities and depository credit intermediation	9	737,982	4,081,782	5,139,653
Other financial investment activities	12	549,061	631,514	1,571,561
Direct life insurance carriers	2	224,504	490,255	705,716
Insurance carriers, except direct life	6	671,278	2,519,319	4,646,067
Insurance agencies, brokerages, and related activities	7	457,097	763,932	1,704,466
Funds, trusts, and other financial vehicles	3	114,260	137,820	855,030
Other real estate	35	857,524	2,831,350	6,910,188
Tenant-occupied housing	7	137,905	1,998,301	2,287,627

## APPENDIX

Owner-occupied dwellings	0	0	5,994,159	7,573,550
Automotive equipment rental and leasing	1	115,081	309,205	418,726
General and consumer goods rental except video tapes and discs	1	105,101	126,797	184,827
Video tape and disc rental	1	26,935	43,343	67,970
Commercial and industrial machinery and equipment rental and leasing	1	139,177	260,942	389,300
Lessors of nonfinancial intangible assets	0	8,205	198,281	240,891
Legal services	10	847,816	1,483,601	2,188,116
Accounting, tax preparation, bookkeeping, and payroll services	6	524,794	681,286	928,281
Architectural, engineering, and related services	8	661,727	771,875	1,395,795
Specialized design services	2	133,081	139,692	162,981
Custom computer programming services	2	227,687	260,801	377,889
Computer systems design services	2	240,686	250,307	332,318
Other computer related services, including facilities management	1	84,069	143,317	243,118
Management consulting services	30	2,664,451	2,635,083	4,012,131
Environmental and other technical consulting services	2	149,437	130,275	195,140
Scientific research and development services	110	10,517,310	14,691,805	28,802,545
Advertising, public relations, and related services	4	292,825	388,372	668,877
Photographic services	2	86,468	30,345	60,770
Veterinary services	2	82,921	114,842	179,763
Marketing research and all other miscellaneous professional, scientific, and technical services	16	1,086,300	963,797	1,373,955
Management of companies and enterprises	18	2,570,506	2,990,385	4,128,734
Office administrative services	6	495,032	219,905	438,993
Facilities support services	1	29,290	41,735	94,433
Employment services	28	1,131,591	1,937,353	2,950,212
Business support services	6	290,069	266,545	430,127
Travel arrangement and reservation services	1	49,886	71,329	172,222
Investigation and security services	4	157,930	168,657	244,222
Services to buildings	11	354,642	389,388	585,385



## APPENDIX

Landscape and horticultural services	6	257,137	286,860	437,617
Other support services	2	97,305	131,864	243,448
Waste management and remediation services	2	137,538	278,995	449,357
Elementary and secondary schools	9	354,206	303,594	385,573
Junior colleges, colleges, universities, and professional schools	8	462,391	607,573	845,534
Other educational services	8	199,497	183,886	381,735
Offices of physicians	16	1,984,556	2,386,926	3,343,124
Offices of dentists	6	376,992	488,166	734,649
Offices of other health practitioners	8	413,743	389,025	561,767
Outpatient care centers	6	361,443	382,026	739,805
Medical and diagnostic laboratories	1	94,073	149,194	238,607
Home health care services	15	587,453	450,347	641,433
Other ambulatory health care services	2	113,385	125,980	219,572
Hospitals	44	3,534,609	4,115,141	7,786,833
Nursing and community care facilities	14	535,383	622,880	1,072,971
Residential mental retardation, mental health, substance abuse and other facilities	7	257,197	275,489	431,107
Individual and family services	17	564,178	536,156	759,462
Child day care services	9	236,551	290,498	389,967
Community food, housing, and other relief services, including rehabilitation services	5	151,409	174,184	392,942
Performing arts companies	1	44,226	68,575	124,302
Commercial Sports Except Racing	1	143,752	157,045	215,211
Racing and Track Operation	0	11,192	17,620	37,555
Independent artists, writers, and performers	5	92,437	115,939	148,011
Promoters of performing arts and sports and agents for public figures	2	89,540	188,454	323,421
Museums, historical sites, zoos, and parks	1	51,349	61,759	107,896
Amusement parks and arcades	1	28,584	42,442	58,575
Gambling industries (except casino hotels)	3	123,616	345,573	487,655
Other amusement and recreation industries	3	139,051	148,508	224,925

## APPENDIX

Fitness and recreational sports centers	3	138,260	152,660	202,122
Bowling centers	1	21,968	24,956	40,034
Hotels and motels, including casino hotels	4	138,473	233,978	383,982
Other accommodations	2	78,007	98,165	131,330
Full-service restaurants	30	699,748	1,051,147	1,877,332
Limited-service restaurants	26	532,409	854,226	1,889,963
All other food and drinking places	17	529,612	658,104	1,004,662
Automotive repair and maintenance, except car washes	10	571,305	706,158	1,028,771
Car washes	6	286,696	475,231	692,523
Electronic and precision equipment repair and maintenance	16	1,345,217	1,990,919	2,962,150
Commercial and industrial machinery and equipment repair and maintenance	2	165,870	186,424	281,619
Personal and household goods repair and maintenance	3	156,902	125,842	161,269
Personal care services	11	326,152	226,550	304,494
Death care services	1	32,682	39,993	64,670
Dry-cleaning and laundry services	2	71,654	78,224	108,167
Other personal services	8	258,674	190,833	265,595
Religious organizations	21	929,764	343,880	1,695,091
Grantmaking, giving, and social advocacy organizations	3	170,012	432,286	676,735
Business and professional associations	1	114,454	158,823	270,969
Labor and civic organizations	8	160,373	346,958	719,300
Private households	4	56,814	56,814	56,814
Postal service	3	279,940	280,200	309,309
Federal electric utilities	0	0	0	0
Other federal government enterprises	1	111,177	(249,199)	73,593
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	17,125	17,343	37,300
Local government passenger transit	1	84,075	(76,959)	31,399
Local government electric utilities	0	13,994	31,249	65,400
Other local government enterprises	3	278,778	444,330	902,427

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	282	44,316,590	58,349,519	122,006,923

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 38. Oklahoma

**Table 443: Detailed NASA Impacts by Types of Impact, Oklahoma.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	625	35,482,030	50,579,371	110,244,665
Oilseed farming	0	6,584	15,292	30,135
Grain farming	0	11,630	25,432	109,426
Vegetable and melon farming	0	897	1,480	4,791
Fruit farming	0	200	369	987
Tree nut farming	0	1,797	1,902	4,064
Greenhouse, nursery, and floriculture production	0	3,745	5,229	15,632
Tobacco farming	0	0	0	0
Cotton farming	0	2,301	3,286	9,564
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	6,552	7,612	26,112
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	8,109	22,772	108,689

## APPENDIX

Dairy cattle and milk production	0	1,178	2,340	20,347
Poultry and egg production	0	1,158	1,654	29,029
Animal production, except cattle and poultry and eggs	2	31,402	89,556	172,679
Forestry, forest products, and timber tract production	0	730	812	1,205
Commercial logging	0	2,575	2,924	7,688
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	76	209	375
Support activities for agriculture and forestry	1	46,329	42,704	52,494
Oil and gas extraction	3	251,906	856,203	1,591,994
Coal mining	0	65,486	29,941	46,036
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	126,386	(115,597)	23,189
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	1	141,969	(20,762)	30,507
Sand and gravel mining	0	51,499	28,177	36,666
Other clay, ceramic, refractory minerals mining	0	2,292	305	1,697
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	12,160	5,912	7,846
Drilling oil and gas wells	0	82	188	446
Support activities for oil and gas operations	0	4,128	6,993	16,786
Metal mining services	0	7,502	28,940	59,583
Other nonmetallic minerals services	0	962	3,565	7,020
Electric power generation - Hydroelectric	0	601	1,636	6,491
Electric power generation - Fossil fuel	1	91,691	262,416	867,685
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	192	334	2,728
Electric power generation - Wind	0	6,430	35,604	69,940

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	1	124,161	350,856	1,211,984
Natural gas distribution	0	60,396	133,730	317,232
Water, sewage and other systems	0	1,281	2,474	5,194
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	45	2,486,793	1,144,505	3,204,842
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	117,359	142,501	399,187
Maintenance and repair construction of residential structures	1	39,939	52,840	149,577
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	65	37	106
Dog and cat food manufacturing	0	4,369	18,806	70,351
Other animal food manufacturing	0	3,220	5,656	47,837
Flour milling	0	1,628	3,503	23,266
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	783	4,724	35,456
Fats and oils refining and blending	0	5	11	95
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	101	181	1,063
Confectionery manufacturing from purchased chocolate	0	61	67	281
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	1,653	2,560	12,763
Canned fruits and vegetables manufacturing	0	375	642	3,035
Canned specialties	0	391	975	5,227
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	52	80	935
Dry, condensed, and evaporated dairy product manufacturing	0	524	1,386	10,026
Fluid milk manufacturing	0	4,351	7,391	57,781
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	591	953	4,955
Frozen cakes and other pastries manufacturing	0	3,111	4,699	8,605
Poultry processing	0	5,992	8,171	41,258
Animal, except poultry, slaughtering	0	2,130	3,066	32,009
Meat processed from carcasses	0	17,622	19,141	152,028
Rendering and meat byproduct processing	0	121	151	754
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	14,747	19,077	42,684
Cookie and cracker manufacturing	0	4,586	6,668	25,633
Dry pasta, mixes, and dough manufacturing	0	256	609	2,507
Tortilla manufacturing	0	407	467	1,943

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	984	1,205	6,252
Other snack food manufacturing	0	769	914	5,872
Coffee and tea manufacturing	0	199	284	1,575
Flavoring syrup and concentrate manufacturing	0	334	2,118	3,815
Mayonnaise, dressing, and sauce manufacturing	0	155	265	1,459
Spice and extract manufacturing	0	47	59	314
All other food manufacturing	0	1,667	2,242	8,737
Bottled and canned soft drinks & water	0	11,033	24,517	127,864
Manufactured ice	0	582	304	1,887
Breweries	0	1,238	3,980	15,327
Wineries	0	23	49	412
Distilleries	0	408	2,155	4,283
Tobacco product manufacturing	0	2,315	51,595	80,533
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	10	22	137
Narrow fabric mills and schiffli machine embroidery	0	7	9	79
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	60	104	541
Fabric coating mills	0	49	89	361
Carpet and rug mills	0	24	70	307
Curtain and linen mills	0	336	717	2,043
Textile bag and canvas mills	0	309	508	1,361
Rope, cordage, twine, tire cord and tire fabric mills	0	49	130	270
Other textile product mills	0	280	442	1,455
Hosiery and sock mills	0	22	39	109
Other apparel knitting mills	0	24	44	132
Cut and sew apparel contractors	0	664	689	1,469
Mens and boys cut and sew apparel manufacturing	0	101	113	626
Womens and girls cut and sew apparel manufacturing	0	240	243	986
Other cut and sew apparel manufacturing	0	31	44	169
Apparel accessories and other apparel manufacturing	0	59	69	313
Leather and hide tanning and finishing	0	10	12	319

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	60	59	234
Sawmills	0	7,722	11,876	35,944
Wood preservation	0	820	2,541	9,875
Veneer and plywood manufacturing	0	209	230	799
Engineered wood member and truss manufacturing	0	1,477	1,917	5,872
Reconstituted wood product manufacturing	0	983	2,902	11,131
Wood windows and door manufacturing	0	3,317	3,934	9,935
Cut stock, resawing lumber, and planing	0	234	399	1,064
Other millwork, including flooring	0	4,394	5,334	14,641
Wood container and pallet manufacturing	0	3,403	3,963	10,126
Manufactured home (mobile home) manufacturing	0	24	40	108
Prefabricated wood building manufacturing	0	2,881	3,311	9,848
All other miscellaneous wood product manufacturing	0	1,232	1,428	3,780
Pulp mills	0	0	0	0
Paper mills	0	19,337	66,051	185,207
Paperboard mills	0	1,905	6,586	19,586
Paperboard container manufacturing	0	5,855	10,660	40,276
Paper bag and coated and treated paper manufacturing	0	887	2,077	7,275
Stationery product manufacturing	0	944	1,609	5,483
Sanitary paper product manufacturing	0	1,717	7,936	22,440
All other converted paper product manufacturing	0	39	65	233
Printing	1	34,850	45,638	117,281
Support activities for printing	0	171	217	570
Petroleum refineries	0	36,224	206,666	1,385,113
Asphalt paving mixture and block manufacturing	0	10,808	12,217	34,248
Asphalt shingle and coating materials manufacturing	0	3,916	6,879	21,339
Petroleum lubricating oil and grease manufacturing	0	4,958	12,897	38,402



## APPENDIX

All other petroleum and coal products manufacturing	0	9,616	13,792	35,316
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	1	71,905	150,093	779,381
Synthetic dye and pigment manufacturing	0	22	40	228
Other basic inorganic chemical manufacturing	0	3,064	5,746	24,035
Other basic organic chemical manufacturing	0	540	967	10,164
Plastics material and resin manufacturing	0	654	981	9,405
Synthetic rubber manufacturing	0	77	109	1,045
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	7,224	14,544	43,674
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	60	92	358
Pesticide and other agricultural chemical manufacturing	0	619	1,632	14,531
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	1,801	5,625	19,668
In-vitro diagnostic substance manufacturing	0	3	5	26
Biological product (except diagnostic) manufacturing	0	371	772	2,000
Paint and coating manufacturing	0	2,026	3,399	16,654
Adhesive manufacturing	0	529	783	4,160
Soap and other detergent manufacturing	0	1,217	2,949	19,701
Polish and other sanitation good manufacturing	0	674	1,070	7,664
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	197	457	2,576
Printing ink manufacturing	0	62	65	370
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	316	510	3,370
Photographic film and chemical manufacturing	0	3,912	7,346	22,624
Other miscellaneous chemical product manufacturing	0	1,943	2,639	11,710

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	5,107	8,694	33,783
Unlaminated plastics profile shape manufacturing	0	505	1,157	3,456
Plastics pipe and pipe fitting manufacturing	0	20,173	48,718	151,200
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	285	539	1,557
Polystyrene foam product manufacturing	0	1,792	3,144	13,661
Urethane and other foam product (except polystyrene) manufacturing	0	921	1,540	6,780
Plastics bottle manufacturing	0	424	729	2,973
Other plastics product manufacturing	0	4,799	7,313	25,575
Tire manufacturing	0	20,184	28,480	108,097
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	7,099	10,915	43,298
Pottery, ceramics, and plumbing fixture manufacturing	0	1,146	1,568	3,434
Brick, tile, and other structural clay product manufacturing	0	6,534	13,196	33,325
Flat glass manufacturing	0	1,545	3,636	8,309
Other pressed and blown glass and glassware manufacturing	0	277	393	1,315
Glass container manufacturing	0	1,835	3,594	8,735
Glass product manufacturing made of purchased glass	0	3,141	5,904	14,873
Cement manufacturing	0	5,354	14,971	37,714
Ready-mix concrete manufacturing	0	25,656	47,527	161,891
Concrete block and brick manufacturing	0	6,504	13,369	35,834
Concrete pipe manufacturing	0	6,063	10,867	27,139
Other concrete product manufacturing	0	17,721	27,808	74,138
Lime manufacturing	0	2,083	5,968	15,296
Gypsum product manufacturing	0	3,634	11,323	29,867
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	3,027	3,659	8,527

## APPENDIX

Ground or treated mineral and earth manufacturing	0	208	712	2,217
Mineral wool manufacturing	0	277	680	2,908
Miscellaneous nonmetallic mineral products manufacturing	0	5,479	15,346	37,729
Iron and steel mills and ferroalloy manufacturing	0	3,759	5,715	44,801
Iron, steel pipe and tube manufacturing from purchased steel	0	811	1,118	5,222
Rolled steel shape manufacturing	0	184	332	1,441
Steel wire drawing	0	10,305	13,161	51,717
Alumina refining and primary aluminum production	0	21	43	456
Secondary smelting and alloying of aluminum	0	15	24	353
Aluminum sheet, plate, and foil manufacturing	0	389	637	3,438
Other aluminum rolling, drawing and extruding	0	113	152	1,217
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	867	1,119	13,232
Nonferrous metal, except copper and aluminum, shaping	0	41	54	306
Secondary processing of other nonferrous metals	0	2	7	49
Ferrous metal foundries	0	5,534	8,626	22,691
Nonferrous metal foundries	0	716	1,017	2,923
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	459	675	1,763
Iron and steel forging	0	543	758	2,363
Nonferrous forging	0	145	177	577
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	117	181	371
Prefabricated metal buildings and components manufacturing	0	21,556	30,943	85,562
Fabricated structural metal manufacturing	0	17,930	27,641	77,604
Plate work manufacturing	0	6,322	6,484	17,789
Metal window and door manufacturing	0	6,023	9,710	27,047

## APPENDIX

Sheet metal work manufacturing	0	3,809	4,912	12,444
Ornamental and architectural metal work manufacturing	0	8,686	11,703	27,704
Power boiler and heat exchanger manufacturing	0	3,546	5,080	11,841
Metal tank (heavy gauge) manufacturing	0	5,680	7,021	18,698
Metal cans manufacturing	0	380	920	3,684
Metal barrels, drums and pails manufacturing	0	40	48	178
Hardware manufacturing	0	131	212	651
Spring and wire product manufacturing	1	38,571	53,950	155,197
Machine shops	0	19,038	21,913	43,711
Turned product and screw, nut, and bolt manufacturing	0	2,154	3,068	8,429
Metal heat treating	0	704	1,127	2,764
Metal coating and nonprecious engraving	0	4,317	7,567	17,667
Electroplating, anodizing, and coloring metal	0	4,128	4,627	10,153
Valve and fittings, other than plumbing, manufacturing	1	109,295	186,321	470,210
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	6,467	12,543	31,161
Small arms ammunition manufacturing	0	244	512	992
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	188	483	976
Fabricated pipe and pipe fitting manufacturing	0	6,814	7,971	18,789
Other fabricated metal manufacturing	0	4,245	5,664	14,968
Farm machinery and equipment manufacturing	0	306	408	2,707
Lawn and garden equipment manufacturing	0	232	357	2,235
Construction machinery manufacturing	0	613	999	3,607
Mining machinery and equipment manufacturing	0	0	0	0

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	2,422	2,705	9,642
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	9	10	35
Sawmill, woodworking, and paper machinery	0	19	20	65
Printing machinery and equipment manufacturing	0	8	9	42
All other industrial machinery manufacturing	0	35	42	108
Optical instrument and lens manufacturing	0	6	9	28
Photographic and photocopying equipment manufacturing	0	6	8	38
Other commercial service industry machinery manufacturing	0	2,925	4,737	13,786
Air purification and ventilation equipment manufacturing	0	537	708	2,382
Heating equipment (except warm air furnaces) manufacturing	0	1,562	2,024	5,209
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	8,493	13,457	49,364
Industrial mold manufacturing	0	480	518	1,139
Special tool, die, jig, and fixture manufacturing	0	44	51	125
Cutting tool and machine tool accessory manufacturing	0	25	27	112
Machine tool manufacturing	0	114	122	403
Rolling mill and other metalworking machinery manufacturing	0	29	33	77
Turbine and turbine generator set units manufacturing	0	61	75	324
Speed changer, industrial high-speed drive, and gear manufacturing	0	(1)	(1)	14
Mechanical power transmission equipment manufacturing	0	43	56	207
Other engine equipment manufacturing	0	80,387	149,734	428,979
Pump and pumping equipment manufacturing	0	3,333	5,042	14,594

## APPENDIX

Air and gas compressor manufacturing	0	4,630	6,910	22,394
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	396	631	2,156
Industrial truck, trailer, and stacker manufacturing	0	100	136	532
Power-driven handtool manufacturing	0	11	24	140
Welding and soldering equipment manufacturing	0	12	15	63
Packaging machinery manufacturing	0	7	9	35
Industrial process furnace and oven manufacturing	0	439	489	1,002
Fluid power cylinder and actuator manufacturing	0	226	280	867
Fluid power pump and motor manufacturing	0	1,648	2,210	7,096
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	213	252	883
Electronic computer manufacturing	0	21	45	117
Computer storage device manufacturing	0	200	555	3,148
Computer terminals and other computer peripheral equipment manufacturing	0	3	6	20
Telephone apparatus manufacturing	0	100	183	733
Broadcast and wireless communications equipment manufacturing	0	12	18	59
Other communications equipment manufacturing	0	187	299	1,103
Audio and video equipment manufacturing	0	58	103	458
Printed circuit assembly (electronic assembly) manufacturing	0	133	202	940
Bare printed circuit board manufacturing	0	19	25	65

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Semiconductor and related device manufacturing	0	42	73	233
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	19	29	132
Other electronic component manufacturing	0	200	226	691
Electromedical and electrotherapeutic apparatus manufacturing	0	32	66	191
Search, detection, and navigation instruments manufacturing	0	12	20	57
Automatic environmental control manufacturing	0	31	42	155
Industrial process variable instruments manufacturing	0	1,029	1,482	3,063
Totalizing fluid meter and counting device manufacturing	0	367	776	1,898
Electricity and signal testing instruments manufacturing	0	71	102	346
Analytical laboratory instrument manufacturing	0	47,709	83,223	173,763
Irradiation apparatus manufacturing	0	2	5	14
Watch, clock, and other measuring and controlling device manufacturing	0	15	26	87
Blank magnetic and optical recording media manufacturing	0	29	86	874
Software and other prerecorded and record reproducing	0	20	29	103
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	110	126	488
Small electrical appliance manufacturing	0	196	324	971
Household cooking appliance manufacturing	0	2,008	3,841	13,148
Household refrigerator and home freezer manufacturing	0	2,038	4,534	15,101
Household laundry equipment manufacturing	0	3,577	6,251	30,404

## APPENDIX

Other major household appliance manufacturing	0	1,016	2,048	6,480
Power, distribution, and specialty transformer manufacturing	0	9	11	52
Motor and generator manufacturing	0	1,414	1,978	6,904
Switchgear and switchboard apparatus manufacturing	0	245	361	1,259
Relay and industrial control manufacturing	0	380	467	1,427
Storage battery manufacturing	0	278	386	1,530
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	260	375	1,890
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	205	340	1,051
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	44	49	131
Automobile manufacturing	0	11	51	220
Light truck and utility vehicle manufacturing	0	794	2,858	20,579
Heavy duty truck manufacturing	0	783	2,150	10,957
Motor vehicle body manufacturing	0	325	454	1,764
Truck trailer manufacturing	0	60	80	383
Motor home manufacturing	0	4,769	9,302	32,279
Travel trailer and camper manufacturing	0	5,814	6,378	29,828
Motor vehicle gasoline engine and engine parts manufacturing	0	890	1,364	7,442
Motor vehicle electrical and electronic equipment manufacturing	0	1,011	1,587	8,778
Motor vehicle transmission and power train parts manufacturing	0	6,920	11,437	57,970
Motor vehicle seating and interior trim manufacturing	0	1	2	17
Motor vehicle metal stamping	0	333	462	1,911
Other motor vehicle parts manufacturing	0	4,290	7,215	31,626
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	4,260	7,208	32,075



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Aircraft manufacturing	0	968	1,371	5,038
Aircraft engine and engine parts manufacturing	0	15,554	27,406	100,668
Other aircraft parts and auxiliary equipment manufacturing	3	235,960	317,228	890,548
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	72	84	224
Railroad rolling stock manufacturing	0	34	43	336
Ship building and repairing	0	0	0	0
Boat building	0	3,756	4,572	20,407
Motorcycle, bicycle, and parts manufacturing	0	154	317	1,495
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	331	501	2,823
Wood kitchen cabinet and countertop manufacturing	0	2,889	4,093	11,318
Upholstered household furniture manufacturing	0	283	381	1,308
Nonupholstered wood household furniture manufacturing	0	58	67	306
Other household nonupholstered furniture manufacturing	0	88	135	586
Institutional furniture manufacturing	0	20	21	98
Wood office furniture manufacturing	0	226	322	819
Custom architectural woodwork and millwork	0	325	311	1,040
Office furniture, except wood, manufacturing	0	170	292	2,356
Showcase, partition, shelving, and locker manufacturing	0	150	211	737
Mattress manufacturing	0	558	1,177	3,995
Blind and shade manufacturing	0	4	4	62
Surgical and medical instrument manufacturing	0	667	1,307	3,374
Surgical appliance and supplies manufacturing	0	198	395	1,377

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Dental equipment and supplies manufacturing	0	4	8	36
Ophthalmic goods manufacturing	0	16	35	117
Dental laboratories	0	458	435	888
Jewelry and silverware manufacturing	0	474	786	2,423
Sporting and athletic goods manufacturing	0	90	130	817
Doll, toy, and game manufacturing	0	9	20	242
Office supplies (except paper) manufacturing	0	5	8	137
Sign manufacturing	0	3,379	2,728	10,637
Gasket, packing, and sealing device manufacturing	0	844	1,074	3,612
Musical instrument manufacturing	0	12	13	204
Fasteners, buttons, needles, and pins manufacturing	0	446	558	1,327
Broom, brush, and mop manufacturing	0	812	1,233	3,884
Burial casket manufacturing	0	119	149	785
All other miscellaneous manufacturing	0	5,325	6,428	15,250
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	22,419	63,024	129,878
Wholesale - Professional and commercial equipment and supplies	1	70,297	137,341	240,172
Wholesale - Household appliances and electrical and electronic goods	0	33,885	95,247	199,525
Wholesale - Machinery, equipment, and supplies	1	94,265	188,719	313,072
Wholesale - Other durable goods merchant wholesalers	2	116,624	201,010	380,225
Wholesale - Drugs and druggists' sundries	0	49,003	176,001	334,265
Wholesale - Grocery and related product wholesalers	1	64,132	97,160	188,010
Wholesale - Petroleum and petroleum products	0	29,862	278,846	340,286
Wholesale - Other nondurable goods merchant wholesalers	2	147,882	327,395	645,117
Wholesale - Wholesale electronic markets and agents and brokers	2	105,090	72,291	85,499
Retail - Motor vehicle and parts dealers	2	97,579	154,004	229,113

## APPENDIX

Retail - Furniture and home furnishings stores	1	54,366	66,544	108,146
Retail - Electronics and appliance stores	1	50,006	55,667	98,429
Retail - Building material and garden equipment and supplies stores	3	112,818	209,797	308,291
Retail - Food and beverage stores	4	127,191	170,926	277,066
Retail - Health and personal care stores	3	111,815	135,729	211,272
Retail - Gasoline stores	2	46,096	88,368	177,756
Retail - Clothing and clothing accessories stores	2	47,434	78,605	181,016
Retail - Sporting goods, hobby, musical instrument and book stores	2	36,011	46,619	83,495
Retail - General merchandise stores	6	172,699	239,039	401,740
Retail - Miscellaneous store retailers	4	71,997	87,209	161,988
Retail - Nonstore retailers	4	38,668	146,180	415,960
Air transportation	0	46,891	32,024	73,053
Rail transportation	0	27,507	133,932	182,177
Water transportation	0	(276)	(269)	3,859
Truck transportation	3	225,980	273,238	563,541
Transit and ground passenger transportation	1	14,602	19,308	39,081
Pipeline transportation	0	303,519	277,827	274,212
Scenic and sightseeing transportation and support activities for transportation	3	179,371	208,591	446,924
Couriers and messengers	1	51,737	73,354	132,696
Warehousing and storage	3	118,067	132,482	295,294
Newspaper publishers	1	53,672	88,142	113,079
Periodical publishers	0	50,543	86,709	119,397
Book publishers	0	5,188	15,029	22,119
Directory, mailing list, and other publishers	0	8,214	24,634	36,903
Greeting card publishing	0	383	1,547	1,958
Software publishers	0	46,458	119,222	144,270
Motion picture and video industries	0	12,599	26,084	94,784
Sound recording industries	0	727	5,570	12,250
Radio and television broadcasting	1	294,150	260,112	541,554

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Cable and other subscription programming	0	22,315	34,634	77,191
Wired telecommunications carriers	1	91,950	213,725	444,088
Wireless telecommunications carriers (except satellite)	0	29,784	151,721	466,561
Satellite, telecommunications resellers, and all other telecommunications	0	9,676	11,020	28,524
Data processing, hosting, and related services	1	40,952	73,496	238,957
News syndicates, libraries, archives and all other information services	0	4,312	6,677	13,638
Internet publishing and broadcasting and web search portals	0	31,476	78,243	280,571
Nondepository credit intermediation and related activities	2	88,824	114,143	265,121
Securities and commodity contracts intermediation and brokerage	1	80,040	81,564	223,312
Monetary authorities and depository credit intermediation	8	548,901	991,740	2,202,395
Other financial investment activities	4	35,834	72,833	429,408
Direct life insurance carriers	1	67,231	148,624	218,914
Insurance carriers, except direct life	1	111,639	423,172	896,084
Insurance agencies, brokerages, and related activities	4	217,801	344,472	943,340
Funds, trusts, and other financial vehicles	1	43,734	34,220	395,895
Other real estate	36	606,571	2,111,746	6,235,350
Tenant-occupied housing	2	25,889	475,208	538,727
Owner-occupied dwellings	0	0	1,777,022	2,245,246
Automotive equipment rental and leasing	1	30,329	112,962	174,782
General and consumer goods rental except video tapes and discs	1	30,387	41,330	73,878
Video tape and disc rental	0	7,321	13,091	21,771
Commercial and industrial machinery and equipment rental and leasing	1	56,734	170,171	264,834
Lessors of nonfinancial intangible assets	0	3,520	83,109	111,750

## APPENDIX

Legal services	12	843,875	1,197,399	1,995,317
Accounting, tax preparation, bookkeeping, and payroll services	5	338,491	462,478	658,633
Architectural, engineering, and related services	4	304,931	361,167	688,208
Specialized design services	0	17,577	19,481	27,170
Custom computer programming services	1	46,203	53,831	86,049
Computer systems design services	1	42,858	45,572	64,551
Other computer related services, including facilities management	1	72,380	94,529	231,639
Management consulting services	10	601,174	601,702	1,073,265
Environmental and other technical consulting services	2	113,904	96,184	153,978
Scientific research and development services	190	12,981,207	17,209,301	41,108,707
Advertising, public relations, and related services	2	117,977	163,268	305,797
Photographic services	1	27,792	13,968	29,192
Veterinary services	1	24,512	34,574	58,431
Marketing research and all other miscellaneous professional, scientific, and technical services	8	451,318	381,504	599,112
Management of companies and enterprises	11	906,085	1,100,426	1,777,885
Office administrative services	4	198,907	60,446	197,639
Facilities support services	1	28,400	37,694	87,552
Employment services	24	1,018,783	1,550,599	2,433,916
Business support services	5	204,776	173,776	304,682
Travel arrangement and reservation services	1	23,726	32,136	89,408
Investigation and security services	2	90,861	94,935	139,100
Services to buildings	7	159,545	172,453	292,797
Landscape and horticultural services	4	117,284	128,934	226,272
Other support services	2	85,901	111,543	219,163
Waste management and remediation services	1	45,504	90,125	166,493
Elementary and secondary schools	1	45,790	40,230	50,330
Junior colleges, colleges, universities, and professional schools	2	55,008	75,935	117,436
Other educational services	3	75,609	69,078	134,431
Offices of physicians	5	557,459	662,269	954,964
Offices of dentists	2	126,666	161,158	243,631

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Offices of other health practitioners	3	155,426	147,248	202,867
Outpatient care centers	2	124,588	131,588	249,139
Medical and diagnostic laboratories	1	41,427	62,943	106,183
Home health care services	3	155,870	118,435	160,592
Other ambulatory health care services	1	41,607	46,237	84,234
Hospitals	11	903,994	1,015,490	1,953,572
Nursing and community care facilities	4	151,052	170,371	310,468
Residential mental retardation, mental health, substance abuse and other facilities	1	39,726	41,914	69,871
Individual and family services	4	111,882	107,613	156,666
Child day care services	2	51,470	65,947	92,866
Community food, housing, and other relief services, including rehabilitation services	1	22,492	27,091	66,001
Performing arts companies	0	15,838	30,672	50,093
Commercial Sports Except Racing	1	55,332	59,034	93,509
Racing and Track Operation	0	2,971	8,350	15,043
Independent artists, writers, and performers	2	19,271	28,965	43,038
Promoters of performing arts and sports and agents for public figures	0	6,302	18,678	51,497
Museums, historical sites, zoos, and parks	0	7,602	9,609	16,446
Amusement parks and arcades	0	2,092	8,086	10,915
Gambling industries (except casino hotels)	0	11,449	34,480	55,014
Other amusement and recreation industries	1	18,776	29,567	51,835
Fitness and recreational sports centers	1	15,191	30,388	51,140
Bowling centers	0	2,670	4,746	9,109
Hotels and motels, including casino hotels	1	15,205	30,820	54,146
Other accommodations	0	4,533	6,011	8,645
Full-service restaurants	14	303,915	435,821	818,255
Limited-service restaurants	10	204,766	313,075	720,144
All other food and drinking places	7	202,375	258,048	396,073
Automotive repair and maintenance, except car washes	3	138,501	180,342	275,730
Car washes	2	68,990	108,312	167,282

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Electronic and precision equipment repair and maintenance	1	42,539	62,145	113,779
Commercial and industrial machinery and equipment repair and maintenance	1	84,648	108,708	170,441
Personal and household goods repair and maintenance	1	58,885	61,137	81,153
Personal care services	3	67,402	65,100	85,101
Death care services	0	7,729	10,511	17,480
Dry-cleaning and laundry services	1	24,089	26,456	39,579
Other personal services	3	61,023	62,488	84,705
Religious organizations	2	89,412	75,419	208,593
Grantmaking, giving, and social advocacy organizations	1	21,807	84,302	129,390
Business and professional associations	1	38,713	67,165	131,261
Labor and civic organizations	1	19,785	56,357	108,158
Private households	2	18,273	18,273	18,273
Postal service	1	116,546	116,612	129,965
Federal electric utilities	0	0	0	0
Other federal government enterprises	2	49,047	(11,103)	242,365
State government passenger transit	0	0	0	0
State government electric utilities	1	153,336	225,549	739,373
Other state government enterprises	1	85,571	112,078	182,312
Local government passenger transit	0	24,527	(1,506)	20,301
Local government electric utilities	0	10,335	32,639	76,045
Other local government enterprises	5	307,793	773,993	1,635,479
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	11	1,270,972	1,879,682	2,988,714

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 444: Detailed M2M Program Impacts by Types of Impact, Oklahoma.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	5	420,843	596,527	1,300,389
Oilseed farming	0	59	206	474
Grain farming	0	95	230	913
Vegetable and melon farming	0	10	17	53
Fruit farming	0	3	5	14
Tree nut farming	0	41	43	91
Greenhouse, nursery, and floriculture production	0	33	48	140
Tobacco farming	0	0	0	0
Cotton farming	0	15	21	61
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	65	78	262
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	66	178	746
Dairy cattle and milk production	0	14	29	220
Poultry and egg production	0	10	14	240
Animal production, except cattle and poultry and eggs	0	144	451	890
Forestry, forest products, and timber tract production	0	6	7	10
Commercial logging	0	12	14	33
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	1	2	3
Support activities for agriculture and forestry	0	270	246	302
Oil and gas extraction	0	1,699	7,579	13,656
Coal mining	0	478	190	325
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	34,369	(8,867)	1,494
Gold ore mining	0	0	0	0



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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	719	(52)	79
Sand and gravel mining	0	258	70	76
Other clay, ceramic, refractory minerals mining	0	10	1	6
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	156	41	50
Drilling oil and gas wells	0	1	1	3
Support activities for oil and gas operations	0	23	40	96
Metal mining services	0	36	178	360
Other nonmetallic minerals services	0	2	9	18
Electric power generation - Hydroelectric	0	12	28	104
Electric power generation - Fossil fuel	0	1,200	3,215	10,297
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	2	4	29
Electric power generation - Wind	0	75	393	720
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	1,449	4,095	13,822
Natural gas distribution	0	594	1,360	2,840
Water, sewage and other systems	0	19	30	57
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	747	911	2,476
Maintenance and repair construction of residential structures	0	414	551	1,510
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1	0	1
Dog and cat food manufacturing	0	41	184	660
Other animal food manufacturing	0	24	44	358
Flour milling	0	14	30	205
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	10	62	456
Fats and oils refining and blending	0	0	0	1
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	0
Chocolate and confectionery manufacturing from cacao beans	0	2	4	21
Confectionery manufacturing from purchased chocolate	0	1	1	3
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	21	32	148
Canned fruits and vegetables manufacturing	0	5	9	42

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Canned specialties	0	4	10	55
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	1	1	11
Dry, condensed, and evaporated dairy product manufacturing	0	7	20	128
Fluid milk manufacturing	0	49	84	632
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	6	10	48
Frozen cakes and other pastries manufacturing	0	36	54	96
Poultry processing	0	52	75	360
Animal, except poultry, slaughtering	0	18	26	262
Meat processed from carcasses	0	184	202	1,554
Rendering and meat byproduct processing	0	2	2	9
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	166	215	471
Cookie and cracker manufacturing	0	55	85	298
Dry pasta, mixes, and dough manufacturing	0	3	7	32
Tortilla manufacturing	0	4	5	20
Roasted nuts and peanut butter manufacturing	0	13	17	78
Other snack food manufacturing	0	9	10	63
Coffee and tea manufacturing	0	2	3	18
Flavoring syrup and concentrate manufacturing	0	4	23	43
Mayonnaise, dressing, and sauce manufacturing	0	2	3	16
Spice and extract manufacturing	0	1	1	4
All other food manufacturing	0	23	31	112
Bottled and canned soft drinks & water	0	107	247	1,234
Manufactured ice	0	6	3	18
Breweries	0	13	43	160
Wineries	0	1	1	9
Distilleries	0	5	26	46
Tobacco product manufacturing	0	24	698	950
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	1

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Narrow fabric mills and schiffli machine embroidery	0	0	0	1
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	2	10
Fabric coating mills	0	1	1	3
Carpet and rug mills	0	0	1	3
Curtain and linen mills	0	4	10	25
Textile bag and canvas mills	0	3	4	12
Rope, cordage, twine, tire cord and tire fabric mills	0	0	1	1
Other textile product mills	0	3	4	13
Hosiery and sock mills	0	0	0	1
Other apparel knitting mills	0	0	1	2
Cut and sew apparel contractors	0	7	7	14
Mens and boys cut and sew apparel manufacturing	0	2	2	9
Womens and girls cut and sew apparel manufacturing	0	5	5	19
Other cut and sew apparel manufacturing	0	1	1	3
Apparel accessories and other apparel manufacturing	0	1	1	5
Leather and hide tanning and finishing	0	0	0	3
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	1	1	3
Sawmills	0	23	37	107
Wood preservation	0	2	7	28
Veneer and plywood manufacturing	0	0	0	1
Engineered wood member and truss manufacturing	0	3	3	10
Reconstituted wood product manufacturing	0	2	5	18
Wood windows and door manufacturing	0	11	13	32
Cut stock, resawing lumber, and planing	0	1	2	4
Other millwork, including flooring	0	14	18	45
Wood container and pallet manufacturing	0	27	32	81
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	2	3	8
All other miscellaneous wood product manufacturing	0	9	11	25
Pulp mills	0	0	0	0
Paper mills	0	149	445	1,363
Paperboard mills	0	15	48	150
Paperboard container manufacturing	0	72	126	475
Paper bag and coated and treated paper manufacturing	0	7	15	55
Stationery product manufacturing	0	10	15	48
Sanitary paper product manufacturing	0	16	65	194
All other converted paper product manufacturing	0	0	1	2
Printing	0	279	365	898
Support activities for printing	0	1	2	5
Petroleum refineries	0	418	2,126	14,518
Asphalt paving mixture and block manufacturing	0	33	37	94
Asphalt shingle and coating materials manufacturing	0	12	19	60
Petroleum lubricating oil and grease manufacturing	0	52	129	374
All other petroleum and coal products manufacturing	0	37	50	129
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	2,777	6,201	30,839
Synthetic dye and pigment manufacturing	0	1	2	13
Other basic inorganic chemical manufacturing	0	40	81	327
Other basic organic chemical manufacturing	0	7	13	143
Plastics material and resin manufacturing	0	90	138	1,375
Synthetic rubber manufacturing	0	1	1	10
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	58	125	340
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	1	2

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Pesticide and other agricultural chemical manufacturing	0	5	14	121
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	32	106	333
In-vitro diagnostic substance manufacturing	0	0	0	1
Biological product (except diagnostic) manufacturing	0	7	15	36
Paint and coating manufacturing	0	15	28	132
Adhesive manufacturing	0	4	7	32
Soap and other detergent manufacturing	0	10	30	169
Polish and other sanitation good manufacturing	0	6	11	65
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	3	7	35
Printing ink manufacturing	0	1	1	4
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	13	26	181
Photographic film and chemical manufacturing	0	21	43	121
Other miscellaneous chemical product manufacturing	0	16	23	104
Plastics packaging materials and unlaminated film and sheet manufacturing	0	217	367	1,395
Unlaminated plastics profile shape manufacturing	0	9	20	59
Plastics pipe and pipe fitting manufacturing	0	19,410	49,655	145,715
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	6	11	31
Polystyrene foam product manufacturing	0	12	20	88
Urethane and other foam product (except polystyrene) manufacturing	0	7	12	51
Plastics bottle manufacturing	0	6	10	39
Other plastics product manufacturing	0	32	48	161
Tire manufacturing	0	117	167	677

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Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	33	50	205
Pottery, ceramics, and plumbing fixture manufacturing	0	4	6	13
Brick, tile, and other structural clay product manufacturing	0	11	22	59
Flat glass manufacturing	0	4	9	21
Other pressed and blown glass and glassware manufacturing	0	3	4	13
Glass container manufacturing	0	19	35	89
Glass product manufacturing made of purchased glass	0	26	47	119
Cement manufacturing	0	10	27	69
Ready-mix concrete manufacturing	0	46	83	283
Concrete block and brick manufacturing	0	9	18	48
Concrete pipe manufacturing	0	3	5	14
Other concrete product manufacturing	0	16	24	65
Lime manufacturing	0	10	29	76
Gypsum product manufacturing	0	14	44	116
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	15	18	41
Ground or treated mineral and earth manufacturing	0	1	2	8
Mineral wool manufacturing	0	1	2	7
Miscellaneous nonmetallic mineral products manufacturing	0	4	12	28
Iron and steel mills and ferroalloy manufacturing	0	15	21	171
Iron, steel pipe and tube manufacturing from purchased steel	0	3	4	18
Rolled steel shape manufacturing	0	0	1	4
Steel wire drawing	0	45	48	201
Alumina refining and primary aluminum production	0	0	0	3
Secondary smelting and alloying of aluminum	0	0	0	2
Aluminum sheet, plate, and foil manufacturing	0	1	1	6

## APPENDIX

Other aluminum rolling, drawing and extruding	0	1	1	7
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	3	3	36
Nonferrous metal, except copper and aluminum, shaping	0	0	0	2
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	12	16	46
Nonferrous metal foundries	0	2	3	9
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	3	5	13
Iron and steel forging	0	2	2	7
Nonferrous forging	0	0	1	2
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	1	2	4
Prefabricated metal buildings and components manufacturing	0	7	10	27
Fabricated structural metal manufacturing	0	37	57	160
Plate work manufacturing	0	39	41	107
Metal window and door manufacturing	0	15	24	65
Sheet metal work manufacturing	0	15	20	49
Ornamental and architectural metal work manufacturing	0	21	28	64
Power boiler and heat exchanger manufacturing	0	27	39	96
Metal tank (heavy gauge) manufacturing	0	8	10	27
Metal cans manufacturing	0	4	9	35
Metal barrels, drums and pails manufacturing	0	0	1	2
Hardware manufacturing	0	1	1	3
Spring and wire product manufacturing	0	16	22	63
Machine shops	0	184	213	415
Turned product and screw, nut, and bolt manufacturing	0	18	25	67
Metal heat treating	0	13	21	51



## APPENDIX

Metal coating and nonprecious engraving	0	65	114	267
Electroplating, anodizing, and coloring metal	0	70	79	169
Valve and fittings, other than plumbing, manufacturing	0	45	77	195
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	2	5	11
Small arms ammunition manufacturing	0	2	3	6
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	2	5	10
Fabricated pipe and pipe fitting manufacturing	0	9	11	26
Other fabricated metal manufacturing	0	28	37	94
Farm machinery and equipment manufacturing	0	2	3	15
Lawn and garden equipment manufacturing	0	2	2	14
Construction machinery manufacturing	0	11	20	67
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	16	18	65
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	1
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	1	2	4
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	1

## APPENDIX

Other commercial service industry machinery manufacturing	0	7	11	31
Air purification and ventilation equipment manufacturing	0	4	5	16
Heating equipment (except warm air furnaces) manufacturing	0	9	12	28
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	42	67	241
Industrial mold manufacturing	0	3	4	7
Special tool, die, jig, and fixture manufacturing	0	0	0	1
Cutting tool and machine tool accessory manufacturing	0	0	0	2
Machine tool manufacturing	0	1	1	3
Rolling mill and other metalworking machinery manufacturing	0	0	0	1
Turbine and turbine generator set units manufacturing	0	0	1	2
Speed changer, industrial high-speed drive, and gear manufacturing	0	(0)	(0)	0
Mechanical power transmission equipment manufacturing	0	0	0	1
Other engine equipment manufacturing	0	7	10	35
Pump and pumping equipment manufacturing	0	9	14	39
Air and gas compressor manufacturing	0	1	1	5
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	5
Industrial truck, trailer, and stacker manufacturing	0	1	1	3
Power-driven handtool manufacturing	0	0	0	3
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0

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Industrial process furnace and oven manufacturing	0	3	4	7
Fluid power cylinder and actuator manufacturing	0	1	1	3
Fluid power pump and motor manufacturing	0	7	10	30
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1	2	5
Electronic computer manufacturing	0	0	1	2
Computer storage device manufacturing	0	4	10	57
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	1	1	5
Broadcast and wireless communications equipment manufacturing	0	0	0	1
Other communications equipment manufacturing	0	1	2	7
Audio and video equipment manufacturing	0	1	2	10
Printed circuit assembly (electronic assembly) manufacturing	0	3	4	19
Bare printed circuit board manufacturing	0	0	0	1
Semiconductor and related device manufacturing	0	1	2	5
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	1
Other electronic component manufacturing	0	2	2	6
Electromedical and electrotherapeutic apparatus manufacturing	0	1	1	3
Search, detection, and navigation instruments manufacturing	0	0	0	1
Automatic environmental control manufacturing	0	0	0	1

## APPENDIX

Industrial process variable instruments manufacturing	0	8	11	22
Totalizing fluid meter and counting device manufacturing	0	3	7	17
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	1	2
Blank magnetic and optical recording media manufacturing	0	1	3	21
Software and other prerecorded and record reproducing	0	0	0	1
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	2
Small electrical appliance manufacturing	0	2	3	10
Household cooking appliance manufacturing	0	21	42	145
Household refrigerator and home freezer manufacturing	0	22	51	179
Household laundry equipment manufacturing	0	40	73	355
Other major household appliance manufacturing	0	8	17	53
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	9	12	42
Switchgear and switchboard apparatus manufacturing	0	1	1	5
Relay and industrial control manufacturing	0	5	6	17
Storage battery manufacturing	0	3	4	15
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	2	3	13
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	1	1	4

## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	1	1	2
Automobile manufacturing	0	0	1	2
Light truck and utility vehicle manufacturing	0	5	20	133
Heavy duty truck manufacturing	0	5	15	72
Motor vehicle body manufacturing	0	3	5	18
Truck trailer manufacturing	0	0	1	3
Motor home manufacturing	0	30	61	199
Travel trailer and camper manufacturing	0	50	55	256
Motor vehicle gasoline engine and engine parts manufacturing	0	7	10	60
Motor vehicle electrical and electronic equipment manufacturing	0	6	9	47
Motor vehicle transmission and power train parts manufacturing	0	72	121	537
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	1	1	6
Other motor vehicle parts manufacturing	0	30	46	227
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	42	78	323
Aircraft manufacturing	0	2	4	13
Aircraft engine and engine parts manufacturing	0	1	2	6
Other aircraft parts and auxiliary equipment manufacturing	0	2	2	7
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	1
Railroad rolling stock manufacturing	0	0	1	4
Ship building and repairing	0	0	0	0
Boat building	0	32	39	172
Motorcycle, bicycle, and parts manufacturing	0	3	5	22

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Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	3	6	31
Wood kitchen cabinet and countertop manufacturing	0	14	18	52
Upholstered household furniture manufacturing	0	5	7	22
Nonupholstered wood household furniture manufacturing	0	1	1	3
Other household nonupholstered furniture manufacturing	0	1	2	7
Institutional furniture manufacturing	0	0	0	1
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	1	1	3
Office furniture, except wood, manufacturing	0	0	0	2
Showcase, partition, shelving, and locker manufacturing	0	1	1	4
Mattress manufacturing	0	6	11	42
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	7	14	33
Surgical appliance and supplies manufacturing	0	3	5	18
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	2
Dental laboratories	0	7	6	13
Jewelry and silverware manufacturing	0	6	9	28
Sporting and athletic goods manufacturing	0	1	1	9
Doll, toy, and game manufacturing	0	0	0	3
Office supplies (except paper) manufacturing	0	0	0	2
Sign manufacturing	0	18	15	55
Gasket, packing, and sealing device manufacturing	0	6	8	26
Musical instrument manufacturing	0	0	0	4
Fasteners, buttons, needles, and pins manufacturing	0	6	8	17

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Broom, brush, and mop manufacturing	0	9	16	42
Burial casket manufacturing	0	1	1	6
All other miscellaneous manufacturing	0	57	68	157
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	219	616	1,270
Wholesale - Professional and commercial equipment and supplies	0	676	1,323	2,264
Wholesale - Household appliances and electrical and electronic goods	0	222	626	1,298
Wholesale - Machinery, equipment, and supplies	0	462	928	1,534
Wholesale - Other durable goods merchant wholesalers	0	610	1,053	1,979
Wholesale - Drugs and druggists' sundries	0	485	1,713	3,180
Wholesale - Grocery and related product wholesalers	0	636	956	1,849
Wholesale - Petroleum and petroleum products	0	259	2,747	3,298
Wholesale - Other nondurable goods merchant wholesalers	0	2,018	4,618	8,918
Wholesale - Wholesale electronic markets and agents and brokers	0	921	599	709
Retail - Motor vehicle and parts dealers	0	947	1,503	2,217
Retail - Furniture and home furnishings stores	0	561	687	1,097
Retail - Electronics and appliance stores	0	511	571	990
Retail - Building material and garden equipment and supplies stores	0	551	1,023	1,487
Retail - Food and beverage stores	0	1,420	1,888	2,988
Retail - Health and personal care stores	0	1,137	1,389	2,155
Retail - Gasoline stores	0	549	979	1,857
Retail - Clothing and clothing accessories stores	0	516	849	1,897
Retail - Sporting goods, hobby, musical instrument and book stores	0	364	472	830

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Retail - General merchandise stores	0	1,678	2,340	3,905
Retail - Miscellaneous store retailers	0	764	916	1,643
Retail - Nonstore retailers	0	427	1,634	4,429
Air transportation	0	396	277	623
Rail transportation	0	433	1,868	2,705
Water transportation	0	(2)	(2)	30
Truck transportation	0	3,244	3,823	7,655
Transit and ground passenger transportation	0	180	240	455
Pipeline transportation	0	2,193	2,172	2,189
Scenic and sightseeing transportation and support activities for transportation	0	1,070	1,261	2,703
Couriers and messengers	0	522	764	1,352
Warehousing and storage	0	1,177	1,318	2,912
Newspaper publishers	0	352	562	711
Periodical publishers	0	444	749	951
Book publishers	0	43	118	173
Directory, mailing list, and other publishers	0	41	126	189
Greeting card publishing	0	3	12	16
Software publishers	0	338	883	1,053
Motion picture and video industries	0	159	333	1,011
Sound recording industries	0	9	63	127
Radio and television broadcasting	0	2,804	2,707	3,847
Cable and other subscription programming	0	232	289	538
Wired telecommunications carriers	0	854	1,839	3,719
Wireless telecommunications carriers (except satellite)	0	363	1,498	4,479
Satellite, telecommunications resellers, and all other telecommunications	0	293	305	669
Data processing, hosting, and related services	0	310	523	1,625
News syndicates, libraries, archives and all other information services	0	43	67	129
Internet publishing and broadcasting and web search portals	0	366	871	2,709



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Nondepository credit intermediation and related activities	0	927	1,207	2,641
Securities and commodity contracts intermediation and brokerage	0	772	774	1,984
Monetary authorities and depository credit intermediation	0	3,859	7,213	15,553
Other financial investment activities	0	481	950	4,468
Direct life insurance carriers	0	606	1,383	1,988
Insurance carriers, except direct life	0	946	3,675	7,508
Insurance agencies, brokerages, and related activities	0	1,746	2,782	7,367
Funds, trusts, and other financial vehicles	0	549	422	4,129
Other real estate	0	3,644	12,559	32,154
Tenant-occupied housing	0	323	5,590	6,245
Owner-occupied dwellings	0	0	20,518	25,924
Automotive equipment rental and leasing	0	328	1,013	1,505
General and consumer goods rental except video tapes and discs	0	317	404	676
Video tape and disc rental	0	80	138	224
Commercial and industrial machinery and equipment rental and leasing	0	394	1,022	1,545
Lessors of nonfinancial intangible assets	0	23	544	727
Legal services	0	3,953	5,828	9,478
Accounting, tax preparation, bookkeeping, and payroll services	0	2,704	3,704	5,151
Architectural, engineering, and related services	0	1,289	1,535	2,878
Specialized design services	0	169	187	256
Custom computer programming services	0	313	362	566
Computer systems design services	0	305	323	450
Other computer related services, including facilities management	0	545	686	1,607
Management consulting services	0	20,799	20,855	36,126
Environmental and other technical consulting services	0	764	652	1,029

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Scientific research and development services	1	53,501	71,890	158,720
Advertising, public relations, and related services	0	749	1,030	1,843
Photographic services	0	238	125	248
Veterinary services	0	243	347	571
Marketing research and all other miscellaneous professional, scientific, and technical services	0	2,232	1,883	2,918
Management of companies and enterprises	0	5,500	6,741	10,553
Office administrative services	0	1,533	474	1,408
Facilities support services	0	230	307	673
Employment services	0	5,739	8,954	13,543
Business support services	0	1,205	1,042	1,771
Travel arrangement and reservation services	0	186	254	680
Investigation and security services	0	675	707	1,006
Services to buildings	0	1,157	1,254	2,028
Landscape and horticultural services	0	711	783	1,325
Other support services	0	553	719	1,400
Waste management and remediation services	0	363	724	1,319
Elementary and secondary schools	0	618	541	665
Junior colleges, colleges, universities, and professional schools	0	818	1,119	1,644
Other educational services	0	638	583	1,097
Offices of physicians	0	5,789	6,931	9,916
Offices of dentists	0	1,381	1,776	2,647
Offices of other health practitioners	0	1,619	1,546	2,125
Outpatient care centers	0	1,431	1,517	2,829
Medical and diagnostic laboratories	0	443	692	1,129
Home health care services	0	1,612	1,239	1,692
Other ambulatory health care services	0	449	502	899
Hospitals	0	10,477	11,721	22,004
Nursing and community care facilities	0	1,669	1,885	3,346
Residential mental retardation, mental health, substance abuse and other facilities	0	491	518	846

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Individual and family services	0	1,345	1,317	1,905
Child day care services	0	580	753	1,035
Community food, housing, and other relief services, including rehabilitation services	0	289	352	829
Performing arts companies	0	187	351	521
Commercial Sports Except Racing	0	466	496	771
Racing and Track Operation	0	35	93	161
Independent artists, writers, and performers	0	177	260	371
Promoters of performing arts and sports and agents for public figures	0	69	188	485
Museums, historical sites, zoos, and parks	0	91	114	189
Amusement parks and arcades	0	25	84	115
Gambling industries (except casino hotels)	0	133	377	594
Other amusement and recreation industries	0	188	283	495
Fitness and recreational sports centers	0	172	321	534
Bowling centers	0	28	49	92
Hotels and motels, including casino hotels	0	176	341	590
Other accommodations	0	72	94	133
Full-service restaurants	0	2,779	4,009	7,370
Limited-service restaurants	0	2,157	3,278	7,277
All other food and drinking places	0	1,943	2,438	3,639
Automotive repair and maintenance, except car washes	0	1,418	1,774	2,696
Car washes	0	682	1,066	1,636
Electronic and precision equipment repair and maintenance	0	231	339	597
Commercial and industrial machinery and equipment repair and maintenance	0	664	838	1,308
Personal and household goods repair and maintenance	0	484	452	601
Personal care services	0	797	705	931
Death care services	0	96	123	203
Dry-cleaning and laundry services	0	206	222	332
Other personal services	0	604	546	759
Religious organizations	0	1,149	754	2,460
Grantmaking, giving, and social advocacy organizations	0	322	1,068	1,638

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Business and professional associations	0	324	510	962
Labor and civic organizations	0	254	639	1,253
Private households	0	223	223	223
Postal service	0	1,119	1,120	1,245
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	57	(17)	250
State government passenger transit	0	0	0	0
State government electric utilities	0	4,484	6,878	22,909
Other state government enterprises	0	346	442	675
Local government passenger transit	0	253	(19)	145
Local government electric utilities	0	133	383	868
Other local government enterprises	0	2,322	5,428	11,367
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	144,045	206,663	432,125

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 39. Oregon

**Table 445: Detailed NASA Impacts by Types of Impact, Oregon.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>207</i>	<i>15,063,884</i>	<i>24,901,050</i>	<i>43,345,231</i>
Oilseed farming	0	179	563	1,147
Grain farming	0	4,385	11,138	42,110
Vegetable and melon farming	0	5,378	8,135	20,310
Fruit farming	0	5,824	9,829	21,101
Tree nut farming	0	6,170	6,413	8,327
Greenhouse, nursery, and floriculture production	0	5,748	7,385	15,464
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	65	99	254
All other crop farming	0	3,962	4,932	10,305
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2,129	7,330	34,511
Dairy cattle and milk production	0	1,480	3,047	22,130
Poultry and egg production	0	967	1,266	15,298
Animal production, except cattle and poultry and eggs	0	4,811	15,275	28,441
Forestry, forest products, and timber tract production	0	817	801	968
Commercial logging	0	5,559	5,628	8,619
Commercial fishing	0	6,580	3,800	4,188
Commercial hunting and trapping	0	2,106	1,541	1,654
Support activities for agriculture and forestry	1	31,357	28,017	32,994
Oil and gas extraction	0	236	255	25,602
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	75	304	2,296
Silver ore mining	0	5,126	7,113	26,764
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,497	2,573	7,762
Sand and gravel mining	0	1,888	2,363	4,572

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Other clay, ceramic, refractory minerals mining	0	55	79	317
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	470	565	1,329
Drilling oil and gas wells	0	0	0	3
Support activities for oil and gas operations	0	1	2	40
Metal mining services	0	18	31	910
Other nonmetallic minerals services	0	3	5	47
Electric power generation - Hydroelectric	0	2,151	6,862	11,553
Electric power generation - Fossil fuel	0	3,237	14,225	29,781
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	18	51	71
Electric power generation - Wind	0	4,275	30,650	46,383
Electric power generation - Geothermal	0	289	729	1,276
Electric power generation - Biomass	0	1,806	3,860	8,527
Electric power generation - All other	0	59	27	83
Electric power transmission and distribution	0	24,622	106,435	236,496
Natural gas distribution	0	12,787	41,400	79,605
Water, sewage and other systems	0	2,203	3,579	6,230
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	62,099	80,814	183,382
Maintenance and repair construction of residential structures	0	22,310	31,186	72,464
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	66	40	93
Dog and cat food manufacturing	0	245	818	4,656
Other animal food manufacturing	0	1,970	3,327	27,140
Flour milling	0	1,807	3,160	23,724
Rice milling	0	0	0	0
Malt manufacturing	0	703	1,250	7,985
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	146	664	9,577
Fats and oils refining and blending	0	104	190	2,780
Breakfast cereal manufacturing	0	4,246	9,241	44,941
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	599	835	5,687
Chocolate and confectionery manufacturing from cacao beans	0	23	49	868
Confectionery manufacturing from purchased chocolate	0	614	806	6,204
Frozen fruits, juices and vegetables manufacturing	0	3,029	4,908	26,498
Frozen specialties manufacturing	0	4,645	6,421	32,887
Canned fruits and vegetables manufacturing	0	2,187	3,577	20,958
Canned specialties	0	170	353	2,625
Dehydrated food products manufacturing	0	1,829	2,946	11,860
Cheese manufacturing	0	2,360	3,214	35,926

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Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	2,853	4,133	29,280
Creamery butter manufacturing	0	185	634	4,743
Ice cream and frozen dessert manufacturing	0	1,013	1,453	7,257
Frozen cakes and other pastries manufacturing	0	2,901	3,595	7,081
Poultry processing	0	797	983	4,684
Animal, except poultry, slaughtering	0	1,865	2,485	25,794
Meat processed from carcasses	0	6,850	7,437	61,781
Rendering and meat byproduct processing	0	224	289	1,262
Seafood product preparation and packaging	0	1,378	1,623	9,051
Bread and bakery product, except frozen, manufacturing	0	11,997	14,597	37,715
Cookie and cracker manufacturing	0	5,001	6,439	20,829
Dry pasta, mixes, and dough manufacturing	0	490	999	5,611
Tortilla manufacturing	0	945	1,113	4,686
Roasted nuts and peanut butter manufacturing	0	782	1,129	4,940
Other snack food manufacturing	0	2,063	3,865	18,634
Coffee and tea manufacturing	0	1,228	2,051	14,242
Flavoring syrup and concentrate manufacturing	0	1,058	6,074	19,117
Mayonnaise, dressing, and sauce manufacturing	0	413	702	4,584
Spice and extract manufacturing	0	144	210	2,255
All other food manufacturing	0	4,210	5,400	30,841
Bottled and canned soft drinks & water	0	1,569	2,843	16,943
Manufactured ice	0	145	41	465
Breweries	0	4,725	12,009	40,902
Wineries	0	914	1,571	7,653
Distilleries	0	785	4,722	11,328
Tobacco product manufacturing	0	26	832	1,692
Fiber, yarn, and thread mills	0	15	31	360
Broadwoven fabric mills	0	118	194	697
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0



## APPENDIX

Textile and fabric finishing mills	0	8	12	106
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	276	448	1,398
Textile bag and canvas mills	0	399	541	1,660
Rope, cordage, twine, tire cord and tire fabric mills	0	15	28	68
Other textile product mills	0	563	748	2,124
Hosiery and sock mills	0	28	35	92
Other apparel knitting mills	0	40	54	144
Cut and sew apparel contractors	0	234	256	614
Mens and boys cut and sew apparel manufacturing	0	275	456	1,179
Womens and girls cut and sew apparel manufacturing	0	152	330	1,135
Other cut and sew apparel manufacturing	0	69	104	381
Apparel accessories and other apparel manufacturing	0	90	140	393
Leather and hide tanning and finishing	0	1	4	102
Footwear manufacturing	0	282	377	981
Other leather and allied product manufacturing	0	30	35	167
Sawmills	0	5,024	7,440	21,434
Wood preservation	0	317	1,018	3,345
Veneer and plywood manufacturing	0	2,456	3,742	11,020
Engineered wood member and truss manufacturing	0	956	1,328	3,725
Reconstituted wood product manufacturing	0	891	2,319	7,844
Wood windows and door manufacturing	0	5,344	7,594	20,938
Cut stock, resawing lumber, and planing	0	1,996	3,570	8,859
Other millwork, including flooring	0	1,549	2,290	6,049
Wood container and pallet manufacturing	0	1,734	2,110	6,293
Manufactured home (mobile home) manufacturing	0	8	15	36
Prefabricated wood building manufacturing	0	332	391	1,172
All other miscellaneous wood product manufacturing	0	578	754	2,531

## APPENDIX

Pulp mills	0	4	6	30
Paper mills	0	7,598	19,307	58,877
Paperboard mills	0	1,625	4,267	13,703
Paperboard container manufacturing	0	5,101	8,140	32,053
Paper bag and coated and treated paper manufacturing	0	4,157	7,936	25,750
Stationery product manufacturing	0	211	328	1,437
Sanitary paper product manufacturing	0	91	311	811
All other converted paper product manufacturing	0	1,728	2,655	6,612
Printing	0	22,833	33,575	71,149
Support activities for printing	0	1,310	1,927	3,019
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	287	564	2,677
Asphalt shingle and coating materials manufacturing	0	479	1,876	4,273
Petroleum lubricating oil and grease manufacturing	0	(4)	97	1,561
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	954	1,857	6,616
Synthetic dye and pigment manufacturing	0	1,326	2,257	7,862
Other basic inorganic chemical manufacturing	0	451	766	2,648
Other basic organic chemical manufacturing	0	1,616	2,800	28,451
Plastics material and resin manufacturing	0	572	835	6,721
Synthetic rubber manufacturing	0	24	32	157
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	637	1,168	4,221
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	318	450	1,888
Pesticide and other agricultural chemical manufacturing	0	884	2,124	10,999
Medicinal and botanical manufacturing	0	130	184	962

## APPENDIX

Pharmaceutical preparation manufacturing	0	567	1,654	7,788
In-vitro diagnostic substance manufacturing	0	70	92	270
Biological product (except diagnostic) manufacturing	0	44	82	228
Paint and coating manufacturing	0	1,618	2,488	11,757
Adhesive manufacturing	0	453	611	2,402
Soap and other detergent manufacturing	0	1,257	2,668	14,535
Polish and other sanitation good manufacturing	0	426	635	3,133
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	898	1,748	8,695
Printing ink manufacturing	0	1,396	1,481	5,746
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	42	61	320
Photographic film and chemical manufacturing	0	1,883	3,249	12,092
Other miscellaneous chemical product manufacturing	0	970	1,262	7,538
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,340	2,076	7,061
Unlaminated plastics profile shape manufacturing	0	779	1,577	5,955
Plastics pipe and pipe fitting manufacturing	0	294	628	1,999
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	490	828	2,416
Polystyrene foam product manufacturing	0	107	161	629
Urethane and other foam product (except polystyrene) manufacturing	0	673	1,038	4,490
Plastics bottle manufacturing	0	121	189	676
Other plastics product manufacturing	0	15,266	21,617	70,698
Tire manufacturing	0	961	1,329	7,219
Rubber and plastics hoses and belting manufacturing	0	490	735	2,224
Other rubber product manufacturing	0	3,966	5,688	21,827

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	561	736	1,711
Brick, tile, and other structural clay product manufacturing	0	635	1,149	3,394
Flat glass manufacturing	0	433	903	2,385
Other pressed and blown glass and glassware manufacturing	0	1,496	2,219	6,685
Glass container manufacturing	0	618	1,097	3,070
Glass product manufacturing made of purchased glass	0	3,410	5,821	15,651
Cement manufacturing	0	81	198	526
Ready-mix concrete manufacturing	0	1,966	3,382	11,454
Concrete block and brick manufacturing	0	586	1,104	2,968
Concrete pipe manufacturing	0	62	104	253
Other concrete product manufacturing	0	991	1,469	3,681
Lime manufacturing	0	349	870	2,191
Gypsum product manufacturing	0	474	1,278	3,385
Abrasive product manufacturing	0	1,026	3,209	5,155
Cut stone and stone product manufacturing	0	669	796	1,859
Ground or treated mineral and earth manufacturing	0	496	1,471	2,843
Mineral wool manufacturing	0	141	336	726
Miscellaneous nonmetallic mineral products manufacturing	0	47	118	266
Iron and steel mills and ferroalloy manufacturing	0	9,893	17,655	73,879
Iron, steel pipe and tube manufacturing from purchased steel	0	697	1,073	3,513
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	158	299	2,162
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	708	1,058	4,515
Nonferrous metal (exc aluminum) smelting and refining	0	829	3,578	8,644

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	659	987	5,851
Nonferrous metal, except copper and aluminum, shaping	0	31	46	204
Secondary processing of other nonferrous metals	0	(1)	1	29
Ferrous metal foundries	0	5,280	9,481	15,995
Nonferrous metal foundries	0	6,680	10,233	19,111
Custom roll forming	0	233	342	2,019
Crown and closure manufacturing and metal stamping	0	665	905	2,929
Iron and steel forging	0	540	705	2,810
Nonferrous forging	0	167	202	619
Cutlery, utensil, pot, and pan manufacturing	0	3,751	9,706	23,431
Handtool manufacturing	0	2,594	3,916	6,973
Prefabricated metal buildings and components manufacturing	0	238	321	1,060
Fabricated structural metal manufacturing	0	2,259	3,156	9,037
Plate work manufacturing	0	1,224	1,273	3,352
Metal window and door manufacturing	0	502	722	2,035
Sheet metal work manufacturing	0	3,949	4,892	12,695
Ornamental and architectural metal work manufacturing	0	1,496	1,886	5,121
Power boiler and heat exchanger manufacturing	0	68	90	254
Metal tank (heavy gauge) manufacturing	0	220	261	723
Metal cans manufacturing	0	21	41	220
Metal barrels, drums and pails manufacturing	0	561	685	2,979
Hardware manufacturing	0	135	205	732
Spring and wire product manufacturing	2	168,446	219,903	626,422
Machine shops	0	15,159	17,153	34,549
Turned product and screw, nut, and bolt manufacturing	0	2,349	3,111	8,534
Metal heat treating	0	913	1,333	3,541
Metal coating and nonprecious engraving	0	2,867	4,538	11,560
Electroplating, anodizing, and coloring metal	0	2,589	2,858	6,421

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	253	382	1,157
Plumbing fixture fitting and trim manufacturing	0	115	314	1,151
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	992	2,128	4,217
Ammunition, except for small arms, manufacturing	0	1	1	4
Small arms, ordnance, and accessories manufacturing	0	153	301	1,031
Fabricated pipe and pipe fitting manufacturing	0	750	857	2,206
Other fabricated metal manufacturing	0	3,177	4,030	11,678
Farm machinery and equipment manufacturing	0	249	497	2,307
Lawn and garden equipment manufacturing	0	73	166	671
Construction machinery manufacturing	0	54	142	396
Mining machinery and equipment manufacturing	0	8	11	36
Oil and gas field machinery and equipment manufacturing	0	5	7	32
Semiconductor machinery manufacturing	0	142	171	492
Food product machinery manufacturing	0	19	27	95
Sawmill, woodworking, and paper machinery	0	501	591	1,781
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	31	50	162
Optical instrument and lens manufacturing	0	45	85	220
Photographic and photocopying equipment manufacturing	0	2	22	142
Other commercial service industry machinery manufacturing	0	153	381	1,027
Air purification and ventilation equipment manufacturing	0	201	339	800

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	346	644	1,655
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	263	654	2,022
Industrial mold manufacturing	0	91	122	311
Special tool, die, jig, and fixture manufacturing	0	49	104	275
Cutting tool and machine tool accessory manufacturing	0	62	79	300
Machine tool manufacturing	0	17	24	97
Rolling mill and other metalworking machinery manufacturing	0	7	11	24
Turbine and turbine generator set units manufacturing	0	1	2	12
Speed changer, industrial high-speed drive, and gear manufacturing	0	(7)	13	105
Mechanical power transmission equipment manufacturing	0	250	454	1,049
Other engine equipment manufacturing	0	40	103	400
Pump and pumping equipment manufacturing	0	109	235	568
Air and gas compressor manufacturing	0	5	10	30
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	162	175	526
Overhead cranes, hoists, and monorail systems manufacturing	0	231	585	1,664
Industrial truck, trailer, and stacker manufacturing	0	274	508	1,298
Power-driven handtool manufacturing	0	164	591	1,403
Welding and soldering equipment manufacturing	0	3	5	12
Packaging machinery manufacturing	0	16	31	85
Industrial process furnace and oven manufacturing	0	11	16	36
Fluid power cylinder and actuator manufacturing	0	103	186	531

## APPENDIX

Fluid power pump and motor manufacturing	0	11	22	63
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	27	49	193
Electronic computer manufacturing	0	22,753	74,918	164,667
Computer storage device manufacturing	0	27	123	507
Computer terminals and other computer peripheral equipment manufacturing	0	16,752	42,961	101,175
Telephone apparatus manufacturing	0	7	21	84
Broadcast and wireless communications equipment manufacturing	0	8	15	40
Other communications equipment manufacturing	0	214	472	1,228
Audio and video equipment manufacturing	0	102	264	882
Printed circuit assembly (electronic assembly) manufacturing	0	2,427	4,996	14,823
Bare printed circuit board manufacturing	0	1,210	1,943	5,110
Semiconductor and related device manufacturing	1	88,442	212,562	430,207
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	878	1,534	3,144
Electronic connector manufacturing	0	274	563	1,481
Other electronic component manufacturing	0	1,887	2,388	6,914
Electromedical and electrotherapeutic apparatus manufacturing	0	46	147	327
Search, detection, and navigation instruments manufacturing	0	34	78	133
Automatic environmental control manufacturing	0	7	13	44
Industrial process variable instruments manufacturing	0	169	320	670
Totalizing fluid meter and counting device manufacturing	0	65	212	505



## APPENDIX

Electricity and signal testing instruments manufacturing	0	9,559	17,645	40,349
Analytical laboratory instrument manufacturing	1	138,847	340,859	595,246
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	28	70	184
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	25	53	158
Electric lamp bulb and part manufacturing	0	196	476	812
Lighting fixture manufacturing	0	553	1,151	2,573
Small electrical appliance manufacturing	0	25	78	181
Household cooking appliance manufacturing	0	128	458	1,040
Household refrigerator and home freezer manufacturing	0	128	556	1,117
Household laundry equipment manufacturing	0	189	594	1,879
Other major household appliance manufacturing	0	54	199	469
Power, distribution, and specialty transformer manufacturing	0	7	13	41
Motor and generator manufacturing	0	10	19	86
Switchgear and switchboard apparatus manufacturing	0	84	198	506
Relay and industrial control manufacturing	0	1,032	1,753	4,004
Storage battery manufacturing	0	1,386	3,127	6,909
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	473	1,046	3,261
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	823	2,576	4,768
Carbon and graphite product manufacturing	0	866	1,660	4,195
All other miscellaneous electrical equipment and component manufacturing	0	41,361	53,189	127,184

## APPENDIX

Automobile manufacturing	0	25	100	440
Light truck and utility vehicle manufacturing	0	19	62	424
Heavy duty truck manufacturing	0	628	1,643	10,190
Motor vehicle body manufacturing	0	104	141	524
Truck trailer manufacturing	0	12	15	57
Motor home manufacturing	0	4,634	8,587	28,962
Travel trailer and camper manufacturing	0	7,220	8,012	32,664
Motor vehicle gasoline engine and engine parts manufacturing	0	69	103	605
Motor vehicle electrical and electronic equipment manufacturing	0	2,376	3,329	16,099
Motor vehicle transmission and power train parts manufacturing	0	2,776	4,417	18,893
Motor vehicle seating and interior trim manufacturing	0	6	9	75
Motor vehicle metal stamping	0	64	87	367
Other motor vehicle parts manufacturing	0	3,038	4,851	22,547
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	290	464	2,235
Aircraft manufacturing	0	12	15	72
Aircraft engine and engine parts manufacturing	0	19	24	96
Other aircraft parts and auxiliary equipment manufacturing	0	177	199	465
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	126	137	807
Ship building and repairing	0	780	818	1,808
Boat building	0	3,177	3,595	11,770
Motorcycle, bicycle, and parts manufacturing	0	940	1,027	4,150
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	359	465	1,817

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	3,515	5,227	11,704
Upholstered household furniture manufacturing	0	1,303	1,884	6,569
Nonupholstered wood household furniture manufacturing	0	631	745	2,071
Other household nonupholstered furniture manufacturing	0	33	48	308
Institutional furniture manufacturing	0	21	23	75
Wood office furniture manufacturing	0	3	4	15
Custom architectural woodwork and millwork	0	42	41	135
Office furniture, except wood, manufacturing	0	42	79	214
Showcase, partition, shelving, and locker manufacturing	0	996	1,478	3,360
Mattress manufacturing	0	312	728	2,655
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	23	22	107
Surgical appliance and supplies manufacturing	0	1,291	1,186	4,981
Dental equipment and supplies manufacturing	0	485	456	1,580
Ophthalmic goods manufacturing	0	266	248	996
Dental laboratories	0	721	650	1,163
Jewelry and silverware manufacturing	0	1,209	1,384	4,205
Sporting and athletic goods manufacturing	0	1,609	1,637	6,084
Doll, toy, and game manufacturing	0	466	422	2,446
Office supplies (except paper) manufacturing	0	424	429	1,519
Sign manufacturing	0	3,462	2,607	6,549
Gasket, packing, and sealing device manufacturing	0	1,241	1,228	3,773
Musical instrument manufacturing	0	300	305	718
Fasteners, buttons, needles, and pins manufacturing	0	50	52	160
Broom, brush, and mop manufacturing	0	966	792	3,322
Burial casket manufacturing	0	269	278	610

## APPENDIX

All other miscellaneous manufacturing	0	1,934	2,037	5,775
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	9,518	22,868	50,928
Wholesale - Professional and commercial equipment and supplies	0	40,846	71,116	118,908
Wholesale - Household appliances and electrical and electronic goods	0	29,185	67,573	126,276
Wholesale - Machinery, equipment, and supplies	0	25,924	45,788	79,769
Wholesale - Other durable goods merchant wholesalers	1	42,275	66,879	126,790
Wholesale - Drugs and druggists' sundries	0	18,307	52,518	109,146
Wholesale - Grocery and related product wholesalers	1	35,977	49,404	96,138
Wholesale - Petroleum and petroleum products	0	5,187	65,449	76,467
Wholesale - Other nondurable goods merchant wholesalers	1	69,732	136,044	251,138
Wholesale - Wholesale electronic markets and agents and brokers	0	44,999	22,841	26,849
Retail - Motor vehicle and parts dealers	1	43,817	53,685	81,989
Retail - Furniture and home furnishings stores	1	23,312	25,641	43,328
Retail - Electronics and appliance stores	0	24,463	21,282	39,109
Retail - Building material and garden equipment and supplies stores	1	26,255	36,509	57,071
Retail - Food and beverage stores	2	78,918	93,957	159,033
Retail - Health and personal care stores	1	33,511	35,954	57,155
Retail - Gasoline stores	1	21,196	27,843	59,733
Retail - Clothing and clothing accessories stores	1	33,431	39,451	84,231
Retail - Sporting goods, hobby, musical instrument and book stores	1	20,613	22,509	38,876
Retail - General merchandise stores	2	75,064	83,759	144,214
Retail - Miscellaneous store retailers	1	41,636	38,957	66,466

## APPENDIX

Retail - Nonstore retailers	1	43,718	101,465	201,221
Air transportation	0	36,490	100,477	146,679
Rail transportation	0	9,023	19,867	37,685
Water transportation	0	5,014	9,171	29,323
Truck transportation	2	170,791	203,452	404,032
Transit and ground passenger transportation	1	19,720	32,401	43,674
Pipeline transportation	0	3,609	6,353	8,304
Scenic and sightseeing transportation and support activities for transportation	1	70,277	78,975	161,146
Couriers and messengers	1	28,329	38,257	69,835
Warehousing and storage	1	33,607	37,652	74,483
Newspaper publishers	0	10,012	14,647	20,609
Periodical publishers	0	7,870	10,838	17,847
Book publishers	0	3,290	8,524	18,234
Directory, mailing list, and other publishers	0	870	2,102	4,020
Greeting card publishing	0	263	741	1,202
Software publishers	5	902,176	1,870,103	2,217,540
Motion picture and video industries	0	17,978	39,202	86,912
Sound recording industries	0	844	7,163	12,050
Radio and television broadcasting	0	47,194	37,387	106,696
Cable and other subscription programming	0	3,488	17,062	50,837
Wired telecommunications carriers	0	23,667	56,873	121,749
Wireless telecommunications carriers (except satellite)	0	4,162	20,987	60,299
Satellite, telecommunications resellers, and all other telecommunications	0	3,127	3,980	11,443
Data processing, hosting, and related services	0	53,093	117,197	216,549
News syndicates, libraries, archives and all other information services	0	1,534	2,441	5,082
Internet publishing and broadcasting and web search portals	0	20,332	55,539	169,876
Nondepository credit intermediation and related activities	1	48,973	65,871	108,290
Securities and commodity contracts intermediation and brokerage	1	48,828	47,508	129,849

## APPENDIX

Monetary authorities and depository credit intermediation	2	151,917	364,535	640,366
Other financial investment activities	1	48,772	54,641	170,114
Direct life insurance carriers	0	2,918	5,795	7,585
Insurance carriers, except direct life	1	67,313	230,600	449,253
Insurance agencies, brokerages, and related activities	1	84,277	136,078	294,528
Funds, trusts, and other financial vehicles	0	13,756	18,252	114,243
Other real estate	11	308,282	945,413	2,232,753
Tenant-occupied housing	1	21,999	308,452	343,997
Owner-occupied dwellings	0	0	952,579	1,203,572
Automotive equipment rental and leasing	0	15,899	41,338	57,414
General and consumer goods rental except video tapes and discs	0	21,000	24,302	34,139
Video tape and disc rental	0	4,679	6,509	10,545
Commercial and industrial machinery and equipment rental and leasing	0	33,252	52,099	73,575
Lessors of nonfinancial intangible assets	0	2,065	70,611	84,163
Legal services	3	237,187	360,840	555,847
Accounting, tax preparation, bookkeeping, and payroll services	1	92,563	126,475	184,119
Architectural, engineering, and related services	1	119,213	143,943	258,339
Specialized design services	4	220,971	234,380	296,461
Custom computer programming services	0	45,341	53,432	77,541
Computer systems design services	0	47,637	50,048	64,849
Other computer related services, including facilities management	0	24,994	41,140	71,852
Management consulting services	2	195,388	193,731	305,433
Environmental and other technical consulting services	1	61,270	54,449	82,711
Scientific research and development services	44	4,320,564	7,567,154	13,119,567
Advertising, public relations, and related services	1	105,928	155,205	252,574
Photographic services	0	15,799	8,877	15,658
Veterinary services	0	12,792	18,863	29,056

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	6	330,326	295,821	447,572
Management of companies and enterprises	5	629,314	735,998	1,018,854
Office administrative services	1	34,418	15,633	40,645
Facilities support services	0	3,248	4,073	12,185
Employment services	7	295,609	441,245	682,753
Business support services	1	67,015	56,066	95,672
Travel arrangement and reservation services	0	16,339	21,320	54,480
Investigation and security services	1	29,636	30,397	42,923
Services to buildings	2	64,068	66,563	103,860
Landscape and horticultural services	1	48,770	51,281	80,902
Other support services	1	25,085	31,498	58,701
Waste management and remediation services	0	24,812	48,117	81,545
Elementary and secondary schools	1	33,893	30,051	37,847
Junior colleges, colleges, universities, and professional schools	1	28,818	40,316	65,773
Other educational services	1	27,142	25,108	48,692
Offices of physicians	2	246,349	289,269	425,491
Offices of dentists	1	56,899	71,115	106,444
Offices of other health practitioners	1	72,142	67,965	94,010
Outpatient care centers	1	70,359	73,822	116,144
Medical and diagnostic laboratories	0	16,379	24,444	38,570
Home health care services	1	35,446	27,645	35,776
Other ambulatory health care services	0	18,156	19,874	32,061
Hospitals	4	361,294	425,054	754,615
Nursing and community care facilities	2	67,772	74,683	130,621
Residential mental retardation, mental health, substance abuse and other facilities	1	29,380	30,828	45,907
Individual and family services	2	71,391	72,785	103,359
Child day care services	1	19,514	35,531	43,937
Community food, housing, and other relief services, including rehabilitation services	0	16,854	26,485	47,235
Performing arts companies	0	8,814	15,369	27,565

## APPENDIX

Commercial Sports Except Racing	0	19,896	20,912	32,346
Racing and Track Operation	0	1,323	2,153	4,634
Independent artists, writers, and performers	2	37,367	41,960	52,797
Promoters of performing arts and sports and agents for public figures	0	6,231	15,134	35,361
Museums, historical sites, zoos, and parks	0	3,847	4,784	8,331
Amusement parks and arcades	0	1,030	3,414	4,170
Gambling industries (except casino hotels)	0	11,682	26,641	43,345
Other amusement and recreation industries	1	14,842	19,674	33,770
Fitness and recreational sports centers	1	11,600	20,127	29,567
Bowling centers	0	2,059	3,110	5,256
Hotels and motels, including casino hotels	0	15,763	29,865	47,511
Other accommodations	0	5,438	7,016	9,769
Full-service restaurants	5	138,499	191,658	324,528
Limited-service restaurants	4	89,527	127,565	277,155
All other food and drinking places	3	97,528	123,740	186,743
Automotive repair and maintenance, except car washes	2	96,332	99,072	151,046
Car washes	1	44,951	56,603	87,431
Electronic and precision equipment repair and maintenance	4	264,921	339,242	573,970
Commercial and industrial machinery and equipment repair and maintenance	0	34,427	34,779	52,701
Personal and household goods repair and maintenance	0	29,719	23,502	29,753
Personal care services	1	37,901	27,777	36,272
Death care services	0	2,691	3,305	5,415
Dry-cleaning and laundry services	0	9,202	9,897	13,826
Other personal services	1	37,925	29,798	39,573
Religious organizations	2	98,187	40,134	189,954
Grantmaking, giving, and social advocacy organizations	0	27,093	72,919	109,201
Business and professional associations	0	17,181	24,614	41,951
Labor and civic organizations	0	14,818	32,980	56,731
Private households	1	11,986	11,986	11,986
Postal service	0	39,597	39,635	43,817
Federal electric utilities	0	22,230	43,010	189,126



## APPENDIX

Other federal government enterprises	0	586	(223)	563
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	1,640	2,185	3,649
Local government passenger transit	0	18,757	5,622	25,595
Local government electric utilities	0	6,912	24,663	40,101
Other local government enterprises	1	64,366	170,025	292,794
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	9	1,277,474	1,762,997	2,887,456

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 446: Detailed M2M Program Impacts by Types of Impact, Oregon.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	9	877,606	1,453,662	2,322,787
Oilseed farming	0	8	36	82
Grain farming	0	178	502	1,722
Vegetable and melon farming	0	291	461	1,087
Fruit farming	0	405	690	1,397
Tree nut farming	0	681	706	904

## APPENDIX

Greenhouse, nursery, and floriculture production	0	256	340	695
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	2	3	6
All other crop farming	0	157	203	413
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	94	311	1,275
Dairy cattle and milk production	0	91	193	1,222
Poultry and egg production	0	42	56	666
Animal production, except cattle and poultry and eggs	0	113	394	750
Forestry, forest products, and timber tract production	0	31	31	35
Commercial logging	0	236	238	336
Commercial fishing	0	429	187	208
Commercial hunting and trapping	0	109	74	71
Support activities for agriculture and forestry	0	1,211	1,072	1,259
Oil and gas extraction	0	6	9	895
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	2	13
Silver ore mining	0	10	13	51
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	81	73	226
Sand and gravel mining	0	100	65	105
Other clay, ceramic, refractory minerals mining	0	3	3	13
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	16	11	25
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	1
Metal mining services	0	1	1	37

## APPENDIX

Other nonmetallic minerals services	0	0	0	1
Electric power generation - Hydroelectric	0	131	383	604
Electric power generation - Fossil fuel	0	153	651	1,295
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	1	2	3
Electric power generation - Wind	0	156	1,073	1,531
Electric power generation - Geothermal	0	22	50	89
Electric power generation - Biomass	0	153	256	572
Electric power generation - All other	0	5	2	5
Electric power transmission and distribution	0	1,010	4,521	9,679
Natural gas distribution	0	622	2,080	3,539
Water, sewage and other systems	0	140	201	315
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	2,038	2,664	5,869

## APPENDIX

Maintenance and repair construction of residential structures	0	1,182	1,663	3,738
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	3	2	4
Dog and cat food manufacturing	0	11	39	212
Other animal food manufacturing	0	80	141	1,098
Flour milling	0	80	141	1,072
Rice milling	0	0	0	0
Malt manufacturing	0	34	68	327
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	9	44	620
Fats and oils refining and blending	0	7	13	175
Breakfast cereal manufacturing	0	184	393	1,898
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	38	53	328
Chocolate and confectionery manufacturing from cacao beans	0	2	5	85
Confectionery manufacturing from purchased chocolate	0	37	49	345
Frozen fruits, juices and vegetables manufacturing	0	196	321	1,618
Frozen specialties manufacturing	0	294	403	1,941
Canned fruits and vegetables manufacturing	0	161	263	1,520
Canned specialties	0	9	19	144
Dehydrated food products manufacturing	0	140	222	826
Cheese manufacturing	0	143	194	2,215
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	157	233	1,578
Creamery butter manufacturing	0	13	41	298
Ice cream and frozen dessert manufacturing	0	56	83	368
Frozen cakes and other pastries manufacturing	0	165	202	389
Poultry processing	0	35	45	205
Animal, except poultry, slaughtering	0	78	106	1,079
Meat processed from carcasses	0	357	393	3,161

## APPENDIX

Rendering and meat byproduct processing	0	14	18	77
Seafood product preparation and packaging	0	61	75	373
Bread and bakery product, except frozen, manufacturing	0	662	807	2,043
Cookie and cracker manufacturing	0	295	405	1,188
Dry pasta, mixes, and dough manufacturing	0	30	60	346
Tortilla manufacturing	0	49	57	235
Roasted nuts and peanut butter manufacturing	0	50	80	305
Other snack food manufacturing	0	114	214	994
Coffee and tea manufacturing	0	73	125	819
Flavoring syrup and concentrate manufacturing	0	59	318	1,031
Mayonnaise, dressing, and sauce manufacturing	0	25	42	261
Spice and extract manufacturing	0	11	17	163
All other food manufacturing	0	284	366	1,969
Bottled and canned soft drinks & water	0	76	144	818
Manufactured ice	0	7	2	22
Breweries	0	249	654	2,144
Wineries	0	102	175	831
Distilleries	0	44	279	602
Tobacco product manufacturing	0	1	54	96
Fiber, yarn, and thread mills	0	1	2	17
Broadwoven fabric mills	0	5	9	30
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	1	10
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	18	30	87
Textile bag and canvas mills	0	19	26	75
Rope, cordage, twine, tire cord and tire fabric mills	0	0	1	2
Other textile product mills	0	30	41	109
Hosiery and sock mills	0	2	2	5
Other apparel knitting mills	0	3	4	9
Cut and sew apparel contractors	0	12	13	29

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	23	39	86
Womens and girls cut and sew apparel manufacturing	0	16	35	106
Other cut and sew apparel manufacturing	0	6	9	29
Apparel accessories and other apparel manufacturing	0	8	12	30
Leather and hide tanning and finishing	0	0	0	5
Footwear manufacturing	0	17	24	58
Other leather and allied product manufacturing	0	2	3	12
Sawmills	0	183	282	773
Wood preservation	0	10	36	114
Veneer and plywood manufacturing	0	86	135	398
Engineered wood member and truss manufacturing	0	35	50	137
Reconstituted wood product manufacturing	0	31	84	280
Wood windows and door manufacturing	0	127	187	503
Cut stock, resawing lumber, and planing	0	74	142	330
Other millwork, including flooring	0	45	69	171
Wood container and pallet manufacturing	0	78	97	284
Manufactured home (mobile home) manufacturing	0	0	1	1
Prefabricated wood building manufacturing	0	12	15	43
All other miscellaneous wood product manufacturing	0	28	38	114
Pulp mills	0	0	0	1
Paper mills	0	321	711	2,373
Paperboard mills	0	84	202	693
Paperboard container manufacturing	0	326	503	1,970
Paper bag and coated and treated paper manufacturing	0	196	341	1,143
Stationery product manufacturing	0	11	16	65
Sanitary paper product manufacturing	0	4	13	35

## APPENDIX

All other converted paper product manufacturing	0	99	144	362
Printing	0	1,331	1,952	3,968
Support activities for printing	0	73	105	163
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	12	22	97
Asphalt shingle and coating materials manufacturing	0	18	64	148
Petroleum lubricating oil and grease manufacturing	0	(0)	5	78
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	33	68	234
Synthetic dye and pigment manufacturing	0	60	104	389
Other basic inorganic chemical manufacturing	0	17	31	103
Other basic organic chemical manufacturing	0	62	109	1,142
Plastics material and resin manufacturing	0	29	43	362
Synthetic rubber manufacturing	0	1	2	8
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	32	63	213
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	14	21	86
Pesticide and other agricultural chemical manufacturing	0	37	92	471
Medicinal and botanical manufacturing	0	11	17	74
Pharmaceutical preparation manufacturing	0	49	151	641
In-vitro diagnostic substance manufacturing	0	10	13	37
Biological product (except diagnostic) manufacturing	0	4	8	21
Paint and coating manufacturing	0	99	163	753
Adhesive manufacturing	0	25	36	132
Soap and other detergent manufacturing	0	52	136	616

## APPENDIX

Polish and other sanitation good manufacturing	0	20	34	139
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	58	129	581
Printing ink manufacturing	0	74	79	300
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	4	7	40
Photographic film and chemical manufacturing	0	60	113	383
Other miscellaneous chemical product manufacturing	0	58	80	483
Plastics packaging materials and unlaminated film and sheet manufacturing	0	114	174	580
Unlaminated plastics profile shape manufacturing	0	68	136	507
Plastics pipe and pipe fitting manufacturing	0	27	58	180
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	20	34	98
Polystyrene foam product manufacturing	0	5	7	27
Urethane and other foam product (except polystyrene) manufacturing	0	34	52	224
Plastics bottle manufacturing	0	9	14	49
Other plastics product manufacturing	0	890	1,256	3,894
Tire manufacturing	0	28	40	230
Rubber and plastics hoses and belting manufacturing	0	18	26	78
Other rubber product manufacturing	0	82	116	458
Pottery, ceramics, and plumbing fixture manufacturing	0	38	48	116
Brick, tile, and other structural clay product manufacturing	0	34	59	181
Flat glass manufacturing	0	21	41	114
Other pressed and blown glass and glassware manufacturing	0	69	101	304
Glass container manufacturing	0	34	56	164
Glass product manufacturing made of purchased glass	0	143	237	638



## APPENDIX

Cement manufacturing	0	3	6	16
Ready-mix concrete manufacturing	0	53	89	300
Concrete block and brick manufacturing	0	28	49	134
Concrete pipe manufacturing	0	2	3	9
Other concrete product manufacturing	0	45	64	162
Lime manufacturing	0	7	18	48
Gypsum product manufacturing	0	22	56	152
Abrasive product manufacturing	0	78	233	382
Cut stone and stone product manufacturing	0	23	28	64
Ground or treated mineral and earth manufacturing	0	21	61	121
Mineral wool manufacturing	0	5	11	23
Miscellaneous nonmetallic mineral products manufacturing	0	1	3	8
Iron and steel mills and ferroalloy manufacturing	0	365	572	2,511
Iron, steel pipe and tube manufacturing from purchased steel	0	28	39	128
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	14	21	163
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	67	86	396
Nonferrous metal (exc aluminum) smelting and refining	0	40	147	386
Copper rolling, drawing, extruding and alloying	0	54	76	436
Nonferrous metal, except copper and aluminum, shaping	0	2	3	14
Secondary processing of other nonferrous metals	0	(0)	0	2
Ferrous metal foundries	0	296	432	815
Nonferrous metal foundries	0	464	635	1,226
Custom roll forming	0	11	16	86
Crown and closure manufacturing and metal stamping	0	54	73	232

## APPENDIX

Iron and steel forging	0	96	126	483
Nonferrous forging	0	31	38	110
Cutlery, utensil, pot, and pan manufacturing	0	291	807	1,843
Handtool manufacturing	0	233	353	629
Prefabricated metal buildings and components manufacturing	0	8	10	33
Fabricated structural metal manufacturing	0	68	95	270
Plate work manufacturing	0	56	58	148
Metal window and door manufacturing	0	18	26	72
Sheet metal work manufacturing	0	406	505	1,264
Ornamental and architectural metal work manufacturing	0	49	62	161
Power boiler and heat exchanger manufacturing	0	5	7	20
Metal tank (heavy gauge) manufacturing	0	15	18	48
Metal cans manufacturing	0	1	2	11
Metal barrels, drums and pails manufacturing	0	27	33	135
Hardware manufacturing	0	8	11	40
Spring and wire product manufacturing	0	52	67	190
Machine shops	0	1,111	1,263	2,485
Turned product and screw, nut, and bolt manufacturing	0	335	443	1,163
Metal heat treating	0	148	215	573
Metal coating and nonprecious engraving	0	398	631	1,610
Electroplating, anodizing, and coloring metal	0	391	432	951
Valve and fittings, other than plumbing, manufacturing	0	16	25	74
Plumbing fixture fitting and trim manufacturing	0	8	22	77
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	30	64	129
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	9	17	55

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	24	28	72
Other fabricated metal manufacturing	0	192	244	674
Farm machinery and equipment manufacturing	0	7	14	57
Lawn and garden equipment manufacturing	0	3	7	24
Construction machinery manufacturing	0	4	10	28
Mining machinery and equipment manufacturing	0	0	0	1
Oil and gas field machinery and equipment manufacturing	0	0	0	1
Semiconductor machinery manufacturing	0	11	14	36
Food product machinery manufacturing	0	2	2	8
Sawmill, woodworking, and paper machinery	0	20	24	67
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	2	4	11
Optical instrument and lens manufacturing	0	2	5	11
Photographic and photocopying equipment manufacturing	0	0	4	28
Other commercial service industry machinery manufacturing	0	6	17	45
Air purification and ventilation equipment manufacturing	0	9	15	35
Heating equipment (except warm air furnaces) manufacturing	0	18	35	80
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	12	30	90
Industrial mold manufacturing	0	5	7	17
Special tool, die, jig, and fixture manufacturing	0	4	9	22
Cutting tool and machine tool accessory manufacturing	0	4	5	20
Machine tool manufacturing	0	2	2	9

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	1	2
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	(0)	1	6
Mechanical power transmission equipment manufacturing	0	8	15	35
Other engine equipment manufacturing	0	3	7	23
Pump and pumping equipment manufacturing	0	6	13	30
Air and gas compressor manufacturing	0	0	1	2
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	7	7	22
Overhead cranes, hoists, and monorail systems manufacturing	0	1	2	6
Industrial truck, trailer, and stacker manufacturing	0	13	24	61
Power-driven handtool manufacturing	0	17	62	132
Welding and soldering equipment manufacturing	0	0	0	1
Packaging machinery manufacturing	0	1	3	8
Industrial process furnace and oven manufacturing	0	1	1	3
Fluid power cylinder and actuator manufacturing	0	4	7	21
Fluid power pump and motor manufacturing	0	1	2	5
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2	4	14
Electronic computer manufacturing	0	9	29	59
Computer storage device manufacturing	0	3	13	52
Computer terminals and other computer peripheral equipment manufacturing	0	3,703	9,467	22,418

## APPENDIX

Telephone apparatus manufacturing	0	0	1	4
Broadcast and wireless communications equipment manufacturing	0	2	3	8
Other communications equipment manufacturing	0	9	20	55
Audio and video equipment manufacturing	0	12	30	93
Printed circuit assembly (electronic assembly) manufacturing	0	607	1,249	3,593
Bare printed circuit board manufacturing	0	201	322	908
Semiconductor and related device manufacturing	0	25,709	60,771	118,123
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	148	255	503
Electronic connector manufacturing	0	46	94	251
Other electronic component manufacturing	0	379	479	1,332
Electromedical and electrotherapeutic apparatus manufacturing	0	4	12	27
Search, detection, and navigation instruments manufacturing	0	4	9	15
Automatic environmental control manufacturing	0	1	1	4
Industrial process variable instruments manufacturing	0	19	36	75
Totalizing fluid meter and counting device manufacturing	0	3	11	27
Electricity and signal testing instruments manufacturing	0	2,072	3,827	8,225
Analytical laboratory instrument manufacturing	0	25,957	65,839	103,050
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	8	20	50
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	1	3	8
Electric lamp bulb and part manufacturing	0	12	29	48
Lighting fixture manufacturing	0	26	51	113
Small electrical appliance manufacturing	0	2	6	12
Household cooking appliance manufacturing	0	7	25	57
Household refrigerator and home freezer manufacturing	0	7	31	66
Household laundry equipment manufacturing	0	10	34	108
Other major household appliance manufacturing	0	3	11	27
Power, distribution, and specialty transformer manufacturing	0	1	1	4
Motor and generator manufacturing	0	1	2	9
Switchgear and switchboard apparatus manufacturing	0	4	10	26
Relay and industrial control manufacturing	0	163	277	602
Storage battery manufacturing	0	92	197	443
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	25	55	155
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	125	390	663
Carbon and graphite product manufacturing	0	14	27	70
All other miscellaneous electrical equipment and component manufacturing	0	11	15	37
Automobile manufacturing	0	1	5	24
Light truck and utility vehicle manufacturing	0	1	2	13
Heavy duty truck manufacturing	0	21	56	326
Motor vehicle body manufacturing	0	5	7	28
Truck trailer manufacturing	0	1	1	2
Motor home manufacturing	0	142	275	866
Travel trailer and camper manufacturing	0	316	351	1,435
Motor vehicle gasoline engine and engine parts manufacturing	0	3	5	30

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Motor vehicle electrical and electronic equipment manufacturing	0	93	129	573
Motor vehicle transmission and power train parts manufacturing	0	172	279	1,039
Motor vehicle seating and interior trim manufacturing	0	0	0	3
Motor vehicle metal stamping	0	2	2	9
Other motor vehicle parts manufacturing	0	146	212	1,112
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	15	26	118
Aircraft manufacturing	0	1	1	4
Aircraft engine and engine parts manufacturing	0	2	2	10
Other aircraft parts and auxiliary equipment manufacturing	0	11	13	30
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	6	6	35
Ship building and repairing	0	31	33	71
Boat building	0	134	152	488
Motorcycle, bicycle, and parts manufacturing	0	78	81	300
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	19	26	100
Wood kitchen cabinet and countertop manufacturing	0	196	266	611
Upholstered household furniture manufacturing	0	110	158	543
Nonupholstered wood household furniture manufacturing	0	37	42	114
Other household nonupholstered furniture manufacturing	0	2	3	19
Institutional furniture manufacturing	0	1	1	4
Wood office furniture manufacturing	0	0	0	1

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Custom architectural woodwork and millwork	0	2	2	6
Office furniture, except wood, manufacturing	0	3	5	14
Showcase, partition, shelving, and locker manufacturing	0	48	66	155
Mattress manufacturing	0	16	33	132
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	1	1	6
Surgical appliance and supplies manufacturing	0	90	84	331
Dental equipment and supplies manufacturing	0	36	33	108
Ophthalmic goods manufacturing	0	17	16	64
Dental laboratories	0	51	46	81
Jewelry and silverware manufacturing	0	73	82	239
Sporting and athletic goods manufacturing	0	88	87	315
Doll, toy, and game manufacturing	0	35	29	151
Office supplies (except paper) manufacturing	0	29	29	94
Sign manufacturing	0	168	130	304
Gasket, packing, and sealing device manufacturing	0	47	46	138
Musical instrument manufacturing	0	37	38	69
Fasteners, buttons, needles, and pins manufacturing	0	4	4	10
Broom, brush, and mop manufacturing	0	59	55	190
Burial casket manufacturing	0	10	10	21
All other miscellaneous manufacturing	0	99	104	287
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	481	1,154	2,572
Wholesale - Professional and commercial equipment and supplies	0	2,985	5,207	8,500
Wholesale - Household appliances and electrical and electronic goods	0	2,953	6,822	12,532
Wholesale - Machinery, equipment, and supplies	0	1,098	1,946	3,375
Wholesale - Other durable goods merchant wholesalers	0	1,932	3,059	5,756



## APPENDIX

Wholesale - Drugs and druggists' sundries	0	914	2,577	5,233
Wholesale - Grocery and related product wholesalers	0	1,762	2,398	4,668
Wholesale - Petroleum and petroleum products	0	206	2,955	3,397
Wholesale - Other nondurable goods merchant wholesalers	0	3,406	6,860	12,411
Wholesale - Wholesale electronic markets and agents and brokers	0	2,515	1,212	1,425
Retail - Motor vehicle and parts dealers	0	2,090	2,576	3,902
Retail - Furniture and home furnishings stores	0	1,190	1,308	2,174
Retail - Electronics and appliance stores	0	1,235	1,079	1,944
Retail - Building material and garden equipment and supplies stores	0	1,266	1,760	2,719
Retail - Food and beverage stores	0	4,268	5,027	8,308
Retail - Health and personal care stores	0	1,655	1,786	2,829
Retail - Gasoline stores	0	1,090	1,329	2,686
Retail - Clothing and clothing accessories stores	0	1,769	2,072	4,293
Retail - Sporting goods, hobby, musical instrument and book stores	0	1,029	1,127	1,910
Retail - General merchandise stores	0	3,578	4,023	6,878
Retail - Miscellaneous store retailers	0	2,183	2,023	3,332
Retail - Nonstore retailers	0	2,360	5,541	10,468
Air transportation	0	1,742	4,919	7,072
Rail transportation	0	371	722	1,457
Water transportation	0	191	338	1,065
Truck transportation	0	4,623	5,360	10,316
Transit and ground passenger transportation	0	1,237	2,052	2,592
Pipeline transportation	0	108	207	276
Scenic and sightseeing transportation and support activities for transportation	0	1,986	2,258	4,605
Couriers and messengers	0	1,352	1,884	3,362
Warehousing and storage	0	2,185	2,443	4,792

## APPENDIX

Newspaper publishers	0	541	766	1,063
Periodical publishers	0	489	660	1,001
Book publishers	0	144	359	762
Directory, mailing list, and other publishers	0	39	95	181
Greeting card publishing	0	10	29	47
Software publishers	1	236,199	418,664	484,861
Motion picture and video industries	0	1,305	2,876	5,281
Sound recording industries	0	61	485	753
Radio and television broadcasting	0	4,019	3,491	6,674
Cable and other subscription programming	0	298	1,158	2,855
Wired telecommunications carriers	0	1,291	2,878	5,984
Wireless telecommunications carriers (except satellite)	0	291	1,200	3,345
Satellite, telecommunications resellers, and all other telecommunications	0	226	250	639
Data processing, hosting, and related services	0	2,628	5,450	9,614
News syndicates, libraries, archives and all other information services	0	91	145	283
Internet publishing and broadcasting and web search portals	0	1,662	4,328	11,432
Nondepository credit intermediation and related activities	0	2,665	3,637	5,629
Securities and commodity contracts intermediation and brokerage	0	2,429	2,323	5,945
Monetary authorities and depository credit intermediation	0	5,379	13,402	22,827
Other financial investment activities	0	3,273	3,566	8,854
Direct life insurance carriers	0	128	263	336
Insurance carriers, except direct life	0	2,863	10,066	18,908
Insurance agencies, brokerages, and related activities	0	3,807	6,183	12,973
Funds, trusts, and other financial vehicles	0	845	1,102	5,827
Other real estate	0	10,214	30,972	63,540
Tenant-occupied housing	0	1,327	17,543	19,282

## APPENDIX

Owner-occupied dwellings	0	0	53,443	67,525
Automotive equipment rental and leasing	0	971	2,070	2,751
General and consumer goods rental except video tapes and discs	0	1,082	1,173	1,539
Video tape and disc rental	0	249	334	527
Commercial and industrial machinery and equipment rental and leasing	0	1,717	2,312	3,164
Lessors of nonfinancial intangible assets	0	80	2,703	3,202
Legal services	0	6,314	9,975	15,002
Accounting, tax preparation, bookkeeping, and payroll services	0	4,411	6,049	8,593
Architectural, engineering, and related services	0	2,354	2,859	5,049
Specialized design services	0	894	947	1,183
Custom computer programming services	0	3,497	4,092	5,795
Computer systems design services	0	2,398	2,510	3,198
Other computer related services, including facilities management	0	1,196	1,896	3,164
Management consulting services	0	5,390	5,353	8,213
Environmental and other technical consulting services	0	2,447	2,194	3,282
Scientific research and development services	0	53,165	94,363	151,267
Advertising, public relations, and related services	0	6,225	9,074	14,074
Photographic services	0	679	400	668
Veterinary services	0	637	952	1,427
Marketing research and all other miscellaneous professional, scientific, and technical services	0	4,230	3,788	5,677
Management of companies and enterprises	0	29,497	34,821	46,701
Office administrative services	0	2,174	1,006	2,366
Facilities support services	0	180	225	635
Employment services	0	12,700	19,447	28,978
Business support services	0	2,292	1,955	3,232
Travel arrangement and reservation services	0	653	859	2,113
Investigation and security services	0	1,497	1,539	2,107
Services to buildings	0	2,514	2,618	3,893

## APPENDIX

Landscape and horticultural services	0	1,886	1,987	3,019
Other support services	0	1,300	1,636	3,024
Waste management and remediation services	0	964	1,881	3,144
Elementary and secondary schools	0	2,245	1,982	2,455
Junior colleges, colleges, universities, and professional schools	0	2,106	2,920	4,526
Other educational services	0	1,605	1,489	2,782
Offices of physicians	0	12,418	14,696	21,447
Offices of dentists	0	3,009	3,801	5,611
Offices of other health practitioners	0	3,646	3,462	4,778
Outpatient care centers	0	3,921	4,131	6,401
Medical and diagnostic laboratories	0	850	1,303	1,989
Home health care services	0	1,778	1,403	1,828
Other ambulatory health care services	0	953	1,049	1,665
Hospitals	0	20,349	23,841	41,304
Nursing and community care facilities	0	3,615	3,990	6,797
Residential mental retardation, mental health, substance abuse and other facilities	0	1,759	1,847	2,695
Individual and family services	0	4,176	4,333	6,116
Child day care services	0	1,071	1,979	2,388
Community food, housing, and other relief services, including rehabilitation services	0	1,052	1,674	2,886
Performing arts companies	0	533	899	1,466
Commercial Sports Except Racing	0	1,024	1,073	1,626
Racing and Track Operation	0	76	118	244
Independent artists, writers, and performers	0	2,100	2,300	2,768
Promoters of performing arts and sports and agents for public figures	0	367	817	1,789
Museums, historical sites, zoos, and parks	0	224	275	464
Amusement parks and arcades	0	60	174	215
Gambling industries (except casino hotels)	0	658	1,415	2,273
Other amusement and recreation industries	0	738	937	1,605

## APPENDIX

Fitness and recreational sports centers	0	661	1,072	1,553
Bowling centers	0	107	155	259
Hotels and motels, including casino hotels	0	978	1,774	2,781
Other accommodations	0	410	520	709
Full-service restaurants	0	6,527	9,086	15,064
Limited-service restaurants	0	4,674	6,621	13,880
All other food and drinking places	0	4,527	5,651	8,300
Automotive repair and maintenance, except car washes	0	5,068	5,023	7,613
Car washes	0	2,358	2,959	4,537
Electronic and precision equipment repair and maintenance	1	68,099	87,321	139,013
Commercial and industrial machinery and equipment repair and maintenance	0	1,707	1,694	2,554
Personal and household goods repair and maintenance	0	1,396	992	1,256
Personal care services	0	2,175	1,459	1,926
Death care services	0	161	187	305
Dry-cleaning and laundry services	0	558	590	823
Other personal services	0	1,949	1,348	1,839
Religious organizations	0	6,133	1,951	10,889
Grantmaking, giving, and social advocacy organizations	0	1,947	4,496	6,732
Business and professional associations	0	843	1,096	1,799
Labor and civic organizations	0	924	1,819	3,195
Private households	0	712	712	712
Postal service	0	1,795	1,797	1,983
Federal electric utilities	0	434	862	3,717
Other federal government enterprises	0	32	(14)	31
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	39	51	80
Local government passenger transit	0	1,001	375	936
Local government electric utilities	0	308	1,007	1,596
Other local government enterprises	0	2,834	6,939	11,869

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	109,148	142,457	297,872

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 40. Pennsylvania

**Table 447: Detailed NASA Impacts by Types of Impact, Pennsylvania.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,080</i>	<i>86,244,702</i>	<i>128,685,656</i>	<i>231,494,870</i>
Oilseed farming	0	20,664	62,167	91,867
Grain farming	1	21,161	59,688	176,517
Vegetable and melon farming	0	5,611	9,823	23,846
Fruit farming	0	3,661	7,272	14,560
Tree nut farming	0	75	80	128
Greenhouse, nursery, and floriculture production	1	17,724	25,523	56,912
Tobacco farming	0	7,152	7,949	15,152
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	8,427	12,077	25,871
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	6,409	23,831	78,399

## APPENDIX

Dairy cattle and milk production	1	8,553	21,954	125,649
Poultry and egg production	0	7,583	11,944	144,982
Animal production, except cattle and poultry and eggs	2	30,507	105,744	160,347
Forestry, forest products, and timber tract production	0	6,151	6,265	7,840
Commercial logging	0	24,339	24,039	34,788
Commercial fishing	0	287	925	1,019
Commercial hunting and trapping	0	308	(1,427)	1,048
Support activities for agriculture and forestry	2	94,043	65,630	83,395
Oil and gas extraction	1	64,614	657,253	883,076
Coal mining	0	43,302	111,899	193,094
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	(535)	1,835	7,486
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	4,560	23,805	53,781
Sand and gravel mining	0	301	3,083	11,209
Other clay, ceramic, refractory minerals mining	0	(123)	(55)	296
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(324)	383	2,481
Drilling oil and gas wells	0	24	75	149
Support activities for oil and gas operations	0	1,295	2,253	4,664
Metal mining services	0	1,330	15,422	22,919
Other nonmetallic minerals services	0	119	947	1,465
Electric power generation - Hydroelectric	0	2,218	9,530	26,792
Electric power generation - Fossil fuel	1	69,906	276,201	722,833
Electric power generation - Nuclear	1	110,670	248,232	515,397
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	982	6,839	10,294

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	1,087	4,506	12,836
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	1	206,133	756,205	1,834,542
Natural gas distribution	1	68,883	192,804	416,842
Water, sewage and other systems	0	17,513	39,734	69,707
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	6	452,898	599,337	1,341,733
Maintenance and repair construction of residential structures	2	103,176	148,616	337,362
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	434	302	644
Dog and cat food manufacturing	0	19,817	75,647	282,091
Other animal food manufacturing	0	14,003	23,703	201,020
Flour milling	0	2,722	5,374	36,309
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0



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Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	815	4,266	30,109
Fats and oils refining and blending	0	437	860	9,169
Breakfast cereal manufacturing	0	21,211	53,219	133,222
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	409	946	4,231
Nonchocolate confectionery manufacturing	0	5,987	8,834	33,112
Chocolate and confectionery manufacturing from cacao beans	0	9,633	21,212	104,434
Confectionery manufacturing from purchased chocolate	0	20,809	28,648	114,923
Frozen fruits, juices and vegetables manufacturing	0	1,369	2,473	11,199
Frozen specialties manufacturing	0	6,117	9,136	39,145
Canned fruits and vegetables manufacturing	0	11,090	20,131	85,764
Canned specialties	0	5,998	14,780	63,272
Dehydrated food products manufacturing	0	338	594	2,734
Cheese manufacturing	0	9,230	13,064	117,160
Dry, condensed, and evaporated dairy product manufacturing	0	2,268	5,484	36,295
Fluid milk manufacturing	0	11,015	17,441	122,810
Creamery butter manufacturing	0	372	1,508	10,622
Ice cream and frozen dessert manufacturing	0	3,600	5,583	24,800
Frozen cakes and other pastries manufacturing	0	12,491	17,241	32,733
Poultry processing	1	31,038	40,484	183,321
Animal, except poultry, slaughtering	1	40,854	55,323	432,142
Meat processed from carcasses	1	38,138	40,427	320,550
Rendering and meat byproduct processing	0	1,740	1,777	9,715
Seafood product preparation and packaging	0	1,154	1,316	7,713
Bread and bakery product, except frozen, manufacturing	1	40,973	52,893	132,767
Cookie and cracker manufacturing	0	10,801	14,962	54,843
Dry pasta, mixes, and dough manufacturing	0	3,496	8,215	31,891
Tortilla manufacturing	0	1,558	1,885	6,716

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	2,870	4,424	17,417
Other snack food manufacturing	0	17,028	38,882	147,147
Coffee and tea manufacturing	0	3,643	6,660	28,449
Flavoring syrup and concentrate manufacturing	0	7,145	53,022	134,642
Mayonnaise, dressing, and sauce manufacturing	0	2,920	5,550	24,618
Spice and extract manufacturing	0	2,061	3,111	15,229
All other food manufacturing	0	10,276	13,787	66,891
Bottled and canned soft drinks & water	0	19,605	39,779	176,453
Manufactured ice	0	1,104	466	3,349
Breweries	0	13,259	32,149	106,417
Wineries	0	1,137	2,042	15,819
Distilleries	0	3,076	15,650	56,799
Tobacco product manufacturing	0	9,258	167,173	339,846
Fiber, yarn, and thread mills	0	9,979	13,529	65,377
Broadwoven fabric mills	0	9,703	12,806	38,174
Narrow fabric mills and schiffli machine embroidery	0	2,060	2,225	5,837
Nonwoven fabric mills	0	9,017	13,582	46,019
Knit fabric mills	0	1,639	2,031	5,764
Textile and fabric finishing mills	1	51,399	62,428	258,624
Fabric coating mills	0	1,134	1,361	5,779
Carpet and rug mills	0	3,115	4,656	20,303
Curtain and linen mills	0	1,339	1,789	6,394
Textile bag and canvas mills	0	2,714	3,192	8,844
Rope, cordage, twine, tire cord and tire fabric mills	0	1,223	1,732	4,896
Other textile product mills	0	3,635	4,274	12,461
Hosiery and sock mills	0	388	448	1,162
Other apparel knitting mills	0	378	471	1,222
Cut and sew apparel contractors	0	2,743	2,888	4,984
Mens and boys cut and sew apparel manufacturing	0	1,112	1,350	5,260
Womens and girls cut and sew apparel manufacturing	0	764	1,079	5,639
Other cut and sew apparel manufacturing	0	2,013	2,446	7,380
Apparel accessories and other apparel manufacturing	0	958	1,172	3,502
Leather and hide tanning and finishing	0	214	339	1,866

## APPENDIX

Footwear manufacturing	0	1,194	1,336	4,141
Other leather and allied product manufacturing	0	238	251	1,036
Sawmills	0	18,982	24,802	96,620
Wood preservation	0	1,319	3,405	11,809
Veneer and plywood manufacturing	0	2,587	3,575	13,443
Engineered wood member and truss manufacturing	0	2,875	3,730	10,363
Reconstituted wood product manufacturing	0	2,180	5,042	18,331
Wood windows and door manufacturing	0	19,122	24,956	67,881
Cut stock, resawing lumber, and planing	0	2,403	3,461	10,174
Other millwork, including flooring	0	8,575	11,078	28,376
Wood container and pallet manufacturing	0	10,128	11,371	28,927
Manufactured home (mobile home) manufacturing	0	10	15	39
Prefabricated wood building manufacturing	0	2,893	3,231	9,105
All other miscellaneous wood product manufacturing	0	9,431	11,058	29,029
Pulp mills	0	0	0	0
Paper mills	0	43,532	111,384	323,251
Paperboard mills	0	2,254	5,917	17,540
Paperboard container manufacturing	1	46,595	72,908	287,492
Paper bag and coated and treated paper manufacturing	0	20,882	39,203	114,486
Stationery product manufacturing	0	4,773	7,067	26,766
Sanitary paper product manufacturing	0	35,660	119,448	354,682
All other converted paper product manufacturing	0	5,684	8,734	29,371
Printing	2	146,144	235,908	441,824
Support activities for printing	0	5,147	8,223	11,846
Petroleum refineries	0	33,263	396,395	1,493,714
Asphalt paving mixture and block manufacturing	0	1,616	4,290	24,571
Asphalt shingle and coating materials manufacturing	0	1,415	6,820	16,521
Petroleum lubricating oil and grease manufacturing	1	72,456	357,623	859,903

## APPENDIX

All other petroleum and coal products manufacturing	0	7,314	30,721	85,355
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	7,179	16,484	50,244
Synthetic dye and pigment manufacturing	0	17,219	33,157	105,201
Other basic inorganic chemical manufacturing	0	10,080	18,740	58,151
Other basic organic chemical manufacturing	0	11,905	21,213	143,498
Plastics material and resin manufacturing	0	32,380	49,476	292,408
Synthetic rubber manufacturing	0	2,173	3,189	11,259
Artificial and synthetic fibers and filaments manufacturing	2	230,490	339,078	1,642,341
Nitrogenous fertilizer manufacturing	0	1,244	1,437	2,630
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	5,412	6,204	13,883
Pesticide and other agricultural chemical manufacturing	0	1,936	4,568	16,008
Medicinal and botanical manufacturing	0	3,555	5,212	14,214
Pharmaceutical preparation manufacturing	1	123,048	415,179	998,216
In-vitro diagnostic substance manufacturing	0	2,821	3,855	7,652
Biological product (except diagnostic) manufacturing	0	25,483	56,976	111,228
Paint and coating manufacturing	0	24,145	33,660	96,151
Adhesive manufacturing	0	5,189	6,918	22,247
Soap and other detergent manufacturing	0	23,513	45,285	127,234
Polish and other sanitation good manufacturing	0	20,004	26,118	72,105
Surface active agent manufacturing	0	3,360	6,660	12,276
Toilet preparation manufacturing	0	28,159	51,435	151,998
Printing ink manufacturing	0	3,115	3,147	6,615
Explosives manufacturing	0	723	793	2,520
Custom compounding of purchased resins	0	20,812	31,626	105,356
Photographic film and chemical manufacturing	0	17,784	28,612	73,549
Other miscellaneous chemical product manufacturing	0	24,488	30,262	81,000

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	26,439	49,538	155,555
Unlaminated plastics profile shape manufacturing	0	13,405	34,839	90,010
Plastics pipe and pipe fitting manufacturing	1	49,363	136,262	346,605
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	7,202	15,158	35,294
Polystyrene foam product manufacturing	0	12,346	23,636	72,568
Urethane and other foam product (except polystyrene) manufacturing	0	6,014	10,839	35,529
Plastics bottle manufacturing	0	6,559	12,349	44,268
Other plastics product manufacturing	1	79,368	129,933	374,606
Tire manufacturing	0	8,445	12,830	61,790
Rubber and plastics hoses and belting manufacturing	0	5,086	9,057	22,021
Other rubber product manufacturing	0	33,372	54,844	130,105
Pottery, ceramics, and plumbing fixture manufacturing	0	2,025	2,894	6,521
Brick, tile, and other structural clay product manufacturing	0	6,719	13,622	27,305
Flat glass manufacturing	0	1,303	3,170	7,197
Other pressed and blown glass and glassware manufacturing	0	8,492	13,723	31,099
Glass container manufacturing	0	2,305	4,442	10,281
Glass product manufacturing made of purchased glass	0	7,278	14,003	35,148
Cement manufacturing	0	3,190	8,747	22,129
Ready-mix concrete manufacturing	0	11,490	21,628	71,406
Concrete block and brick manufacturing	0	4,119	8,603	22,010
Concrete pipe manufacturing	0	636	1,143	2,866
Other concrete product manufacturing	0	10,106	16,087	38,259
Lime manufacturing	0	1,245	3,492	8,443
Gypsum product manufacturing	0	3,159	9,915	25,483
Abrasive product manufacturing	0	2,720	10,489	17,986
Cut stone and stone product manufacturing	0	4,433	5,638	14,483

## APPENDIX

Ground or treated mineral and earth manufacturing	0	3,664	12,498	19,138
Mineral wool manufacturing	0	1,745	4,851	13,433
Miscellaneous nonmetallic mineral products manufacturing	0	390	1,255	3,160
Iron and steel mills and ferroalloy manufacturing	1	97,271	153,478	695,943
Iron, steel pipe and tube manufacturing from purchased steel	0	8,264	11,853	45,112
Rolled steel shape manufacturing	0	7,656	14,928	59,397
Steel wire drawing	0	4,244	5,945	23,100
Alumina refining and primary aluminum production	0	1,325	2,639	15,568
Secondary smelting and alloying of aluminum	0	991	1,552	10,874
Aluminum sheet, plate, and foil manufacturing	0	36,403	63,053	216,097
Other aluminum rolling, drawing and extruding	0	10,899	14,765	59,610
Nonferrous metal (exc aluminum) smelting and refining	0	2,021	7,794	21,509
Copper rolling, drawing, extruding and alloying	0	35,077	46,785	316,782
Nonferrous metal, except copper and aluminum, shaping	0	12,328	15,669	49,374
Secondary processing of other nonferrous metals	0	2,043	6,444	28,676
Ferrous metal foundries	1	49,545	82,634	176,108
Nonferrous metal foundries	0	23,541	34,310	79,288
Custom roll forming	0	397	595	3,414
Crown and closure manufacturing and metal stamping	0	14,743	20,509	57,067
Iron and steel forging	1	36,712	48,838	162,773
Nonferrous forging	0	14,153	17,412	59,482
Cutlery, utensil, pot, and pan manufacturing	0	4,675	13,020	31,425
Handtool manufacturing	0	5,584	8,735	18,167
Prefabricated metal buildings and components manufacturing	0	3,028	4,152	11,376
Fabricated structural metal manufacturing	0	13,961	20,014	60,957
Plate work manufacturing	0	9,392	9,684	27,178
Metal window and door manufacturing	0	9,116	13,505	34,818

## APPENDIX

Sheet metal work manufacturing	0	31,758	39,907	99,676
Ornamental and architectural metal work manufacturing	0	9,729	12,531	28,697
Power boiler and heat exchanger manufacturing	0	1,437	1,924	4,872
Metal tank (heavy gauge) manufacturing	0	2,655	3,179	8,778
Metal cans manufacturing	0	4,905	10,401	48,664
Metal barrels, drums and pails manufacturing	0	1,849	2,256	8,663
Hardware manufacturing	0	3,778	5,989	17,599
Spring and wire product manufacturing	0	21,540	28,572	73,725
Machine shops	2	141,041	160,703	314,685
Turned product and screw, nut, and bolt manufacturing	0	27,156	36,672	88,996
Metal heat treating	0	3,661	5,483	13,731
Metal coating and nonprecious engraving	0	12,502	20,980	45,573
Electroplating, anodizing, and coloring metal	0	9,407	10,398	22,437
Valve and fittings, other than plumbing, manufacturing	2	133,849	208,752	540,839
Plumbing fixture fitting and trim manufacturing	0	940	2,716	8,635
Ball and roller bearing manufacturing	0	7,763	13,656	26,444
Small arms ammunition manufacturing	1	53,152	121,781	246,026
Ammunition, except for small arms, manufacturing	0	947	1,157	2,891
Small arms, ordnance, and accessories manufacturing	0	2,853	6,644	15,522
Fabricated pipe and pipe fitting manufacturing	0	7,217	8,267	20,424
Other fabricated metal manufacturing	2	170,896	218,825	543,582
Farm machinery and equipment manufacturing	0	945	1,276	5,738
Lawn and garden equipment manufacturing	0	340	557	2,298
Construction machinery manufacturing	0	1,089	1,957	5,942
Mining machinery and equipment manufacturing	0	386	451	1,268

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	218	251	822
Semiconductor machinery manufacturing	0	342	379	1,109
Food product machinery manufacturing	0	69	80	226
Sawmill, woodworking, and paper machinery	0	1,179	1,275	3,419
Printing machinery and equipment manufacturing	0	233	255	589
All other industrial machinery manufacturing	1	50,784	64,009	169,654
Optical instrument and lens manufacturing	0	68	99	315
Photographic and photocopying equipment manufacturing	0	70	97	325
Other commercial service industry machinery manufacturing	0	1,413	2,351	6,418
Air purification and ventilation equipment manufacturing	0	829	1,119	2,827
Heating equipment (except warm air furnaces) manufacturing	0	2,476	3,400	9,594
Air conditioning, refrigeration, and warm air heating equipment manufacturing	2	151,855	267,982	782,103
Industrial mold manufacturing	0	1,404	1,548	3,029
Special tool, die, jig, and fixture manufacturing	0	3,370	4,036	7,243
Cutting tool and machine tool accessory manufacturing	0	1,981	2,116	4,761
Machine tool manufacturing	0	431	469	1,260
Rolling mill and other metalworking machinery manufacturing	0	640	756	1,530
Turbine and turbine generator set units manufacturing	0	398	513	1,757
Speed changer, industrial high-speed drive, and gear manufacturing	0	1,070	1,452	3,826
Mechanical power transmission equipment manufacturing	0	7,209	9,725	24,574
Other engine equipment manufacturing	1	215,212	443,903	1,423,502
Pump and pumping equipment manufacturing	0	1,171	1,861	4,581



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Air and gas compressor manufacturing	0	28,007	45,014	130,081
Elevator and moving stairway manufacturing	0	127	180	530
Conveyor and conveying equipment manufacturing	0	806	833	2,104
Overhead cranes, hoists, and monorail systems manufacturing	0	113	193	611
Industrial truck, trailer, and stacker manufacturing	0	738	1,064	3,487
Power-driven handtool manufacturing	0	245	552	1,451
Welding and soldering equipment manufacturing	0	261	324	943
Packaging machinery manufacturing	0	325	444	1,111
Industrial process furnace and oven manufacturing	0	471	546	1,249
Fluid power cylinder and actuator manufacturing	0	1,279	1,658	4,654
Fluid power pump and motor manufacturing	0	1,167	1,673	4,778
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	841	1,026	2,715
Electronic computer manufacturing	0	14,089	34,856	83,954
Computer storage device manufacturing	0	90	300	1,383
Computer terminals and other computer peripheral equipment manufacturing	2	326,140	657,477	1,493,324
Telephone apparatus manufacturing	0	1,186	2,498	9,123
Broadcast and wireless communications equipment manufacturing	0	187	296	770
Other communications equipment manufacturing	0	1,603	2,821	6,405
Audio and video equipment manufacturing	0	308	623	2,250
Printed circuit assembly (electronic assembly) manufacturing	0	16,273	27,271	92,516
Bare printed circuit board manufacturing	0	1,649	2,293	6,509

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Semiconductor and related device manufacturing	0	10,218	19,877	49,139
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	6,829	10,293	22,490
Electronic connector manufacturing	0	34,940	56,416	115,811
Other electronic component manufacturing	0	13,452	15,837	51,879
Electromedical and electrotherapeutic apparatus manufacturing	0	1,104	2,652	5,931
Search, detection, and navigation instruments manufacturing	0	7,188	12,896	28,744
Automatic environmental control manufacturing	0	623	877	2,124
Industrial process variable instruments manufacturing	0	3,615	5,686	11,842
Totalizing fluid meter and counting device manufacturing	0	3,994	9,766	20,472
Electricity and signal testing instruments manufacturing	0	5,531	8,720	27,704
Analytical laboratory instrument manufacturing	4	400,384	789,606	1,708,424
Irradiation apparatus manufacturing	0	43	96	213
Watch, clock, and other measuring and controlling device manufacturing	0	568	1,113	2,626
Blank magnetic and optical recording media manufacturing	0	44	150	515
Software and other prerecorded and record reproducing	0	613	980	2,739
Electric lamp bulb and part manufacturing	0	2,163	3,315	7,909
Lighting fixture manufacturing	0	21,633	30,041	68,578
Small electrical appliance manufacturing	0	1,963	3,511	9,549
Household cooking appliance manufacturing	0	196	408	1,455
Household refrigerator and home freezer manufacturing	0	206	501	1,775
Household laundry equipment manufacturing	0	364	739	3,907

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Other major household appliance manufacturing	0	72	164	555
Power, distribution, and specialty transformer manufacturing	0	383	543	1,597
Motor and generator manufacturing	0	2,487	3,626	10,978
Switchgear and switchboard apparatus manufacturing	0	4,848	7,387	19,121
Relay and industrial control manufacturing	0	30,581	38,811	86,698
Storage battery manufacturing	0	3,520	5,184	15,370
Primary battery manufacturing	1	40,243	94,520	259,577
Fiber optic cable manufacturing	0	1,612	2,448	10,649
Other communication and energy wire manufacturing	0	2,515	4,194	17,940
Wiring device manufacturing	0	27,152	46,022	118,323
Carbon and graphite product manufacturing	0	6,657	9,158	29,178
All other miscellaneous electrical equipment and component manufacturing	2	179,940	204,770	595,149
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	327	800	3,646
Motor vehicle body manufacturing	0	1,819	2,426	8,738
Truck trailer manufacturing	0	70	88	357
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	7,387	8,071	32,973
Motor vehicle gasoline engine and engine parts manufacturing	0	5,795	8,389	38,880
Motor vehicle electrical and electronic equipment manufacturing	0	13,746	18,906	103,462
Motor vehicle transmission and power train parts manufacturing	0	12,392	19,093	73,879
Motor vehicle seating and interior trim manufacturing	0	495	680	3,864
Motor vehicle metal stamping	0	1,716	2,272	9,108
Other motor vehicle parts manufacturing	0	19,113	29,501	113,382
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	7,365	11,555	47,450

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Aircraft manufacturing	0	14,575	18,459	61,885
Aircraft engine and engine parts manufacturing	0	8,898	14,388	50,085
Other aircraft parts and auxiliary equipment manufacturing	2	244,553	313,185	713,679
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	403	457	948
Railroad rolling stock manufacturing	0	1,147	1,343	5,865
Ship building and repairing	0	658	726	1,747
Boat building	0	931	1,105	3,684
Motorcycle, bicycle, and parts manufacturing	0	5,908	10,626	37,596
Military armored vehicle, tank, and tank component manufacturing	0	32,606	45,281	187,551
All other transportation equipment manufacturing	0	894	1,446	12,650
Wood kitchen cabinet and countertop manufacturing	0	19,226	26,579	57,473
Upholstered household furniture manufacturing	0	6,292	8,439	24,154
Nonupholstered wood household furniture manufacturing	0	3,378	3,791	10,624
Other household nonupholstered furniture manufacturing	0	1,215	1,797	5,329
Institutional furniture manufacturing	0	157	171	552
Wood office furniture manufacturing	0	38	54	147
Custom architectural woodwork and millwork	0	270	260	756
Office furniture, except wood, manufacturing	0	1,527	2,558	5,891
Showcase, partition, shelving, and locker manufacturing	0	3,161	4,380	10,002
Mattress manufacturing	0	1,696	3,499	12,177
Blind and shade manufacturing	0	291	303	981
Surgical and medical instrument manufacturing	0	8,765	17,082	39,757
Surgical appliance and supplies manufacturing	0	9,824	19,010	46,405

## APPENDIX

Dental equipment and supplies manufacturing	0	855	1,458	3,562
Ophthalmic goods manufacturing	0	1,336	2,689	6,839
Dental laboratories	0	2,979	2,845	5,202
Jewelry and silverware manufacturing	0	2,400	3,527	9,911
Sporting and athletic goods manufacturing	0	3,942	5,373	16,563
Doll, toy, and game manufacturing	0	2,493	3,882	10,990
Office supplies (except paper) manufacturing	0	3,479	4,600	13,304
Sign manufacturing	0	5,877	4,866	12,262
Gasket, packing, and sealing device manufacturing	0	5,039	6,256	13,062
Musical instrument manufacturing	0	2,068	2,075	3,752
Fasteners, buttons, needles, and pins manufacturing	0	354	435	1,020
Broom, brush, and mop manufacturing	0	3,859	5,661	12,912
Burial casket manufacturing	0	2,941	3,440	6,208
All other miscellaneous manufacturing	0	10,025	12,050	29,068
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	45,754	133,793	281,280
Wholesale - Professional and commercial equipment and supplies	2	195,011	387,744	642,104
Wholesale - Household appliances and electrical and electronic goods	1	122,196	337,925	634,926
Wholesale - Machinery, equipment, and supplies	2	142,791	294,677	482,768
Wholesale - Other durable goods merchant wholesalers	3	209,147	379,849	692,295
Wholesale - Drugs and druggists' sundries	1	130,212	460,085	765,240
Wholesale - Grocery and related product wholesalers	2	159,940	242,437	452,394
Wholesale - Petroleum and petroleum products	0	22,216	430,716	478,476
Wholesale - Other nondurable goods merchant wholesalers	3	245,755	595,188	1,005,508
Wholesale - Wholesale electronic markets and agents and brokers	2	275,539	162,603	179,804
Retail - Motor vehicle and parts dealers	4	207,269	285,563	431,613

## APPENDIX

Retail - Furniture and home furnishings stores	2	98,559	122,639	206,222
Retail - Electronics and appliance stores	2	113,819	106,902	189,170
Retail - Building material and garden equipment and supplies stores	3	127,538	196,058	301,150
Retail - Food and beverage stores	12	358,594	455,973	797,982
Retail - Health and personal care stores	5	256,779	288,598	440,637
Retail - Gasoline stores	3	80,741	139,187	308,314
Retail - Clothing and clothing accessories stores	5	152,404	202,964	430,553
Retail - Sporting goods, hobby, musical instrument and book stores	4	91,602	112,813	188,887
Retail - General merchandise stores	11	300,840	396,738	683,334
Retail - Miscellaneous store retailers	7	173,538	187,157	318,620
Retail - Nonstore retailers	8	351,732	744,634	1,298,210
Air transportation	2	186,051	398,904	621,012
Rail transportation	1	71,960	101,309	253,255
Water transportation	0	12,132	18,654	100,107
Truck transportation	6	500,209	573,846	1,139,453
Transit and ground passenger transportation	8	202,873	230,719	348,258
Pipeline transportation	0	317,894	256,359	256,554
Scenic and sightseeing transportation and support activities for transportation	4	272,203	301,995	651,247
Couriers and messengers	4	167,125	212,780	395,500
Warehousing and storage	5	281,603	312,845	621,797
Newspaper publishers	1	53,121	87,080	115,326
Periodical publishers	1	72,084	110,047	157,228
Book publishers	0	28,551	93,122	145,071
Directory, mailing list, and other publishers	0	13,927	44,675	67,211
Greeting card publishing	0	0	0	0
Software publishers	11	2,164,800	5,348,156	6,039,878
Motion picture and video industries	1	61,421	160,063	284,060
Sound recording industries	0	4,920	50,037	67,008
Radio and television broadcasting	1	2,497,980	2,581,677	2,444,725

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Cable and other subscription programming	0	82,346	142,155	161,848
Wired telecommunications carriers	2	212,345	937,804	1,305,220
Wireless telecommunications carriers (except satellite)	0	46,333	550,409	822,194
Satellite, telecommunications resellers, and all other telecommunications	0	21,194	38,810	72,572
Data processing, hosting, and related services	2	184,862	415,553	876,444
News syndicates, libraries, archives and all other information services	1	31,010	53,959	115,380
Internet publishing and broadcasting and web search portals	1	151,085	464,615	934,279
Nondepository credit intermediation and related activities	2	234,581	301,047	498,709
Securities and commodity contracts intermediation and brokerage	3	382,937	391,441	825,508
Monetary authorities and depository credit intermediation	11	1,003,531	1,964,370	3,737,881
Other financial investment activities	12	408,028	791,840	1,728,077
Direct life insurance carriers	2	251,847	455,253	654,605
Insurance carriers, except direct life	5	613,520	1,783,901	3,751,464
Insurance agencies, brokerages, and related activities	7	558,589	824,826	1,815,367
Funds, trusts, and other financial vehicles	2	94,656	76,106	620,652
Other real estate	49	1,258,114	3,535,092	9,117,694
Tenant-occupied housing	5	113,342	1,385,979	1,584,537
Owner-occupied dwellings	0	0	4,438,260	5,607,689
Automotive equipment rental and leasing	1	82,653	266,591	355,388
General and consumer goods rental except video tapes and discs	1	82,578	101,205	149,662
Video tape and disc rental	0	17,865	28,133	45,681
Commercial and industrial machinery and equipment rental and leasing	1	106,067	286,895	381,566
Lessors of nonfinancial intangible assets	0	4,836	254,004	315,617

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Legal services	15	1,634,980	2,961,344	3,959,256
Accounting, tax preparation, bookkeeping, and payroll services	7	611,063	757,491	1,034,320
Architectural, engineering, and related services	9	810,100	922,827	1,626,688
Specialized design services	2	128,421	134,597	162,159
Custom computer programming services	3	339,435	380,281	543,923
Computer systems design services	3	340,687	352,866	458,528
Other computer related services, including facilities management	1	109,685	160,412	297,620
Management consulting services	33	3,591,659	3,522,854	5,020,488
Environmental and other technical consulting services	3	300,630	251,583	360,071
Scientific research and development services	241	26,357,966	35,206,580	65,712,306
Advertising, public relations, and related services	3	303,539	396,820	654,895
Photographic services	1	86,768	35,785	62,543
Veterinary services	1	63,356	82,660	129,249
Marketing research and all other miscellaneous professional, scientific, and technical services	19	1,612,236	1,351,164	1,816,113
Management of companies and enterprises	22	3,209,980	3,766,572	5,157,487
Office administrative services	3	124,836	64,968	161,795
Facilities support services	1	39,382	49,871	130,128
Employment services	31	1,333,528	1,911,704	3,032,298
Business support services	6	321,583	266,525	443,297
Travel arrangement and reservation services	2	96,699	123,578	297,784
Investigation and security services	5	199,685	206,320	291,794
Services to buildings	11	350,614	368,232	567,875
Landscape and horticultural services	6	249,493	264,547	407,073
Other support services	2	115,198	143,004	278,757
Waste management and remediation services	2	141,799	270,059	454,581
Elementary and secondary schools	5	230,567	189,937	237,077
Junior colleges, colleges, universities, and professional schools	11	672,223	832,727	1,147,548
Other educational services	7	220,260	191,977	370,259
Offices of physicians	13	1,607,348	1,890,561	2,654,942
Offices of dentists	4	261,853	325,686	501,919



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Offices of other health practitioners	7	389,315	360,110	503,438
Outpatient care centers	5	354,753	370,962	667,679
Medical and diagnostic laboratories	1	100,227	153,540	242,433
Home health care services	9	457,651	316,397	434,180
Other ambulatory health care services	2	119,679	131,755	213,814
Hospitals	30	2,508,740	2,809,742	5,259,220
Nursing and community care facilities	10	427,157	470,633	800,188
Residential mental retardation, mental health, substance abuse and other facilities	5	201,856	210,944	311,567
Individual and family services	17	595,794	567,029	787,961
Child day care services	7	170,793	221,443	296,624
Community food, housing, and other relief services, including rehabilitation services	3	108,826	124,801	258,150
Performing arts companies	1	46,769	88,523	138,972
Commercial Sports Except Racing	1	117,684	141,605	191,010
Racing and Track Operation	0	15,637	26,656	41,419
Independent artists, writers, and performers	4	152,365	197,250	221,470
Promoters of performing arts and sports and agents for public figures	1	39,787	129,973	232,048
Museums, historical sites, zoos, and parks	1	33,120	46,560	74,138
Amusement parks and arcades	1	14,783	29,229	43,274
Gambling industries (except casino hotels)	2	92,222	217,174	336,486
Other amusement and recreation industries	4	86,115	104,675	188,176
Fitness and recreational sports centers	3	46,478	63,387	106,462
Bowling centers	0	7,504	10,479	20,180
Hotels and motels, including casino hotels	5	195,161	308,434	497,188
Other accommodations	2	99,763	127,209	167,314
Full-service restaurants	24	561,107	825,971	1,478,232
Limited-service restaurants	17	341,625	528,941	1,192,639
All other food and drinking places	16	482,585	611,234	933,829
Automotive repair and maintenance, except car washes	8	473,093	518,373	780,008
Car washes	4	217,293	305,950	467,234

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Electronic and precision equipment repair and maintenance	3	214,211	300,027	479,991
Commercial and industrial machinery and equipment repair and maintenance	2	185,266	200,773	305,810
Personal and household goods repair and maintenance	2	156,537	130,261	162,216
Personal care services	8	239,591	142,467	200,020
Death care services	1	29,697	36,438	58,463
Dry-cleaning and laundry services	1	50,113	54,598	77,788
Other personal services	7	215,129	168,084	226,189
Religious organizations	12	528,282	203,611	989,619
Grantmaking, giving, and social advocacy organizations	2	114,600	314,714	495,083
Business and professional associations	1	105,731	152,428	245,644
Labor and civic organizations	6	110,889	259,043	534,980
Private households	3	42,244	42,244	42,244
Postal service	3	245,063	245,292	270,132
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	16,653	5,702	42,070
State government passenger transit	1	54,768	(25,708)	61,788
State government electric utilities	0	0	0	0
Other state government enterprises	2	188,950	202,936	492,351
Local government passenger transit	1	45,544	(25,959)	32,222
Local government electric utilities	0	216	566	1,117
Other local government enterprises	3	252,287	482,766	895,190
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	41	6,201,848	8,175,630	14,477,560

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 448: Detailed M2M Program Impacts by Types of Impact, Pennsylvania.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>415</i>	<i>36,202,148</i>	<i>53,859,829</i>	<i>91,728,383</i>
Oilseed farming	0	7,764	34,939	59,851
Grain farming	0	7,633	23,948	64,868
Vegetable and melon farming	0	2,365	4,340	9,942
Fruit farming	0	2,027	4,072	7,702
Tree nut farming	0	65	68	107
Greenhouse, nursery, and floriculture production	0	6,457	9,615	20,943
Tobacco farming	0	4,242	5,579	11,072
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	1	2,840	4,232	8,811
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2,553	9,172	26,883
Dairy cattle and milk production	0	4,130	10,926	54,760
Poultry and egg production	0	2,602	4,179	49,720
Animal production, except cattle and poultry and eggs	1	8,712	33,745	52,635
Forestry, forest products, and timber tract production	0	2,700	2,737	3,283
Commercial logging	0	8,958	8,818	11,833
Commercial fishing	0	155	376	418
Commercial hunting and trapping	0	130	(566)	368
Support activities for agriculture and forestry	1	38,644	26,721	33,880
Oil and gas extraction	0	16,175	215,236	281,796
Coal mining	0	11,344	25,689	49,044
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	(2,163)	2,312	7,684
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	2,758	7,208	16,698
Sand and gravel mining	0	273	1,394	4,245
Other clay, ceramic, refractory minerals mining	0	(49)	(17)	94
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(252)	160	960
Drilling oil and gas wells	0	6	19	38
Support activities for oil and gas operations	0	326	591	1,207
Metal mining services	0	246	3,607	5,276
Other nonmetallic minerals services	0	30	308	460
Electric power generation - Hydroelectric	0	1,335	5,179	13,574
Electric power generation - Fossil fuel	0	30,905	116,390	291,645
Electric power generation - Nuclear	0	47,943	112,351	227,018
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	351	2,347	3,322
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	884	2,833	8,042
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	1	79,557	297,809	699,701
Natural gas distribution	0	32,364	93,732	178,009
Water, sewage and other systems	0	8,969	17,713	27,915
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

## APPENDIX

Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	128,127	170,308	370,258
Maintenance and repair construction of residential structures	1	42,325	61,353	134,736
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	168	113	241
Dog and cat food manufacturing	0	7,031	27,845	99,602
Other animal food manufacturing	0	5,973	10,591	85,337
Flour milling	0	952	1,900	13,015
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	441	2,350	16,238
Fats and oils refining and blending	0	191	389	3,821
Breakfast cereal manufacturing	0	7,076	17,378	43,208
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	220	513	2,276
Nonchocolate confectionery manufacturing	0	2,950	4,300	14,761
Chocolate and confectionery manufacturing from cacao beans	0	7,882	17,480	79,668
Confectionery manufacturing from purchased chocolate	0	9,581	13,327	49,413
Frozen fruits, juices and vegetables manufacturing	0	693	1,262	5,337
Frozen specialties manufacturing	0	3,015	4,469	18,019
Canned fruits and vegetables manufacturing	0	6,406	11,654	48,851

## APPENDIX

Canned specialties	0	2,601	6,320	27,010
Dehydrated food products manufacturing	0	204	355	1,507
Cheese manufacturing	0	4,371	6,179	56,532
Dry, condensed, and evaporated dairy product manufacturing	0	1,245	3,095	18,245
Fluid milk manufacturing	0	4,719	7,651	51,598
Creamery butter manufacturing	0	198	766	5,199
Ice cream and frozen dessert manufacturing	0	1,656	2,658	10,447
Frozen cakes and other pastries manufacturing	0	5,489	7,485	13,879
Poultry processing	0	10,707	14,745	63,207
Animal, except poultry, slaughtering	0	13,835	19,052	145,554
Meat processed from carcasses	0	16,069	17,285	132,644
Rendering and meat byproduct processing	0	819	826	4,502
Seafood product preparation and packaging	0	425	503	2,631
Bread and bakery product, except frozen, manufacturing	0	17,434	22,544	55,456
Cookie and cracker manufacturing	0	4,949	7,290	24,266
Dry pasta, mixes, and dough manufacturing	0	1,668	3,832	15,279
Tortilla manufacturing	0	623	749	2,614
Roasted nuts and peanut butter manufacturing	0	1,451	2,494	8,547
Other snack food manufacturing	0	7,447	17,089	62,265
Coffee and tea manufacturing	0	1,697	3,156	12,776
Flavoring syrup and concentrate manufacturing	0	4,802	33,664	87,589
Mayonnaise, dressing, and sauce manufacturing	0	1,437	2,666	11,277
Spice and extract manufacturing	0	1,294	1,995	8,871
All other food manufacturing	0	5,432	7,319	33,473
Bottled and canned soft drinks & water	0	7,614	16,058	68,105
Manufactured ice	0	446	207	1,238
Breweries	0	5,430	13,599	43,345
Wineries	0	1,032	1,851	14,012
Distilleries	0	1,412	7,493	24,485
Tobacco product manufacturing	0	3,509	83,733	148,409
Fiber, yarn, and thread mills	0	1,325	2,004	8,553
Broadwoven fabric mills	0	1,521	2,214	6,437

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	1,158	1,268	3,064
Nonwoven fabric mills	0	4,665	7,489	22,938
Knit fabric mills	0	936	1,186	3,316
Textile and fabric finishing mills	0	429	518	2,135
Fabric coating mills	0	719	840	3,253
Carpet and rug mills	0	1,641	2,640	9,853
Curtain and linen mills	0	661	922	3,079
Textile bag and canvas mills	0	1,183	1,412	3,768
Rope, cordage, twine, tire cord and tire fabric mills	0	368	547	1,439
Other textile product mills	0	1,742	2,088	5,731
Hosiery and sock mills	0	161	199	451
Other apparel knitting mills	0	239	285	677
Cut and sew apparel contractors	0	2,069	2,158	3,533
Mens and boys cut and sew apparel manufacturing	0	705	867	2,919
Womens and girls cut and sew apparel manufacturing	0	627	878	4,032
Other cut and sew apparel manufacturing	0	1,349	1,617	4,354
Apparel accessories and other apparel manufacturing	0	637	782	2,037
Leather and hide tanning and finishing	0	83	137	726
Footwear manufacturing	0	562	644	1,871
Other leather and allied product manufacturing	0	144	153	577
Sawmills	0	6,344	8,668	31,967
Wood preservation	0	383	1,076	3,556
Veneer and plywood manufacturing	0	732	1,038	3,902
Engineered wood member and truss manufacturing	0	866	1,163	3,160
Reconstituted wood product manufacturing	0	599	1,453	5,302
Wood windows and door manufacturing	0	6,499	8,785	23,236
Cut stock, resawing lumber, and planing	0	942	1,460	3,981
Other millwork, including flooring	0	3,066	4,156	9,945
Wood container and pallet manufacturing	0	3,894	4,494	11,162
Manufactured home (mobile home) manufacturing	0	3	5	12

## APPENDIX

Prefabricated wood building manufacturing	0	993	1,128	3,057
All other miscellaneous wood product manufacturing	0	3,617	4,426	10,500
Pulp mills	0	0	0	0
Paper mills	0	14,333	32,024	101,690
Paperboard mills	0	695	1,698	5,297
Paperboard container manufacturing	0	19,120	28,976	113,649
Paper bag and coated and treated paper manufacturing	0	8,131	13,942	42,040
Stationery product manufacturing	0	2,498	3,433	11,720
Sanitary paper product manufacturing	0	12,433	37,512	117,433
All other converted paper product manufacturing	0	2,462	3,571	12,112
Printing	1	53,573	86,273	154,980
Support activities for printing	0	2,503	3,915	5,586
Petroleum refineries	0	14,185	151,912	583,184
Asphalt paving mixture and block manufacturing	0	534	1,354	7,206
Asphalt shingle and coating materials manufacturing	0	440	1,928	4,786
Petroleum lubricating oil and grease manufacturing	0	18,174	91,655	212,181
All other petroleum and coal products manufacturing	0	1,728	6,883	19,230
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	2,842	6,915	20,256
Synthetic dye and pigment manufacturing	0	10,367	20,606	70,504
Other basic inorganic chemical manufacturing	0	3,710	7,393	22,216
Other basic organic chemical manufacturing	0	4,750	8,556	60,006
Plastics material and resin manufacturing	0	13,457	20,972	128,769
Synthetic rubber manufacturing	0	737	1,087	4,000
Artificial and synthetic fibers and filaments manufacturing	1	117,744	171,615	794,520
Nitrogenous fertilizer manufacturing	0	619	764	1,285
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	2,239	2,700	5,978



## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	699	1,684	5,860
Medicinal and botanical manufacturing	0	2,419	3,876	8,899
Pharmaceutical preparation manufacturing	0	83,767	299,313	647,983
In-vitro diagnostic substance manufacturing	0	2,979	4,101	8,067
Biological product (except diagnostic) manufacturing	0	24,417	57,627	103,243
Paint and coating manufacturing	0	5,452	8,113	22,682
Adhesive manufacturing	0	2,105	3,039	9,037
Soap and other detergent manufacturing	0	9,127	22,098	50,752
Polish and other sanitation good manufacturing	0	9,907	15,242	34,531
Surface active agent manufacturing	0	1,024	2,393	3,960
Toilet preparation manufacturing	0	14,908	31,199	83,512
Printing ink manufacturing	0	1,559	1,596	3,288
Explosives manufacturing	0	154	171	557
Custom compounding of purchased resins	0	5,492	9,401	31,799
Photographic film and chemical manufacturing	0	7,348	13,045	30,349
Other miscellaneous chemical product manufacturing	0	8,763	11,503	31,048
Plastics packaging materials and unlaminated film and sheet manufacturing	0	11,131	20,654	63,474
Unlaminated plastics profile shape manufacturing	0	4,640	11,896	30,400
Plastics pipe and pipe fitting manufacturing	0	1,194	3,442	8,496
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	2,482	5,215	12,044
Polystyrene foam product manufacturing	0	5,071	9,574	29,163
Urethane and other foam product (except polystyrene) manufacturing	0	2,684	4,767	15,524
Plastics bottle manufacturing	0	3,300	6,153	21,616
Other plastics product manufacturing	0	32,792	53,500	146,226
Tire manufacturing	0	1,556	2,389	12,303

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	1,285	2,232	5,317
Other rubber product manufacturing	0	15,079	24,594	60,113
Pottery, ceramics, and plumbing fixture manufacturing	0	700	954	2,255
Brick, tile, and other structural clay product manufacturing	0	1,992	3,853	8,048
Flat glass manufacturing	0	446	1,015	2,413
Other pressed and blown glass and glassware manufacturing	0	4,518	7,215	16,287
Glass container manufacturing	0	982	1,771	4,297
Glass product manufacturing made of purchased glass	0	3,112	5,819	14,583
Cement manufacturing	0	1,015	2,640	6,764
Ready-mix concrete manufacturing	0	3,996	7,240	24,054
Concrete block and brick manufacturing	0	1,418	2,806	7,271
Concrete pipe manufacturing	0	215	374	955
Other concrete product manufacturing	0	3,279	5,053	12,132
Lime manufacturing	0	375	1,074	2,644
Gypsum product manufacturing	0	1,241	3,747	9,824
Abrasive product manufacturing	0	949	3,484	6,102
Cut stone and stone product manufacturing	0	1,585	2,003	5,098
Ground or treated mineral and earth manufacturing	0	1,176	3,879	6,123
Mineral wool manufacturing	0	905	2,340	6,548
Miscellaneous nonmetallic mineral products manufacturing	0	185	552	1,369
Iron and steel mills and ferroalloy manufacturing	0	52,619	71,055	334,674
Iron, steel pipe and tube manufacturing from purchased steel	0	2,809	3,615	13,713
Rolled steel shape manufacturing	0	1,856	3,352	14,717
Steel wire drawing	0	1,479	1,576	6,871
Alumina refining and primary aluminum production	0	569	1,034	5,869
Secondary smelting and alloying of aluminum	0	348	448	3,272
Aluminum sheet, plate, and foil manufacturing	0	6,370	9,893	37,051

## APPENDIX

Other aluminum rolling, drawing and extruding	0	3,125	3,723	15,974
Nonferrous metal (exc aluminum) smelting and refining	0	521	1,715	5,157
Copper rolling, drawing, extruding and alloying	0	9,940	12,416	81,273
Nonferrous metal, except copper and aluminum, shaping	0	4,302	5,031	17,187
Secondary processing of other nonferrous metals	0	638	1,240	7,120
Ferrous metal foundries	0	6,277	8,627	20,441
Nonferrous metal foundries	0	4,039	5,288	12,628
Custom roll forming	0	135	201	1,058
Crown and closure manufacturing and metal stamping	0	4,717	6,602	17,947
Iron and steel forging	0	10,578	14,131	45,361
Nonferrous forging	0	4,269	5,313	17,093
Cutlery, utensil, pot, and pan manufacturing	0	2,313	6,875	15,712
Handtool manufacturing	0	3,123	4,904	10,197
Prefabricated metal buildings and components manufacturing	0	1,167	1,616	4,232
Fabricated structural metal manufacturing	0	4,444	6,403	19,196
Plate work manufacturing	0	2,895	2,990	8,100
Metal window and door manufacturing	0	3,405	5,063	12,762
Sheet metal work manufacturing	0	7,554	9,533	22,989
Ornamental and architectural metal work manufacturing	0	3,653	4,729	10,334
Power boiler and heat exchanger manufacturing	0	600	824	2,165
Metal tank (heavy gauge) manufacturing	0	851	1,025	2,764
Metal cans manufacturing	0	1,615	3,490	16,108
Metal barrels, drums and pails manufacturing	0	400	490	1,764
Hardware manufacturing	0	1,470	2,338	6,683
Spring and wire product manufacturing	0	3,639	4,777	12,141
Machine shops	0	26,920	30,783	58,961
Turned product and screw, nut, and bolt manufacturing	0	7,561	10,192	23,768
Metal heat treating	0	1,600	2,390	5,990

## APPENDIX

Metal coating and nonprecious engraving	0	4,403	7,399	16,084
Electroplating, anodizing, and coloring metal	0	4,349	4,816	10,191
Valve and fittings, other than plumbing, manufacturing	0	2,202	3,406	8,885
Plumbing fixture fitting and trim manufacturing	0	359	1,065	3,217
Ball and roller bearing manufacturing	0	1,914	3,360	6,278
Small arms ammunition manufacturing	0	773	1,708	3,557
Ammunition, except for small arms, manufacturing	0	259	317	794
Small arms, ordnance, and accessories manufacturing	0	1,238	2,829	6,176
Fabricated pipe and pipe fitting manufacturing	0	1,373	1,579	3,904
Other fabricated metal manufacturing	0	4,943	6,359	15,121
Farm machinery and equipment manufacturing	0	526	775	2,985
Lawn and garden equipment manufacturing	0	194	312	1,174
Construction machinery manufacturing	0	1,313	2,528	7,210
Mining machinery and equipment manufacturing	0	106	126	342
Oil and gas field machinery and equipment manufacturing	0	71	82	267
Semiconductor machinery manufacturing	0	298	329	876
Food product machinery manufacturing	0	40	47	132
Sawmill, woodworking, and paper machinery	0	658	722	1,747
Printing machinery and equipment manufacturing	0	111	122	253
All other industrial machinery manufacturing	0	209	256	688
Optical instrument and lens manufacturing	0	31	45	135
Photographic and photocopying equipment manufacturing	0	51	72	229

## APPENDIX

Other commercial service industry machinery manufacturing	0	494	901	2,341
Air purification and ventilation equipment manufacturing	0	479	678	1,650
Heating equipment (except warm air furnaces) manufacturing	0	1,554	2,240	5,506
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	102,368	196,924	549,035
Industrial mold manufacturing	0	535	600	1,125
Special tool, die, jig, and fixture manufacturing	0	1,625	1,972	3,385
Cutting tool and machine tool accessory manufacturing	0	709	761	1,691
Machine tool manufacturing	0	168	185	471
Rolling mill and other metalworking machinery manufacturing	0	226	266	511
Turbine and turbine generator set units manufacturing	0	157	213	604
Speed changer, industrial high-speed drive, and gear manufacturing	0	500	702	1,663
Mechanical power transmission equipment manufacturing	0	1,760	2,390	5,993
Other engine equipment manufacturing	0	1,146	1,929	7,212
Pump and pumping equipment manufacturing	0	533	908	2,032
Air and gas compressor manufacturing	0	92	139	436
Elevator and moving stairway manufacturing	0	58	87	241
Conveyor and conveying equipment manufacturing	0	237	247	618
Overhead cranes, hoists, and monorail systems manufacturing	0	27	50	154
Industrial truck, trailer, and stacker manufacturing	0	251	371	1,211
Power-driven handtool manufacturing	0	249	568	1,327
Welding and soldering equipment manufacturing	0	135	172	423
Packaging machinery manufacturing	0	199	279	681

## APPENDIX

Industrial process furnace and oven manufacturing	0	175	203	452
Fluid power cylinder and actuator manufacturing	0	244	325	941
Fluid power pump and motor manufacturing	0	190	286	738
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	305	380	939
Electronic computer manufacturing	0	363	898	2,246
Computer storage device manufacturing	0	57	189	854
Computer terminals and other computer peripheral equipment manufacturing	1	81,991	164,864	377,324
Telephone apparatus manufacturing	0	479	995	3,634
Broadcast and wireless communications equipment manufacturing	0	93	145	366
Other communications equipment manufacturing	0	640	1,111	2,662
Audio and video equipment manufacturing	0	253	500	1,695
Printed circuit assembly (electronic assembly) manufacturing	0	6,230	10,413	34,452
Bare printed circuit board manufacturing	0	466	644	1,958
Semiconductor and related device manufacturing	0	4,827	9,214	21,913
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	2,009	2,982	6,292
Electronic connector manufacturing	0	16,278	26,082	54,520
Other electronic component manufacturing	0	3,693	4,337	13,710
Electromedical and electrotherapeutic apparatus manufacturing	0	744	1,740	3,763
Search, detection, and navigation instruments manufacturing	0	50	91	198
Automatic environmental control manufacturing	0	612	847	1,889

## APPENDIX

Industrial process variable instruments manufacturing	0	1,239	1,919	3,962
Totalizing fluid meter and counting device manufacturing	0	1,499	3,697	7,713
Electricity and signal testing instruments manufacturing	0	1,264	1,993	5,956
Analytical laboratory instrument manufacturing	1	78,850	160,657	311,614
Irradiation apparatus manufacturing	0	28	62	135
Watch, clock, and other measuring and controlling device manufacturing	0	578	1,102	2,429
Blank magnetic and optical recording media manufacturing	0	91	305	817
Software and other prerecorded and record reproducing	0	295	473	1,198
Electric lamp bulb and part manufacturing	0	1,062	1,651	3,885
Lighting fixture manufacturing	0	2,826	3,792	8,537
Small electrical appliance manufacturing	0	1,087	1,903	4,873
Household cooking appliance manufacturing	0	81	177	632
Household refrigerator and home freezer manufacturing	0	86	221	817
Household laundry equipment manufacturing	0	154	326	1,718
Other major household appliance manufacturing	0	31	74	251
Power, distribution, and specialty transformer manufacturing	0	213	304	864
Motor and generator manufacturing	0	889	1,252	3,929
Switchgear and switchboard apparatus manufacturing	0	1,854	2,780	7,263
Relay and industrial control manufacturing	0	11,399	14,494	30,888
Storage battery manufacturing	0	1,879	2,616	7,884
Primary battery manufacturing	0	19,143	36,659	113,778
Fiber optic cable manufacturing	0	961	1,449	5,594
Other communication and energy wire manufacturing	0	489	786	3,273
Wiring device manufacturing	0	9,539	16,139	38,543

## APPENDIX

Carbon and graphite product manufacturing	0	2,057	2,796	9,347
All other miscellaneous electrical equipment and component manufacturing	0	198	228	686
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	92	226	979
Motor vehicle body manufacturing	0	689	926	3,437
Truck trailer manufacturing	0	21	26	106
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	2,553	2,797	11,454
Motor vehicle gasoline engine and engine parts manufacturing	0	2,054	2,984	14,612
Motor vehicle electrical and electronic equipment manufacturing	0	3,964	5,397	27,141
Motor vehicle transmission and power train parts manufacturing	0	6,926	10,895	36,491
Motor vehicle seating and interior trim manufacturing	0	114	165	897
Motor vehicle metal stamping	0	490	659	2,578
Other motor vehicle parts manufacturing	0	6,239	8,795	38,094
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3,213	5,449	20,887
Aircraft manufacturing	0	154	228	725
Aircraft engine and engine parts manufacturing	0	592	910	3,481
Other aircraft parts and auxiliary equipment manufacturing	0	409	507	1,192
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	72	82	160
Railroad rolling stock manufacturing	0	533	641	2,574
Ship building and repairing	0	382	431	1,003
Boat building	0	302	361	1,176
Motorcycle, bicycle, and parts manufacturing	0	3,798	6,493	20,970



## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	16,481	23,503	81,427
All other transportation equipment manufacturing	0	389	654	5,630
Wood kitchen cabinet and countertop manufacturing	0	6,587	8,351	18,524
Upholstered household furniture manufacturing	0	4,070	5,431	15,341
Nonupholstered wood household furniture manufacturing	0	1,523	1,649	4,473
Other household nonupholstered furniture manufacturing	0	596	870	2,433
Institutional furniture manufacturing	0	64	69	221
Wood office furniture manufacturing	0	15	21	57
Custom architectural woodwork and millwork	0	103	99	277
Office furniture, except wood, manufacturing	0	278	436	1,071
Showcase, partition, shelving, and locker manufacturing	0	1,162	1,488	3,513
Mattress manufacturing	0	690	1,262	4,792
Blind and shade manufacturing	0	97	100	353
Surgical and medical instrument manufacturing	0	4,156	7,868	17,237
Surgical appliance and supplies manufacturing	0	5,681	11,135	25,436
Dental equipment and supplies manufacturing	0	384	632	1,591
Ophthalmic goods manufacturing	0	646	1,330	3,389
Dental laboratories	0	1,621	1,549	2,785
Jewelry and silverware manufacturing	0	1,107	1,601	4,325
Sporting and athletic goods manufacturing	0	1,660	2,199	6,587
Doll, toy, and game manufacturing	0	1,371	2,000	5,052
Office supplies (except paper) manufacturing	0	1,893	2,519	6,697
Sign manufacturing	0	1,904	1,615	3,795
Gasket, packing, and sealing device manufacturing	0	1,715	2,088	4,266
Musical instrument manufacturing	0	1,914	1,909	2,657
Fasteners, buttons, needles, and pins manufacturing	0	193	236	500

## APPENDIX

Broom, brush, and mop manufacturing	0	2,038	3,427	6,364
Burial casket manufacturing	0	801	939	1,656
All other miscellaneous manufacturing	0	4,154	4,959	11,540
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	18,447	53,940	113,389
Wholesale - Professional and commercial equipment and supplies	1	77,007	153,346	248,347
Wholesale - Household appliances and electrical and electronic goods	0	36,868	102,176	189,601
Wholesale - Machinery, equipment, and supplies	1	44,914	93,030	151,738
Wholesale - Other durable goods merchant wholesalers	1	73,709	134,010	242,365
Wholesale - Drugs and druggists' sundries	0	52,631	183,058	297,344
Wholesale - Grocery and related product wholesalers	1	62,166	93,453	174,359
Wholesale - Petroleum and petroleum products	0	7,972	173,998	190,268
Wholesale - Other nondurable goods merchant wholesalers	1	97,327	243,415	403,001
Wholesale - Wholesale electronic markets and agents and brokers	1	104,998	58,743	64,994
Retail - Motor vehicle and parts dealers	1	78,186	108,339	162,398
Retail - Furniture and home furnishings stores	1	38,701	48,137	79,597
Retail - Electronics and appliance stores	1	44,203	41,679	72,327
Retail - Building material and garden equipment and supplies stores	1	47,079	72,379	109,848
Retail - Food and beverage stores	5	149,314	187,829	320,948
Retail - Health and personal care stores	2	97,311	110,038	167,421
Retail - Gasoline stores	1	34,714	55,667	116,402
Retail - Clothing and clothing accessories stores	2	61,782	81,627	168,071
Retail - Sporting goods, hobby, musical instrument and book stores	1	35,176	43,447	71,399

## APPENDIX

Retail - General merchandise stores	4	110,535	146,877	251,190
Retail - Miscellaneous store retailers	3	69,970	74,750	122,846
Retail - Nonstore retailers	3	147,178	315,211	523,536
Air transportation	1	62,790	138,020	211,640
Rail transportation	0	30,252	37,773	100,335
Water transportation	0	6,740	10,108	52,921
Truck transportation	2	201,842	226,627	437,791
Transit and ground passenger transportation	4	108,929	125,140	176,864
Pipeline transportation	0	89,422	77,723	79,430
Scenic and sightseeing transportation and support activities for transportation	2	119,136	133,883	288,871
Couriers and messengers	1	64,584	84,833	154,151
Warehousing and storage	2	108,490	120,325	236,995
Newspaper publishers	0	19,713	31,361	40,921
Periodical publishers	0	34,991	52,379	68,979
Book publishers	0	11,563	35,891	55,804
Directory, mailing list, and other publishers	0	4,515	14,732	22,087
Greeting card publishing	0	0	0	0
Software publishers	3	741,051	1,598,728	1,769,532
Motion picture and video industries	0	32,759	86,219	127,085
Sound recording industries	0	2,651	25,476	31,430
Radio and television broadcasting	0	1,431,261	1,619,305	1,034,137
Cable and other subscription programming	0	48,407	66,582	62,891
Wired telecommunications carriers	1	87,575	358,181	484,108
Wireless telecommunications carriers (except satellite)	0	25,393	247,275	358,337
Satellite, telecommunications resellers, and all other telecommunications	0	11,037	17,167	28,379
Data processing, hosting, and related services	1	79,656	168,168	338,293
News syndicates, libraries, archives and all other information services	0	16,029	27,738	55,767
Internet publishing and broadcasting and web search portals	0	100,567	294,796	511,674

## APPENDIX

Nondepository credit intermediation and related activities	1	102,508	133,378	208,001
Securities and commodity contracts intermediation and brokerage	1	158,254	158,985	313,847
Monetary authorities and depository credit intermediation	4	373,731	757,489	1,398,315
Other financial investment activities	5	221,247	417,397	726,409
Direct life insurance carriers	1	85,155	158,995	223,143
Insurance carriers, except direct life	2	230,994	691,399	1,398,404
Insurance agencies, brokerages, and related activities	3	205,776	305,419	652,560
Funds, trusts, and other financial vehicles	1	44,778	35,374	243,749
Other real estate	19	630,664	1,761,300	3,942,659
Tenant-occupied housing	2	52,360	603,691	680,209
Owner-occupied dwellings	0	0	1,911,561	2,415,235
Automotive equipment rental and leasing	0	42,825	112,890	144,003
General and consumer goods rental except video tapes and discs	0	36,164	41,497	57,230
Video tape and disc rental	0	7,280	11,059	17,511
Commercial and industrial machinery and equipment rental and leasing	0	49,622	115,068	148,278
Lessors of nonfinancial intangible assets	0	1,944	100,621	124,225
Legal services	6	694,485	1,309,704	1,707,280
Accounting, tax preparation, bookkeeping, and payroll services	3	246,130	306,327	408,019
Architectural, engineering, and related services	4	387,080	442,939	769,075
Specialized design services	0	39,564	41,516	49,100
Custom computer programming services	1	100,948	112,344	157,019
Computer systems design services	1	138,304	142,722	182,327
Other computer related services, including facilities management	0	51,598	72,681	128,651
Management consulting services	9	1,054,475	1,036,027	1,435,671
Environmental and other technical consulting services	2	142,851	120,557	169,768

## APPENDIX

Scientific research and development services	109	13,935,117	18,865,244	32,545,303
Advertising, public relations, and related services	1	118,585	154,240	242,847
Photographic services	1	33,294	14,457	23,859
Veterinary services	0	25,346	33,535	51,041
Marketing research and all other miscellaneous professional, scientific, and technical services	7	589,002	492,382	651,817
Management of companies and enterprises	9	1,355,235	1,605,302	2,129,394
Office administrative services	1	65,023	34,485	77,697
Facilities support services	0	16,450	20,854	51,431
Employment services	12	571,500	840,877	1,283,961
Business support services	2	116,821	98,772	159,039
Travel arrangement and reservation services	1	41,996	54,105	125,176
Investigation and security services	2	83,551	86,539	118,644
Services to buildings	4	156,592	164,933	242,143
Landscape and horticultural services	2	101,361	107,702	159,681
Other support services	1	43,185	53,730	103,967
Waste management and remediation services	1	58,307	111,780	185,503
Elementary and secondary schools	2	117,789	96,597	118,581
Junior colleges, colleges, universities, and professional schools	5	378,639	464,798	608,510
Other educational services	3	93,838	82,070	152,975
Offices of physicians	5	621,721	737,022	1,026,892
Offices of dentists	2	106,223	133,524	202,917
Offices of other health practitioners	3	150,915	140,719	196,272
Outpatient care centers	2	151,698	159,269	282,367
Medical and diagnostic laboratories	0	39,947	62,831	96,020
Home health care services	4	176,095	123,139	170,151
Other ambulatory health care services	1	48,179	53,362	85,198
Hospitals	12	1,084,950	1,210,106	2,210,368
Nursing and community care facilities	4	174,381	192,426	318,646
Residential mental retardation, mental health, substance abuse and other facilities	2	92,697	96,924	140,250

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Individual and family services	8	267,746	259,310	358,215
Child day care services	3	72,091	94,855	123,980
Community food, housing, and other relief services, including rehabilitation services	1	52,203	60,614	121,168
Performing arts companies	0	22,442	41,080	58,578
Commercial Sports Except Racing	0	46,792	56,113	74,200
Racing and Track Operation	0	6,922	11,212	16,760
Independent artists, writers, and performers	2	75,401	95,164	102,113
Promoters of performing arts and sports and agents for public figures	0	18,862	56,429	94,281
Museums, historical sites, zoos, and parks	0	14,787	20,550	31,711
Amusement parks and arcades	0	6,657	11,486	17,185
Gambling industries (except casino hotels)	1	39,839	88,434	135,307
Other amusement and recreation industries	1	33,474	39,002	69,919
Fitness and recreational sports centers	1	20,700	26,378	43,703
Bowling centers	0	2,983	4,018	7,650
Hotels and motels, including casino hotels	2	102,470	154,988	246,106
Other accommodations	1	59,351	74,449	95,872
Full-service restaurants	9	223,786	331,371	580,385
Limited-service restaurants	6	141,408	217,653	473,425
All other food and drinking places	6	210,780	262,631	389,871
Automotive repair and maintenance, except car washes	3	200,784	212,144	317,284
Car washes	2	88,840	124,661	188,955
Electronic and precision equipment repair and maintenance	1	94,874	133,271	202,127
Commercial and industrial machinery and equipment repair and maintenance	1	62,167	66,190	100,358
Personal and household goods repair and maintenance	1	66,362	49,399	61,500
Personal care services	3	105,498	57,410	81,494
Death care services	0	13,625	15,807	25,231
Dry-cleaning and laundry services	1	21,289	22,828	32,449
Other personal services	3	96,180	65,864	91,168
Religious organizations	6	253,410	76,025	435,625
Grantmaking, giving, and social advocacy organizations	1	63,271	149,060	234,473

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Business and professional associations	0	46,675	60,935	94,559
Labor and civic organizations	3	53,123	109,749	231,413
Private households	1	19,307	19,307	19,307
Postal service	1	96,596	96,693	106,276
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	2,570	1,092	5,909
State government passenger transit	2	235,916	(113,518)	221,481
State government electric utilities	0	0	0	0
Other state government enterprises	0	42,760	44,744	101,777
Local government passenger transit	0	20,633	(14,828)	9,901
Local government electric utilities	0	93	222	427
Other local government enterprises	1	108,963	192,805	354,488
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	4	500,112	886,794	1,539,975

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 41. Rhode Island

**Table 449: Detailed NASA Impacts by Types of Impact, Rhode Island.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	25	1,583,386	2,535,978	4,767,547
Oilseed farming	0	0	0	0
Grain farming	0	2	6	24
Vegetable and melon farming	0	108	156	350
Fruit farming	0	31	50	99
Tree nut farming	0	1	1	1
Greenhouse, nursery, and floriculture production	0	229	284	503
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	13	16	29
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	3	21	68
Dairy cattle and milk production	0	3	8	38
Poultry and egg production	0	23	34	299
Animal production, except cattle and poultry and eggs	0	255	1,289	1,962
Forestry, forest products, and timber tract production	0	140	154	187
Commercial logging	0	220	228	329
Commercial fishing	0	564	323	356
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	1,098	892	1,175
Oil and gas extraction	0	42	45	2,523
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	55	274	565
Sand and gravel mining	0	163	363	565



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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	(0)	(0)	0
Support activities for oil and gas operations	0	0	0	2
Metal mining services	0	0	0	21
Other nonmetallic minerals services	0	0	0	2
Electric power generation - Hydroelectric	0	39	357	1,499
Electric power generation - Fossil fuel	0	851	4,589	9,357
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	277	5,572	21,653
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	565	377	611
Electric power transmission and distribution	0	3,215	18,134	44,319
Natural gas distribution	0	1,679	6,614	11,003
Water, sewage and other systems	0	244	743	1,145
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	7,012	9,009	21,441
Maintenance and repair construction of residential structures	0	1,994	2,791	6,681
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	8	6	13
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	83	216	1,093
Flour milling	0	2	3	42
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	14	24	189
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	4	5	39
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	11	13	95
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	46	57	410
Canned fruits and vegetables manufacturing	0	5	7	77
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	17	21	327

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Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	48	61	622
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	8	10	76
Frozen cakes and other pastries manufacturing	0	81	108	203
Poultry processing	0	13	15	77
Animal, except poultry, slaughtering	0	22	33	192
Meat processed from carcasses	0	530	567	4,310
Rendering and meat byproduct processing	0	6	10	32
Seafood product preparation and packaging	0	141	152	609
Bread and bakery product, except frozen, manufacturing	0	391	460	1,272
Cookie and cracker manufacturing	0	9	10	62
Dry pasta, mixes, and dough manufacturing	0	1	2	16
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	57	82	372
Other snack food manufacturing	0	28	37	183
Coffee and tea manufacturing	0	26	35	214
Flavoring syrup and concentrate manufacturing	0	3	8	49
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	6	8	70
All other food manufacturing	0	59	69	453
Bottled and canned soft drinks & water	0	138	204	1,349
Manufactured ice	0	8	1	21
Breweries	0	53	120	459
Wineries	0	4	6	26
Distilleries	0	5	26	59
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	439	712	2,515
Broadwoven fabric mills	0	13	21	65
Narrow fabric mills and schiffli machine embroidery	0	203	237	700
Nonwoven fabric mills	0	50	99	297
Knit fabric mills	0	27	39	79

## APPENDIX

Textile and fabric finishing mills	0	39	53	146
Fabric coating mills	0	40	56	197
Carpet and rug mills	0	82	158	552
Curtain and linen mills	0	11	17	56
Textile bag and canvas mills	0	13	17	49
Rope, cordage, twine, tire cord and tire fabric mills	0	14	25	58
Other textile product mills	0	37	48	109
Hosiery and sock mills	0	0	1	2
Other apparel knitting mills	0	0	1	2
Cut and sew apparel contractors	0	3	4	12
Mens and boys cut and sew apparel manufacturing	0	1	1	7
Womens and girls cut and sew apparel manufacturing	0	0	0	2
Other cut and sew apparel manufacturing	0	1	2	8
Apparel accessories and other apparel manufacturing	0	1	1	8
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	2	2	5
Sawmills	0	27	47	228
Wood preservation	0	23	99	306
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	4	6	19
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	20	33	154
Cut stock, resawing lumber, and planing	0	2	5	35
Other millwork, including flooring	0	203	349	753
Wood container and pallet manufacturing	0	55	72	202
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	5	6	26
All other miscellaneous wood product manufacturing	0	26	38	147

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Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	42	59	433
Paperboard container manufacturing	0	353	421	3,038
Paper bag and coated and treated paper manufacturing	0	206	245	1,160
Stationery product manufacturing	0	18	20	108
Sanitary paper product manufacturing	0	2	3	16
All other converted paper product manufacturing	0	162	182	754
Printing	0	2,337	3,265	6,875
Support activities for printing	0	99	137	226
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	5	226	227
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	25	35	218
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	67	100	1,128
Plastics material and resin manufacturing	0	279	381	3,873
Synthetic rubber manufacturing	0	16	19	113
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1	1	8
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	0

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Pharmaceutical preparation manufacturing	0	245	487	1,909
In-vitro diagnostic substance manufacturing	0	0	0	1
Biological product (except diagnostic) manufacturing	0	24	33	75
Paint and coating manufacturing	0	26	33	214
Adhesive manufacturing	0	7	9	72
Soap and other detergent manufacturing	0	307	546	3,006
Polish and other sanitation good manufacturing	0	40	50	306
Surface active agent manufacturing	0	29	52	251
Toilet preparation manufacturing	0	17	27	152
Printing ink manufacturing	0	78	82	258
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	148	184	739
Photographic film and chemical manufacturing	0	96	133	534
Other miscellaneous chemical product manufacturing	0	14	17	109
Plastics packaging materials and unlaminated film and sheet manufacturing	0	438	766	2,148
Unlaminated plastics profile shape manufacturing	0	52	126	383
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	88	173	441
Polystyrene foam product manufacturing	0	64	115	332
Urethane and other foam product (except polystyrene) manufacturing	0	39	70	329
Plastics bottle manufacturing	0	0	1	3
Other plastics product manufacturing	0	274	433	1,364
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	40	68	176
Other rubber product manufacturing	0	133	211	658

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	2	3	26
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	6	10	49
Other pressed and blown glass and glassware manufacturing	0	17	23	119
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	3	4	32
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	136	189	803
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	3	4	16
Other concrete product manufacturing	0	95	120	355
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	93	197	400
Cut stone and stone product manufacturing	0	142	158	371
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	79	133	345
Miscellaneous nonmetallic mineral products manufacturing	0	10	17	48
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	13	17	73
Rolled steel shape manufacturing	0	42	70	285
Steel wire drawing	0	21	28	109
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	11	33	175

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Copper rolling, drawing, extruding and alloying	0	176	228	1,849
Nonferrous metal, except copper and aluminum, shaping	0	186	230	981
Secondary processing of other nonferrous metals	0	13	33	229
Ferrous metal foundries	0	5	8	20
Nonferrous metal foundries	0	47	64	194
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	241	273	810
Iron and steel forging	0	13	19	198
Nonferrous forging	0	18	21	97
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	5	6	20
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	42	50	193
Plate work manufacturing	0	7	8	26
Metal window and door manufacturing	0	100	117	301
Sheet metal work manufacturing	0	89	99	301
Ornamental and architectural metal work manufacturing	0	19	21	64
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	57	62	191
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	26	29	109
Hardware manufacturing	0	37	46	194
Spring and wire product manufacturing	0	24	27	70
Machine shops	0	283	303	673
Turned product and screw, nut, and bolt manufacturing	0	161	183	581
Metal heat treating	0	11	14	48
Metal coating and nonprecious engraving	0	67	84	264
Electroplating, anodizing, and coloring metal	0	147	156	421



## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	41	50	139
Plumbing fixture fitting and trim manufacturing	0	79	137	615
Ball and roller bearing manufacturing	0	2	2	9
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0
Fabricated pipe and pipe fitting manufacturing	0	0	0	2
Other fabricated metal manufacturing	0	187	210	692
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	2
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	2	3	7
Printing machinery and equipment manufacturing	0	1	1	1
All other industrial machinery manufacturing	0	3	5	11
Optical instrument and lens manufacturing	0	1	1	3
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	6	16	38
Air purification and ventilation equipment manufacturing	0	0	0	0

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Heating equipment (except warm air furnaces) manufacturing	0	44	85	178
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	52	133	291
Industrial mold manufacturing	0	17	22	45
Special tool, die, jig, and fixture manufacturing	0	7	11	20
Cutting tool and machine tool accessory manufacturing	0	2	3	7
Machine tool manufacturing	0	4	4	11
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	1	1	5
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	2
Power-driven handtool manufacturing	0	0	0	1
Welding and soldering equipment manufacturing	0	0	0	1
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	2	3	6
Fluid power cylinder and actuator manufacturing	0	0	0	0

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Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	6	10	27
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	24,138	44,498	90,701
Telephone apparatus manufacturing	0	(0)	(0)	1
Broadcast and wireless communications equipment manufacturing	0	2	2	6
Other communications equipment manufacturing	0	3	5	11
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	5	8	29
Bare printed circuit board manufacturing	0	1	1	4
Semiconductor and related device manufacturing	0	8	16	47
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	38	55	122
Electronic connector manufacturing	0	41	69	225
Other electronic component manufacturing	0	26	32	101
Electromedical and electrotherapeutic apparatus manufacturing	0	1	3	11
Search, detection, and navigation instruments manufacturing	0	1	2	5
Automatic environmental control manufacturing	0	65	87	160
Industrial process variable instruments manufacturing	0	15	22	53
Totalizing fluid meter and counting device manufacturing	0	0	0	0

## APPENDIX

Electricity and signal testing instruments manufacturing	0	2	2	6
Analytical laboratory instrument manufacturing	0	1	1	2
Irradiation apparatus manufacturing	0	0	1	2
Watch, clock, and other measuring and controlling device manufacturing	0	2	4	9
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	1
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	23	32	91
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	31	43	94
Switchgear and switchboard apparatus manufacturing	0	4	6	13
Relay and industrial control manufacturing	0	14	17	32
Storage battery manufacturing	0	28	40	103
Primary battery manufacturing	0	753	1,805	3,676
Fiber optic cable manufacturing	0	2	4	21
Other communication and energy wire manufacturing	0	21	34	149
Wiring device manufacturing	0	60	100	277
Carbon and graphite product manufacturing	0	22	29	69
All other miscellaneous electrical equipment and component manufacturing	0	2	3	5

## APPENDIX

Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	5	17	47
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	(0)	1	6
Motor vehicle electrical and electronic equipment manufacturing	0	54	184	643
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	5	20
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	126	559	1,426
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	(0)	0	1
Ship building and repairing	0	98	185	321
Boat building	0	332	699	1,683
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	41	47	138
Upholstered household furniture manufacturing	0	21	25	91
Nonupholstered wood household furniture manufacturing	0	8	9	29
Other household nonupholstered furniture manufacturing	0	2	2	10
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	19	18	52
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	59	67	175
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	19	20	64
Surgical and medical instrument manufacturing	0	121	359	604
Surgical appliance and supplies manufacturing	0	41	121	214
Dental equipment and supplies manufacturing	0	0	1	2
Ophthalmic goods manufacturing	0	13	41	73
Dental laboratories	0	8	8	14
Jewelry and silverware manufacturing	0	219	361	668
Sporting and athletic goods manufacturing	0	11	19	52
Doll, toy, and game manufacturing	0	14	28	89
Office supplies (except paper) manufacturing	0	3	4	16
Sign manufacturing	0	290	295	574
Gasket, packing, and sealing device manufacturing	0	63	97	201
Musical instrument manufacturing	0	1	1	2
Fasteners, buttons, needles, and pins manufacturing	0	18	26	48
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	10	12	32

## APPENDIX

All other miscellaneous manufacturing	0	11,439	14,629	24,903
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	796	2,538	5,267
Wholesale - Professional and commercial equipment and supplies	0	4,139	8,664	14,631
Wholesale - Household appliances and electrical and electronic goods	0	1,921	5,834	10,368
Wholesale - Machinery, equipment, and supplies	0	1,851	3,983	6,517
Wholesale - Other durable goods merchant wholesalers	0	5,498	10,628	18,221
Wholesale - Drugs and druggists' sundries	0	2,014	7,290	13,134
Wholesale - Grocery and related product wholesalers	0	3,732	5,843	9,765
Wholesale - Petroleum and petroleum products	0	387	9,197	10,030
Wholesale - Other nondurable goods merchant wholesalers	0	6,547	17,189	27,925
Wholesale - Wholesale electronic markets and agents and brokers	0	4,368	3,294	3,541
Retail - Motor vehicle and parts dealers	0	3,710	5,507	8,158
Retail - Furniture and home furnishings stores	0	1,992	2,523	4,147
Retail - Electronics and appliance stores	0	2,228	2,185	3,742
Retail - Building material and garden equipment and supplies stores	0	2,635	4,420	6,475
Retail - Food and beverage stores	0	7,279	9,683	15,993
Retail - Health and personal care stores	0	5,146	5,978	8,684
Retail - Gasoline stores	0	2,694	3,730	5,974
Retail - Clothing and clothing accessories stores	0	2,834	4,323	9,212
Retail - Sporting goods, hobby, musical instrument and book stores	0	1,483	1,886	3,094
Retail - General merchandise stores	0	6,079	7,949	12,419
Retail - Miscellaneous store retailers	0	3,429	3,783	6,259

## APPENDIX

Retail - Nonstore retailers	0	5,842	13,577	22,191
Air transportation	0	885	5,272	6,897
Rail transportation	0	894	110	1,962
Water transportation	0	777	1,345	6,195
Truck transportation	0	5,353	6,387	12,957
Transit and ground passenger transportation	0	3,807	4,564	6,740
Pipeline transportation	0	222	919	1,032
Scenic and sightseeing transportation and support activities for transportation	0	8,089	8,950	19,224
Couriers and messengers	0	2,804	3,585	6,759
Warehousing and storage	0	2,045	2,313	4,601
Newspaper publishers	0	1,490	2,242	3,051
Periodical publishers	0	540	761	1,474
Book publishers	0	51	130	424
Directory, mailing list, and other publishers	0	72	178	486
Greeting card publishing	0	56	171	262
Software publishers	0	3,989	8,893	10,791
Motion picture and video industries	0	1,832	3,298	6,638
Sound recording industries	0	175	620	961
Radio and television broadcasting	0	2,934	1,967	10,390
Cable and other subscription programming	0	79	591	1,243
Wired telecommunications carriers	0	3,692	9,625	18,003
Wireless telecommunications carriers (except satellite)	0	693	4,257	11,626
Satellite, telecommunications resellers, and all other telecommunications	0	1,476	1,998	4,519
Data processing, hosting, and related services	0	2,963	9,364	16,737
News syndicates, libraries, archives and all other information services	0	585	1,410	2,574
Internet publishing and broadcasting and web search portals	0	1,076	4,350	9,981
Nondepository credit intermediation and related activities	0	5,418	7,086	12,832
Securities and commodity contracts intermediation and brokerage	0	20,151	20,583	34,169



## APPENDIX

Monetary authorities and depository credit intermediation	0	31,751	64,071	116,912
Other financial investment activities	0	8,443	15,041	29,453
Direct life insurance carriers	0	1,254	2,947	4,072
Insurance carriers, except direct life	0	10,247	43,228	74,872
Insurance agencies, brokerages, and related activities	0	9,947	17,791	35,390
Funds, trusts, and other financial vehicles	0	1,380	1,975	12,425
Other real estate	2	33,757	145,869	338,523
Tenant-occupied housing	0	1,031	23,279	25,576
Owner-occupied dwellings	0	0	108,315	136,855
Automotive equipment rental and leasing	0	1,130	4,816	6,875
General and consumer goods rental except video tapes and discs	0	1,341	1,801	2,891
Video tape and disc rental	0	267	463	754
Commercial and industrial machinery and equipment rental and leasing	0	1,743	4,857	7,048
Lessors of nonfinancial intangible assets	0	242	7,309	8,893
Legal services	1	45,707	69,159	110,510
Accounting, tax preparation, bookkeeping, and payroll services	0	12,680	15,948	22,976
Architectural, engineering, and related services	0	17,938	20,672	38,283
Specialized design services	0	2,539	2,691	3,341
Custom computer programming services	0	2,980	3,522	5,129
Computer systems design services	0	9,168	9,495	12,857
Other computer related services, including facilities management	0	1,397	3,604	5,406
Management consulting services	0	30,047	29,786	47,345
Environmental and other technical consulting services	0	5,742	4,824	7,169
Scientific research and development services	7	572,611	796,603	1,727,254
Advertising, public relations, and related services	0	7,283	9,420	17,228
Photographic services	0	1,676	560	1,175
Veterinary services	0	1,260	1,710	2,589

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	1	30,984	29,088	42,675
Management of companies and enterprises	1	80,973	94,290	130,841
Office administrative services	0	5,499	2,197	6,050
Facilities support services	0	707	933	1,957
Employment services	1	34,507	53,309	82,996
Business support services	0	6,105	5,291	8,710
Travel arrangement and reservation services	0	2,479	3,376	7,815
Investigation and security services	0	4,332	4,446	6,395
Services to buildings	0	10,750	11,180	17,398
Landscape and horticultural services	0	6,702	7,062	10,794
Other support services	0	2,160	2,726	6,026
Waste management and remediation services	0	3,527	6,924	11,746
Elementary and secondary schools	0	5,920	5,105	6,192
Junior colleges, colleges, universities, and professional schools	0	12,318	16,467	23,126
Other educational services	0	3,453	3,259	6,203
Offices of physicians	0	24,868	30,133	43,843
Offices of dentists	0	5,092	6,662	10,115
Offices of other health practitioners	0	7,136	6,765	9,573
Outpatient care centers	0	5,897	6,276	12,298
Medical and diagnostic laboratories	0	1,787	2,966	4,875
Home health care services	0	7,195	5,264	7,313
Other ambulatory health care services	0	2,022	2,269	3,847
Hospitals	1	43,205	54,555	100,992
Nursing and community care facilities	0	7,171	9,192	14,600
Residential mental retardation, mental health, substance abuse and other facilities	0	3,306	3,811	5,799
Individual and family services	0	7,848	7,301	10,544
Child day care services	0	3,911	4,749	6,226
Community food, housing, and other relief services, including rehabilitation services	0	2,668	3,044	6,880
Performing arts companies	0	1,012	1,487	3,013

## APPENDIX

Commercial Sports Except Racing	0	1,567	1,756	3,379
Racing and Track Operation	0	240	341	547
Independent artists, writers, and performers	0	3,791	4,101	5,198
Promoters of performing arts and sports and agents for public figures	0	637	1,133	3,088
Museums, historical sites, zoos, and parks	0	705	805	1,433
Amusement parks and arcades	0	79	118	181
Gambling industries (except casino hotels)	0	2,220	5,432	8,157
Other amusement and recreation industries	0	2,048	2,386	4,052
Fitness and recreational sports centers	0	948	1,306	2,273
Bowling centers	0	226	321	587
Hotels and motels, including casino hotels	0	628	1,252	1,864
Other accommodations	0	305	425	565
Full-service restaurants	1	16,056	25,012	41,586
Limited-service restaurants	0	7,578	12,397	25,393
All other food and drinking places	0	11,362	15,458	23,534
Automotive repair and maintenance, except car washes	0	9,102	9,411	14,530
Car washes	0	4,001	5,881	8,840
Electronic and precision equipment repair and maintenance	0	2,304	3,080	5,130
Commercial and industrial machinery and equipment repair and maintenance	0	2,094	2,560	3,722
Personal and household goods repair and maintenance	0	3,614	2,402	3,201
Personal care services	0	5,298	3,604	4,825
Death care services	0	538	631	1,006
Dry-cleaning and laundry services	0	1,262	1,353	1,987
Other personal services	0	5,533	3,923	5,399
Religious organizations	0	6,431	1,848	9,996
Grantmaking, giving, and social advocacy organizations	0	3,212	7,538	13,089
Business and professional associations	0	1,852	2,470	4,371
Labor and civic organizations	0	2,734	5,455	10,451
Private households	0	710	710	710
Postal service	0	5,131	5,134	5,656
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	120	120	635
State government passenger transit	0	1,913	(954)	2,922
State government electric utilities	0	0	0	0
Other state government enterprises	0	86	62	159
Local government passenger transit	0	0	0	0
Local government electric utilities	0	0	0	0
Other local government enterprises	0	2,504	2,381	6,564
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	111,690	221,150	374,027

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 450: Detailed M2M Program Impacts by Types of Impact, Rhode Island.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1</i>	<i>52,987</i>	<i>93,129</i>	<i>178,029</i>
Oilseed farming	0	0	0	0
Grain farming	0	0	0	0
Vegetable and melon farming	0	3	5	10
Fruit farming	0	1	2	3
Tree nut farming	0	0	0	0

## APPENDIX

Greenhouse, nursery, and floriculture production	0	2	3	5
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	0	0	1
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	0	0	1
Dairy cattle and milk production	0	0	0	1
Poultry and egg production	0	1	1	6
Animal production, except cattle and poultry and eggs	0	3	14	22
Forestry, forest products, and timber tract production	0	1	1	1
Commercial logging	0	1	1	2
Commercial fishing	0	19	8	9
Commercial hunting and trapping	0	0	0	0
Support activities for agriculture and forestry	0	9	7	10
Oil and gas extraction	0	1	1	57
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	2	4	9
Sand and gravel mining	0	5	5	7
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	(0)	(0)	0
Support activities for oil and gas operations	0	0	0	0
Metal mining services	0	0	0	2

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Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	1	12	49
Electric power generation - Fossil fuel	0	24	124	241
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	6	122	447
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	31	16	22
Electric power transmission and distribution	0	79	458	1,083
Natural gas distribution	0	49	199	291
Water, sewage and other systems	0	9	24	33
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	108	139	322

## APPENDIX

Maintenance and repair construction of residential structures	0	58	81	188
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	0	0	0
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	1	4	18
Flour milling	0	0	0	1
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	1	4
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	0	0	1
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	0	0	3
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	2	2	13
Canned fruits and vegetables manufacturing	0	0	0	3
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	1	1	11
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	1	2	18
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	2
Frozen cakes and other pastries manufacturing	0	2	3	6
Poultry processing	0	0	0	2
Animal, except poultry, slaughtering	0	0	1	4
Meat processed from carcasses	0	14	16	115

## APPENDIX

Rendering and meat byproduct processing	0	0	0	1
Seafood product preparation and packaging	0	3	4	13
Bread and bakery product, except frozen, manufacturing	0	12	14	37
Cookie and cracker manufacturing	0	0	0	2
Dry pasta, mixes, and dough manufacturing	0	0	0	1
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	2	3	12
Other snack food manufacturing	0	1	1	5
Coffee and tea manufacturing	0	1	1	7
Flavoring syrup and concentrate manufacturing	0	0	0	1
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	3
All other food manufacturing	0	2	2	15
Bottled and canned soft drinks & water	0	4	5	34
Manufactured ice	0	0	0	1
Breweries	0	2	4	13
Wineries	0	0	0	1
Distilleries	0	0	1	2
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	2	3	10
Broadwoven fabric mills	0	1	1	3
Narrow fabric mills and schiffli machine embroidery	0	5	6	17
Nonwoven fabric mills	0	3	6	16
Knit fabric mills	0	4	6	12
Textile and fabric finishing mills	0	1	2	4
Fabric coating mills	0	2	2	7
Carpet and rug mills	0	3	6	19
Curtain and linen mills	0	0	1	2
Textile bag and canvas mills	0	0	0	1
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	1
Other textile product mills	0	1	2	4
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	0



## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	0	1	3
Wood preservation	0	0	2	5
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	0	0	2
Cut stock, resawing lumber, and planing	0	0	0	1
Other millwork, including flooring	0	3	5	10
Wood container and pallet manufacturing	0	1	2	5
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	0	0	1
All other miscellaneous wood product manufacturing	0	1	1	4
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	1	1	11
Paperboard container manufacturing	0	15	18	127
Paper bag and coated and treated paper manufacturing	0	6	7	32
Stationery product manufacturing	0	1	1	3
Sanitary paper product manufacturing	0	0	0	0

## APPENDIX

All other converted paper product manufacturing	0	5	5	20
Printing	0	70	98	197
Support activities for printing	0	3	4	6
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	0	4	4
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	1	1	5
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	1	2	23
Plastics material and resin manufacturing	0	17	23	248
Synthetic rubber manufacturing	0	0	0	1
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	0
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	11	24	85
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	1	2	3
Paint and coating manufacturing	0	0	1	4
Adhesive manufacturing	0	1	1	6
Soap and other detergent manufacturing	0	6	14	64

## APPENDIX

Polish and other sanitation good manufacturing	0	1	1	7
Surface active agent manufacturing	0	0	1	4
Toilet preparation manufacturing	0	1	1	5
Printing ink manufacturing	0	3	4	11
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	38	58	254
Photographic film and chemical manufacturing	0	1	1	5
Other miscellaneous chemical product manufacturing	0	0	0	3
Plastics packaging materials and unlaminated film and sheet manufacturing	0	164	286	782
Unlaminated plastics profile shape manufacturing	0	33	78	237
Plastics pipe and pipe fitting manufacturing	0	0	0	0
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	3	5	13
Polystyrene foam product manufacturing	0	2	3	9
Urethane and other foam product (except polystyrene) manufacturing	0	2	3	15
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	22	34	102
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	1	1	3
Other rubber product manufacturing	0	1	2	5
Pottery, ceramics, and plumbing fixture manufacturing	0	1	2	15
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	1
Other pressed and blown glass and glassware manufacturing	0	0	0	2
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0

## APPENDIX

Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	2	3	14
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	1
Other concrete product manufacturing	0	30	36	109
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	2	5	10
Cut stone and stone product manufacturing	0	3	3	7
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	2	2	6
Miscellaneous nonmetallic mineral products manufacturing	0	0	1	2
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	1	1	5
Rolled steel shape manufacturing	0	2	4	16
Steel wire drawing	0	3	2	11
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	1	2	13
Copper rolling, drawing, extruding and alloying	0	77	92	721
Nonferrous metal, except copper and aluminum, shaping	0	106	119	557
Secondary processing of other nonferrous metals	0	7	10	94
Ferrous metal foundries	0	0	0	1
Nonferrous metal foundries	0	3	4	11
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	157	179	519

## APPENDIX

Iron and steel forging	0	16	22	224
Nonferrous forging	0	22	25	111
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	0	0	1
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	5	5	21
Plate work manufacturing	0	1	1	2
Metal window and door manufacturing	0	2	3	7
Sheet metal work manufacturing	0	60	68	198
Ornamental and architectural metal work manufacturing	0	1	1	2
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	17	19	57
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	12	13	47
Hardware manufacturing	0	8	11	43
Spring and wire product manufacturing	0	1	1	3
Machine shops	0	41	44	95
Turned product and screw, nut, and bolt manufacturing	0	91	104	316
Metal heat treating	0	5	6	22
Metal coating and nonprecious engraving	0	26	33	104
Electroplating, anodizing, and coloring metal	0	53	57	149
Valve and fittings, other than plumbing, manufacturing	0	3	4	10
Plumbing fixture fitting and trim manufacturing	0	46	83	349
Ball and roller bearing manufacturing	0	1	1	5
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	0	0	0

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	23	26	81
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	1
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	0	1	2
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	2	3	6
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1	4	8
Industrial mold manufacturing	0	2	3	5
Special tool, die, jig, and fixture manufacturing	0	2	3	5
Cutting tool and machine tool accessory manufacturing	0	0	0	1
Machine tool manufacturing	0	1	1	2

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	1	1	2
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	2	3	6
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	24,019	44,165	90,699

## APPENDIX

Telephone apparatus manufacturing	0	(0)	(0)	0
Broadcast and wireless communications equipment manufacturing	0	1	1	2
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	6	10	34
Bare printed circuit board manufacturing	0	1	1	3
Semiconductor and related device manufacturing	0	7	13	37
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	37	53	112
Electronic connector manufacturing	0	20	34	114
Other electronic component manufacturing	0	29	34	104
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	1
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	2	3	5
Industrial process variable instruments manufacturing	0	3	4	9
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	2	3	7
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	1	2	4
Blank magnetic and optical recording media manufacturing	0	0	0	0



## APPENDIX

Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	1	2	5
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	12	16	36
Switchgear and switchboard apparatus manufacturing	0	2	3	6
Relay and industrial control manufacturing	0	8	10	17
Storage battery manufacturing	0	11	15	39
Primary battery manufacturing	0	242	490	1,102
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	14	23	95
Wiring device manufacturing	0	41	68	172
Carbon and graphite product manufacturing	0	0	0	1
All other miscellaneous electrical equipment and component manufacturing	0	2	2	5
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	1	2
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	(0)	0	0

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	1	5	16
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	1
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3	17	40
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	(0)	0	0
Ship building and repairing	0	2	5	8
Boat building	0	8	16	38
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	8	8	24
Upholstered household furniture manufacturing	0	1	1	4
Nonupholstered wood household furniture manufacturing	0	0	0	1
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	1	1	2
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	13	13	36
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	2
Surgical and medical instrument manufacturing	0	4	11	17
Surgical appliance and supplies manufacturing	0	2	5	8
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	1	3
Dental laboratories	0	0	0	1
Jewelry and silverware manufacturing	0	8	13	23
Sporting and athletic goods manufacturing	0	0	1	2
Doll, toy, and game manufacturing	0	1	1	3
Office supplies (except paper) manufacturing	0	0	0	1
Sign manufacturing	0	7	7	13
Gasket, packing, and sealing device manufacturing	0	1	2	4
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	1	1	2
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	1
All other miscellaneous manufacturing	0	1	2	4
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	32	101	209
Wholesale - Professional and commercial equipment and supplies	0	1,084	2,274	3,738
Wholesale - Household appliances and electrical and electronic goods	0	589	1,776	3,096
Wholesale - Machinery, equipment, and supplies	0	122	264	430
Wholesale - Other durable goods merchant wholesalers	0	645	1,248	2,118

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	62	221	388
Wholesale - Grocery and related product wholesalers	0	103	160	267
Wholesale - Petroleum and petroleum products	0	12	324	348
Wholesale - Other nondurable goods merchant wholesalers	0	344	934	1,487
Wholesale - Wholesale electronic markets and agents and brokers	0	474	342	367
Retail - Motor vehicle and parts dealers	0	115	172	252
Retail - Furniture and home furnishings stores	0	55	70	113
Retail - Electronics and appliance stores	0	61	60	101
Retail - Building material and garden equipment and supplies stores	0	75	126	182
Retail - Food and beverage stores	0	215	283	456
Retail - Health and personal care stores	0	138	161	234
Retail - Gasoline stores	0	95	122	184
Retail - Clothing and clothing accessories stores	0	81	123	255
Retail - Sporting goods, hobby, musical instrument and book stores	0	40	51	82
Retail - General merchandise stores	0	163	215	333
Retail - Miscellaneous store retailers	0	97	106	170
Retail - Nonstore retailers	0	181	426	664
Air transportation	0	22	134	173
Rail transportation	0	34	4	71
Water transportation	0	15	26	117
Truck transportation	0	539	626	1,233
Transit and ground passenger transportation	0	111	134	186
Pipeline transportation	0	4	19	21
Scenic and sightseeing transportation and support activities for transportation	0	136	153	328
Couriers and messengers	0	135	179	330
Warehousing and storage	0	121	137	270

## APPENDIX

Newspaper publishers	0	38	55	74
Periodical publishers	0	18	25	45
Book publishers	0	1	2	8
Directory, mailing list, and other publishers	0	1	4	10
Greeting card publishing	0	1	4	6
Software publishers	0	93	210	250
Motion picture and video industries	0	67	122	205
Sound recording industries	0	6	21	30
Radio and television broadcasting	0	115	84	300
Cable and other subscription programming	0	3	19	33
Wired telecommunications carriers	0	106	256	465
Wireless telecommunications carriers (except satellite)	0	26	132	349
Satellite, telecommunications resellers, and all other telecommunications	0	57	67	135
Data processing, hosting, and related services	0	62	185	316
News syndicates, libraries, archives and all other information services	0	15	36	63
Internet publishing and broadcasting and web search portals	0	38	146	290
Nondepository credit intermediation and related activities	0	246	325	553
Securities and commodity contracts intermediation and brokerage	0	722	725	1,125
Monetary authorities and depository credit intermediation	0	901	1,872	3,321
Other financial investment activities	0	338	586	914
Direct life insurance carriers	0	33	80	108
Insurance carriers, except direct life	0	450	1,963	3,257
Insurance agencies, brokerages, and related activities	0	1,316	2,354	4,531
Funds, trusts, and other financial vehicles	0	54	75	399
Other real estate	0	459	1,960	3,948
Tenant-occupied housing	0	34	723	783

## APPENDIX

Owner-occupied dwellings	0	0	3,294	4,162
Automotive equipment rental and leasing	0	41	144	197
General and consumer goods rental except video tapes and discs	0	41	52	78
Video tape and disc rental	0	8	13	20
Commercial and industrial machinery and equipment rental and leasing	0	71	169	238
Lessors of nonfinancial intangible assets	0	7	206	250
Legal services	0	481	755	1,178
Accounting, tax preparation, bookkeeping, and payroll services	0	303	382	538
Architectural, engineering, and related services	0	140	162	296
Specialized design services	0	76	80	98
Custom computer programming services	0	60	71	100
Computer systems design services	0	217	224	298
Other computer related services, including facilities management	0	30	76	109
Management consulting services	0	325	323	499
Environmental and other technical consulting services	0	99	84	122
Scientific research and development services	0	2,455	3,461	6,940
Advertising, public relations, and related services	0	193	249	434
Photographic services	0	35	12	24
Veterinary services	0	33	45	67
Marketing research and all other miscellaneous professional, scientific, and technical services	0	233	219	317
Management of companies and enterprises	0	1,662	1,954	2,627
Office administrative services	0	101	41	103
Facilities support services	0	15	20	40
Employment services	0	433	685	1,029
Business support services	0	117	104	165
Travel arrangement and reservation services	0	45	62	138
Investigation and security services	0	98	100	140
Services to buildings	0	204	213	316

## APPENDIX

Landscape and horticultural services	0	123	130	191
Other support services	0	49	62	136
Waste management and remediation services	0	75	148	248
Elementary and secondary schools	0	210	180	215
Junior colleges, colleges, universities, and professional schools	0	492	651	869
Other educational services	0	111	105	192
Offices of physicians	0	680	831	1,200
Offices of dentists	0	146	194	290
Offices of other health practitioners	0	196	187	265
Outpatient care centers	0	178	191	368
Medical and diagnostic laboratories	0	50	86	137
Home health care services	0	196	145	203
Other ambulatory health care services	0	58	65	108
Hospitals	0	1,318	1,657	2,993
Nursing and community care facilities	0	210	269	416
Residential mental retardation, mental health, substance abuse and other facilities	0	108	124	185
Individual and family services	0	248	235	337
Child day care services	0	116	143	182
Community food, housing, and other relief services, including rehabilitation services	0	90	104	227
Performing arts companies	0	32	45	83
Commercial Sports Except Racing	0	40	44	84
Racing and Track Operation	0	7	10	16
Independent artists, writers, and performers	0	105	111	134
Promoters of performing arts and sports and agents for public figures	0	19	31	80
Museums, historical sites, zoos, and parks	0	22	25	43
Amusement parks and arcades	0	2	3	5
Gambling industries (except casino hotels)	0	68	157	233
Other amusement and recreation industries	0	54	60	102

## APPENDIX

Fitness and recreational sports centers	0	29	37	63
Bowling centers	0	6	9	16
Hotels and motels, including casino hotels	0	20	37	55
Other accommodations	0	12	17	22
Full-service restaurants	0	399	625	1,017
Limited-service restaurants	0	214	349	689
All other food and drinking places	0	263	352	521
Automotive repair and maintenance, except car washes	0	274	273	419
Car washes	0	111	163	244
Electronic and precision equipment repair and maintenance	0	48	64	102
Commercial and industrial machinery and equipment repair and maintenance	0	56	67	97
Personal and household goods repair and maintenance	0	81	48	65
Personal care services	0	165	103	139
Death care services	0	18	19	31
Dry-cleaning and laundry services	0	29	31	45
Other personal services	0	152	95	134
Religious organizations	0	217	49	310
Grantmaking, giving, and social advocacy organizations	0	125	251	437
Business and professional associations	0	49	59	101
Labor and civic organizations	0	92	163	319
Private households	0	23	23	23
Postal service	0	180	180	198
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	4	5	20
State government passenger transit	0	457	(234)	579
State government electric utilities	0	0	0	0
Other state government enterprises	0	1	1	2
Local government passenger transit	0	0	0	0
Local government electric utilities	0	0	0	0
Other local government enterprises	0	59	52	142



## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 42. South Carolina

**Table 451: Detailed NASA Impacts by Types of Impact, South Carolina.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>204</i>	<i>12,577,784</i>	<i>18,804,448</i>	<i>36,049,295</i>
Oilseed farming	0	35	1,727	4,795
Grain farming	0	366	3,770	18,271
Vegetable and melon farming	0	1,046	3,098	11,420
Fruit farming	0	1,127	4,254	12,267
Tree nut farming	0	136	154	463
Greenhouse, nursery, and floriculture production	0	762	1,518	5,464
Tobacco farming	0	271	443	1,349
Cotton farming	0	163	351	1,174
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	972	1,795	6,838
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	40	1,209	6,375
Dairy cattle and milk production	0	60	341	3,284

## APPENDIX

Poultry and egg production	0	543	1,178	22,557
Animal production, except cattle and poultry and eggs	0	285	4,206	9,929
Forestry, forest products, and timber tract production	0	485	517	728
Commercial logging	0	2,054	2,118	3,826
Commercial fishing	0	(180)	1,076	1,186
Commercial hunting and trapping	0	198	1,183	1,287
Support activities for agriculture and forestry	0	13,806	13,662	16,319
Oil and gas extraction	0	1	13	25,111
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	1,553	3,213	5,334
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,658	3,891	6,571
Sand and gravel mining	0	685	1,075	1,935
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	63	118	178
Other nonmetallic minerals	0	308	465	940
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	6	5	36
Metal mining services	0	1	1	399
Other nonmetallic minerals services	0	2	2	36
Electric power generation - Hydroelectric	0	504	1,854	3,249
Electric power generation - Fossil fuel	0	7,796	34,895	96,964
Electric power generation - Nuclear	0	14,373	35,480	78,306
Electric power generation - Solar	0	160	669	2,203
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0

## APPENDIX

Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	12	60	893
Electric power transmission and distribution	0	16,342	69,540	189,742
Natural gas distribution	0	2,724	8,668	18,671
Water, sewage and other systems	0	1,849	4,700	8,948
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	45,409	66,837	163,583
Maintenance and repair construction of residential structures	0	14,090	23,152	56,273
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	50	41	92
Dog and cat food manufacturing	0	962	4,279	16,266
Other animal food manufacturing	0	784	1,534	10,858
Flour milling	0	509	1,111	7,341
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	200	534	3,745

## APPENDIX

Soybean and other oilseed processing	0	19	63	767
Fats and oils refining and blending	0	11	20	217
Breakfast cereal manufacturing	0	689	1,649	6,227
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	155	186	587
Chocolate and confectionery manufacturing from cacao beans	0	32	48	259
Confectionery manufacturing from purchased chocolate	0	104	105	269
Frozen fruits, juices and vegetables manufacturing	0	261	276	623
Frozen specialties manufacturing	0	2,204	3,501	15,897
Canned fruits and vegetables manufacturing	0	612	1,073	4,312
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	29	37	354
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	1,114	1,866	11,855
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	35	37	105
Frozen cakes and other pastries manufacturing	0	1,109	1,594	3,130
Poultry processing	0	8,319	11,639	57,026
Animal, except poultry, slaughtering	0	2,175	3,104	22,867
Meat processed from carcasses	0	3,285	3,695	29,598
Rendering and meat byproduct processing	0	185	181	849
Seafood product preparation and packaging	0	986	961	1,721
Bread and bakery product, except frozen, manufacturing	0	5,924	7,375	16,208
Cookie and cracker manufacturing	0	524	631	1,856
Dry pasta, mixes, and dough manufacturing	0	454	1,128	4,431
Tortilla manufacturing	0	169	176	331
Roasted nuts and peanut butter manufacturing	0	366	429	1,947

## APPENDIX

Other snack food manufacturing	0	490	604	2,553
Coffee and tea manufacturing	0	298	481	2,362
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	223	426	1,970
Spice and extract manufacturing	0	266	406	1,841
All other food manufacturing	0	1,304	1,574	5,518
Bottled and canned soft drinks & water	0	2,082	4,840	22,928
Manufactured ice	0	131	73	363
Breweries	0	527	1,937	6,270
Wineries	0	19	39	176
Distilleries	0	209	1,948	4,043
Tobacco product manufacturing	0	249	11,437	19,391
Fiber, yarn, and thread mills	0	2,198	3,476	13,411
Broadwoven fabric mills	0	4,198	6,471	19,661
Narrow fabric mills and schiffli machine embroidery	0	528	605	1,828
Nonwoven fabric mills	0	3,425	6,550	18,939
Knit fabric mills	0	184	260	723
Textile and fabric finishing mills	0	689	928	3,138
Fabric coating mills	0	200	277	1,373
Carpet and rug mills	0	930	1,703	5,531
Curtain and linen mills	0	262	379	1,139
Textile bag and canvas mills	0	321	396	1,053
Rope, cordage, twine, tire cord and tire fabric mills	0	234	392	1,025
Other textile product mills	0	885	1,086	2,616
Hosiery and sock mills	0	24	53	104
Other apparel knitting mills	0	18	32	112
Cut and sew apparel contractors	0	240	302	536
Mens and boys cut and sew apparel manufacturing	0	92	293	655
Womens and girls cut and sew apparel manufacturing	0	34	181	474
Other cut and sew apparel manufacturing	0	75	264	515
Apparel accessories and other apparel manufacturing	0	76	251	490
Leather and hide tanning and finishing	0	3	23	53
Footwear manufacturing	0	22	45	83

## APPENDIX

Other leather and allied product manufacturing	0	13	19	48
Sawmills	0	2,127	3,422	10,047
Wood preservation	0	269	1,024	2,876
Veneer and plywood manufacturing	0	953	1,574	4,590
Engineered wood member and truss manufacturing	0	197	294	844
Reconstituted wood product manufacturing	0	647	1,942	5,117
Wood windows and door manufacturing	0	2,292	3,481	8,869
Cut stock, resawing lumber, and planing	0	149	300	871
Other millwork, including flooring	0	760	1,226	3,591
Wood container and pallet manufacturing	0	852	1,084	3,543
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	265	321	903
All other miscellaneous wood product manufacturing	0	763	1,044	2,923
Pulp mills	0	15	17	42
Paper mills	0	5,231	12,555	37,847
Paperboard mills	0	3,010	7,557	26,293
Paperboard container manufacturing	0	5,439	8,306	31,106
Paper bag and coated and treated paper manufacturing	0	4,164	7,506	20,974
Stationery product manufacturing	0	318	451	1,258
Sanitary paper product manufacturing	0	3,817	11,641	33,224
All other converted paper product manufacturing	0	1,992	2,976	8,393
Printing	0	13,389	19,571	43,343
Support activities for printing	0	386	563	892
Petroleum refineries	0	354	5,065	18,631
Asphalt paving mixture and block manufacturing	0	218	514	2,385
Asphalt shingle and coating materials manufacturing	0	41	224	523
Petroleum lubricating oil and grease manufacturing	0	395	2,599	5,774

## APPENDIX

All other petroleum and coal products manufacturing	0	436	2,318	5,495
Petrochemical manufacturing	0	1,471	9,385	59,077
Industrial gas manufacturing	0	1,172	2,292	9,804
Synthetic dye and pigment manufacturing	0	1,061	1,932	6,926
Other basic inorganic chemical manufacturing	0	1,825	3,297	11,850
Other basic organic chemical manufacturing	0	2,831	4,913	32,189
Plastics material and resin manufacturing	0	3,819	5,802	44,483
Synthetic rubber manufacturing	0	109	156	1,138
Artificial and synthetic fibers and filaments manufacturing	0	5,623	7,950	48,346
Nitrogenous fertilizer manufacturing	0	155	296	1,048
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	75	110	430
Pesticide and other agricultural chemical manufacturing	0	594	1,509	7,887
Medicinal and botanical manufacturing	0	27	38	112
Pharmaceutical preparation manufacturing	0	2,954	9,399	39,134
In-vitro diagnostic substance manufacturing	0	2	3	8
Biological product (except diagnostic) manufacturing	0	41	80	280
Paint and coating manufacturing	0	2,264	3,598	14,303
Adhesive manufacturing	0	390	557	2,592
Soap and other detergent manufacturing	0	1,592	4,079	16,484
Polish and other sanitation good manufacturing	0	1,338	2,210	9,424
Surface active agent manufacturing	0	1,142	2,916	7,859
Toilet preparation manufacturing	0	92	175	816
Printing ink manufacturing	0	346	369	1,400
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	376	582	2,197
Photographic film and chemical manufacturing	0	3,079	5,651	19,363
Other miscellaneous chemical product manufacturing	0	2,079	2,821	11,060

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	3,026	5,564	18,038
Unlaminated plastics profile shape manufacturing	0	1,911	4,848	11,449
Plastics pipe and pipe fitting manufacturing	0	119	308	773
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,775	3,655	10,579
Polystyrene foam product manufacturing	0	498	921	3,168
Urethane and other foam product (except polystyrene) manufacturing	0	341	612	2,086
Plastics bottle manufacturing	0	181	334	1,279
Other plastics product manufacturing	0	7,041	11,380	34,658
Tire manufacturing	0	13,714	20,845	77,043
Rubber and plastics hoses and belting manufacturing	0	3,512	6,263	16,491
Other rubber product manufacturing	0	1,838	3,000	9,987
Pottery, ceramics, and plumbing fixture manufacturing	0	235	338	660
Brick, tile, and other structural clay product manufacturing	0	520	1,119	2,596
Flat glass manufacturing	0	135	340	723
Other pressed and blown glass and glassware manufacturing	0	1,823	3,048	6,196
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	245	486	1,090
Cement manufacturing	0	493	1,480	3,561
Ready-mix concrete manufacturing	0	2,177	4,349	13,936
Concrete block and brick manufacturing	0	527	1,176	2,903
Concrete pipe manufacturing	0	97	188	478
Other concrete product manufacturing	0	1,065	1,771	3,803
Lime manufacturing	0	15	46	106
Gypsum product manufacturing	0	140	471	1,162
Abrasive product manufacturing	0	1,574	6,291	10,345
Cut stone and stone product manufacturing	0	279	353	890



## APPENDIX

Ground or treated mineral and earth manufacturing	0	116	444	1,075
Mineral wool manufacturing	0	5	14	50
Miscellaneous nonmetallic mineral products manufacturing	0	128	400	779
Iron and steel mills and ferroalloy manufacturing	0	4,073	7,970	28,949
Iron, steel pipe and tube manufacturing from purchased steel	0	44	78	293
Rolled steel shape manufacturing	0	614	1,588	5,322
Steel wire drawing	0	130	237	881
Alumina refining and primary aluminum production	0	585	1,440	6,626
Secondary smelting and alloying of aluminum	0	122	236	1,502
Aluminum sheet, plate, and foil manufacturing	0	419	944	2,766
Other aluminum rolling, drawing and extruding	0	94	150	586
Nonferrous metal (exc aluminum) smelting and refining	0	34	198	440
Copper rolling, drawing, extruding and alloying	0	538	857	5,373
Nonferrous metal, except copper and aluminum, shaping	0	425	614	2,008
Secondary processing of other nonferrous metals	0	18	90	340
Ferrous metal foundries	0	107	246	610
Nonferrous metal foundries	0	763	1,324	2,953
Custom roll forming	0	41	70	323
Crown and closure manufacturing and metal stamping	0	638	990	2,812
Iron and steel forging	0	1,051	1,544	4,799
Nonferrous forging	0	115	152	462
Cutlery, utensil, pot, and pan manufacturing	0	126	429	1,037
Handtool manufacturing	0	1,193	2,133	3,971
Prefabricated metal buildings and components manufacturing	0	211	319	784
Fabricated structural metal manufacturing	0	1,337	2,145	5,944
Plate work manufacturing	0	628	660	1,869
Metal window and door manufacturing	0	135	226	651

## APPENDIX

Sheet metal work manufacturing	0	700	959	2,632
Ornamental and architectural metal work manufacturing	0	181	253	688
Power boiler and heat exchanger manufacturing	0	35	52	129
Metal tank (heavy gauge) manufacturing	0	79	102	287
Metal cans manufacturing	0	186	475	1,781
Metal barrels, drums and pails manufacturing	0	87	114	416
Hardware manufacturing	0	398	725	2,033
Spring and wire product manufacturing	0	487	711	1,907
Machine shops	0	4,809	5,756	11,865
Turned product and screw, nut, and bolt manufacturing	0	650	967	2,415
Metal heat treating	0	1,090	1,834	3,711
Metal coating and nonprecious engraving	0	1,750	3,396	6,960
Electroplating, anodizing, and coloring metal	0	1,555	1,789	3,814
Valve and fittings, other than plumbing, manufacturing	0	11,358	20,376	55,836
Plumbing fixture fitting and trim manufacturing	0	263	949	2,545
Ball and roller bearing manufacturing	0	9,182	18,944	42,574
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	1	1	2
Small arms, ordnance, and accessories manufacturing	0	423	1,210	2,480
Fabricated pipe and pipe fitting manufacturing	0	286	346	844
Other fabricated metal manufacturing	0	1,203	1,695	4,479
Farm machinery and equipment manufacturing	0	23	40	212
Lawn and garden equipment manufacturing	0	668	1,485	6,842
Construction machinery manufacturing	0	43	107	299
Mining machinery and equipment manufacturing	0	4	5	17

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	6	7	13
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	1	1	4
Sawmill, woodworking, and paper machinery	0	37	42	124
Printing machinery and equipment manufacturing	0	2	3	8
All other industrial machinery manufacturing	0	39	55	147
Optical instrument and lens manufacturing	0	0	1	3
Photographic and photocopying equipment manufacturing	0	22	38	138
Other commercial service industry machinery manufacturing	0	215	500	1,374
Air purification and ventilation equipment manufacturing	0	68	116	349
Heating equipment (except warm air furnaces) manufacturing	0	267	467	1,322
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	3,439	8,176	21,387
Industrial mold manufacturing	0	50	61	119
Special tool, die, jig, and fixture manufacturing	0	43	61	112
Cutting tool and machine tool accessory manufacturing	0	788	903	2,035
Machine tool manufacturing	0	105	125	343
Rolling mill and other metalworking machinery manufacturing	0	14	19	38
Turbine and turbine generator set units manufacturing	0	282	430	1,208
Speed changer, industrial high-speed drive, and gear manufacturing	0	15,767	26,721	62,412
Mechanical power transmission equipment manufacturing	0	88	153	356
Other engine equipment manufacturing	0	1,485	3,774	12,314
Pump and pumping equipment manufacturing	0	88	191	458

## APPENDIX

Air and gas compressor manufacturing	0	1,969	4,181	17,803
Elevator and moving stairway manufacturing	0	29	54	156
Conveyor and conveying equipment manufacturing	0	13	14	38
Overhead cranes, hoists, and monorail systems manufacturing	0	1	3	9
Industrial truck, trailer, and stacker manufacturing	0	71	130	380
Power-driven handtool manufacturing	0	257	835	1,674
Welding and soldering equipment manufacturing	0	1,659	2,469	5,607
Packaging machinery manufacturing	0	51	90	197
Industrial process furnace and oven manufacturing	0	4	6	17
Fluid power cylinder and actuator manufacturing	0	188	298	747
Fluid power pump and motor manufacturing	0	835	1,515	4,376
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	315	458	1,313
Electronic computer manufacturing	0	26	133	341
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	6,812	24,736	35,604
Telephone apparatus manufacturing	0	1	3	10
Broadcast and wireless communications equipment manufacturing	0	9	22	42
Other communications equipment manufacturing	0	93	280	603
Audio and video equipment manufacturing	0	13	49	166
Printed circuit assembly (electronic assembly) manufacturing	0	72	204	524
Bare printed circuit board manufacturing	0	1	2	7

## APPENDIX

Semiconductor and related device manufacturing	0	31	111	293
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,114	2,483	3,724
Electronic connector manufacturing	0	79	206	429
Other electronic component manufacturing	0	258	369	1,211
Electromedical and electrotherapeutic apparatus manufacturing	0	49	234	389
Search, detection, and navigation instruments manufacturing	0	1,725	5,620	9,366
Automatic environmental control manufacturing	0	546	1,082	2,101
Industrial process variable instruments manufacturing	0	68	171	348
Totalizing fluid meter and counting device manufacturing	0	289	1,389	2,235
Electricity and signal testing instruments manufacturing	0	107	277	1,081
Analytical laboratory instrument manufacturing	0	12,827	48,403	124,537
Irradiation apparatus manufacturing	0	1	6	8
Watch, clock, and other measuring and controlling device manufacturing	0	1	5	11
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	8	19	31
Electric lamp bulb and part manufacturing	0	116	297	504
Lighting fixture manufacturing	0	282	624	1,361
Small electrical appliance manufacturing	0	12	46	119
Household cooking appliance manufacturing	0	670	2,769	4,818
Household refrigerator and home freezer manufacturing	0	714	3,786	6,038
Household laundry equipment manufacturing	0	1,371	4,920	11,700

## APPENDIX

Other major household appliance manufacturing	0	243	1,166	1,851
Power, distribution, and specialty transformer manufacturing	0	40	86	214
Motor and generator manufacturing	0	824	1,893	4,558
Switchgear and switchboard apparatus manufacturing	0	524	1,317	2,910
Relay and industrial control manufacturing	0	2,051	3,641	8,029
Storage battery manufacturing	0	789	1,859	4,169
Primary battery manufacturing	0	1,186	7,184	11,596
Fiber optic cable manufacturing	0	319	738	2,196
Other communication and energy wire manufacturing	0	491	1,347	3,469
Wiring device manufacturing	0	693	2,320	4,290
Carbon and graphite product manufacturing	0	610	1,225	2,866
All other miscellaneous electrical equipment and component manufacturing	0	7,907	10,546	29,692
Automobile manufacturing	0	3,364	10,087	62,074
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	15	29	143
Motor vehicle body manufacturing	0	127	148	455
Truck trailer manufacturing	0	3	3	11
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	6,705	7,078	17,544
Motor vehicle gasoline engine and engine parts manufacturing	0	2,982	3,912	17,743
Motor vehicle electrical and electronic equipment manufacturing	0	3,865	4,710	21,406
Motor vehicle transmission and power train parts manufacturing	0	6,523	9,183	47,972
Motor vehicle seating and interior trim manufacturing	0	711	865	5,382
Motor vehicle metal stamping	0	4,564	5,612	19,395
Other motor vehicle parts manufacturing	0	6,357	8,500	39,361
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	4,351	6,055	24,090

## APPENDIX

Aircraft manufacturing	0	44	60	217
Aircraft engine and engine parts manufacturing	0	289	449	1,327
Other aircraft parts and auxiliary equipment manufacturing	0	12,316	15,637	41,869
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	57	67	371
Ship building and repairing	0	194	213	541
Boat building	0	3,788	4,525	16,960
Motorcycle, bicycle, and parts manufacturing	0	12	17	90
Military armored vehicle, tank, and tank component manufacturing	0	575	773	4,696
All other transportation equipment manufacturing	0	1,487	2,148	9,284
Wood kitchen cabinet and countertop manufacturing	0	612	1,874	3,282
Upholstered household furniture manufacturing	0	23	58	140
Nonupholstered wood household furniture manufacturing	0	47	83	220
Other household nonupholstered furniture manufacturing	0	151	498	875
Institutional furniture manufacturing	0	1	2	8
Wood office furniture manufacturing	0	1	2	4
Custom architectural woodwork and millwork	0	10	10	36
Office furniture, except wood, manufacturing	0	6	29	58
Showcase, partition, shelving, and locker manufacturing	0	106	315	572
Mattress manufacturing	0	187	1,219	2,075
Blind and shade manufacturing	0	15	18	75
Surgical and medical instrument manufacturing	0	431	845	2,168
Surgical appliance and supplies manufacturing	0	535	1,049	2,671

## APPENDIX

Dental equipment and supplies manufacturing	0	17	29	51
Ophthalmic goods manufacturing	0	15	30	74
Dental laboratories	0	136	131	244
Jewelry and silverware manufacturing	0	187	307	837
Sporting and athletic goods manufacturing	0	453	624	1,700
Doll, toy, and game manufacturing	0	121	189	649
Office supplies (except paper) manufacturing	0	108	143	430
Sign manufacturing	0	2,026	1,691	4,087
Gasket, packing, and sealing device manufacturing	0	732	922	2,359
Musical instrument manufacturing	0	70	71	148
Fasteners, buttons, needles, and pins manufacturing	0	36	45	113
Broom, brush, and mop manufacturing	0	381	571	1,783
Burial casket manufacturing	0	52	63	165
All other miscellaneous manufacturing	0	2,668	3,178	7,405
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	4,911	13,682	28,934
Wholesale - Professional and commercial equipment and supplies	0	27,289	54,546	93,290
Wholesale - Household appliances and electrical and electronic goods	0	11,589	33,101	66,029
Wholesale - Machinery, equipment, and supplies	0	32,915	68,473	116,032
Wholesale - Other durable goods merchant wholesalers	0	30,141	56,156	107,636
Wholesale - Drugs and druggists' sundries	0	11,880	42,091	87,701
Wholesale - Grocery and related product wholesalers	0	23,985	36,275	69,146
Wholesale - Petroleum and petroleum products	0	3,174	75,256	83,856
Wholesale - Other nondurable goods merchant wholesalers	1	34,668	86,961	157,415
Wholesale - Wholesale electronic markets and agents and brokers	0	43,413	24,872	28,428
Retail - Motor vehicle and parts dealers	1	36,615	56,747	84,261



## APPENDIX

Retail - Furniture and home furnishings stores	0	16,357	21,901	38,790
Retail - Electronics and appliance stores	0	20,768	22,141	36,820
Retail - Building material and garden equipment and supplies stores	1	25,967	48,091	70,901
Retail - Food and beverage stores	2	58,372	83,966	145,989
Retail - Health and personal care stores	1	42,059	51,742	81,348
Retail - Gasoline stores	1	17,592	32,937	67,193
Retail - Clothing and clothing accessories stores	1	29,144	45,129	95,327
Retail - Sporting goods, hobby, musical instrument and book stores	1	15,004	19,587	34,043
Retail - General merchandise stores	2	65,231	92,834	155,632
Retail - Miscellaneous store retailers	1	25,773	31,354	55,559
Retail - Nonstore retailers	1	23,426	76,273	152,730
Air transportation	0	7,940	17,647	27,544
Rail transportation	0	5,002	9,535	19,104
Water transportation	0	2,980	6,242	24,641
Truck transportation	1	60,539	73,535	165,113
Transit and ground passenger transportation	1	8,882	10,590	19,687
Pipeline transportation	0	828	2,806	3,509
Scenic and sightseeing transportation and support activities for transportation	1	50,949	58,741	135,576
Couriers and messengers	1	20,469	28,311	52,992
Warehousing and storage	1	46,008	52,176	109,865
Newspaper publishers	0	8,697	13,134	18,363
Periodical publishers	0	2,997	4,192	7,709
Book publishers	0	3,690	10,406	19,267
Directory, mailing list, and other publishers	0	1,097	2,928	5,084
Greeting card publishing	0	0	0	0
Software publishers	0	20,480	45,672	59,681
Motion picture and video industries	0	4,322	7,423	27,375
Sound recording industries	0	920	4,592	7,025
Radio and television broadcasting	0	78,649	70,938	124,252

## APPENDIX

Cable and other subscription programming	0	3,594	5,018	12,072
Wired telecommunications carriers	0	30,986	64,173	154,734
Wireless telecommunications carriers (except satellite)	0	12,506	50,913	169,882
Satellite, telecommunications resellers, and all other telecommunications	0	5,101	6,045	18,464
Data processing, hosting, and related services	0	21,576	44,774	110,577
News syndicates, libraries, archives and all other information services	0	3,252	5,626	9,891
Internet publishing and broadcasting and web search portals	0	8,145	23,032	68,994
Nondepository credit intermediation and related activities	1	92,136	107,101	176,306
Securities and commodity contracts intermediation and brokerage	0	42,764	44,490	105,541
Monetary authorities and depository credit intermediation	2	133,663	197,950	468,162
Other financial investment activities	1	26,869	33,861	137,184
Direct life insurance carriers	0	20,649	42,043	66,454
Insurance carriers, except direct life	1	62,603	210,739	471,810
Insurance agencies, brokerages, and related activities	1	72,127	111,368	299,039
Funds, trusts, and other financial vehicles	0	9,997	16,526	107,011
Other real estate	11	238,666	672,102	1,926,604
Tenant-occupied housing	1	14,176	211,467	237,228
Owner-occupied dwellings	0	0	734,720	928,310
Automotive equipment rental and leasing	0	7,391	32,772	47,047
General and consumer goods rental except video tapes and discs	0	12,573	17,804	29,201
Video tape and disc rental	0	2,748	4,999	8,226
Commercial and industrial machinery and equipment rental and leasing	0	12,314	38,816	55,720
Lessors of nonfinancial intangible assets	0	830	29,409	38,386

## APPENDIX

Legal services	3	238,986	371,656	570,172
Accounting, tax preparation, bookkeeping, and payroll services	1	90,142	122,001	177,799
Architectural, engineering, and related services	1	108,374	132,726	235,438
Specialized design services	0	11,072	11,687	14,759
Custom computer programming services	0	23,663	26,406	39,965
Computer systems design services	0	26,200	27,159	37,261
Other computer related services, including facilities management	0	16,088	21,018	44,014
Management consulting services	3	246,183	245,046	389,460
Environmental and other technical consulting services	0	28,534	25,562	37,962
Scientific research and development services	37	2,688,146	3,989,753	8,664,452
Advertising, public relations, and related services	1	45,251	66,181	125,401
Photographic services	0	10,468	7,500	11,297
Veterinary services	0	9,130	13,801	21,469
Marketing research and all other miscellaneous professional, scientific, and technical services	2	141,794	128,245	179,894
Management of companies and enterprises	3	255,560	300,914	490,779
Office administrative services	1	56,221	15,945	54,955
Facilities support services	0	14,012	18,391	48,753
Employment services	7	235,688	359,786	598,740
Business support services	1	54,380	45,431	83,655
Travel arrangement and reservation services	0	10,623	14,148	37,173
Investigation and security services	1	32,629	33,495	49,621
Services to buildings	3	67,108	70,498	126,157
Landscape and horticultural services	1	37,228	39,706	73,105
Other support services	0	11,826	14,955	32,248
Waste management and remediation services	0	27,417	48,564	78,671
Elementary and secondary schools	1	21,638	18,746	23,990
Junior colleges, colleges, universities, and professional schools	1	20,347	27,409	41,993
Other educational services	1	16,457	15,235	33,927
Offices of physicians	2	224,250	267,163	391,156
Offices of dentists	1	47,967	61,112	92,192

## APPENDIX

Offices of other health practitioners	1	45,155	42,481	61,855
Outpatient care centers	0	24,033	25,545	49,135
Medical and diagnostic laboratories	0	12,180	18,648	30,871
Home health care services	1	55,231	41,215	58,556
Other ambulatory health care services	0	12,755	14,225	25,731
Hospitals	2	171,199	208,726	411,394
Nursing and community care facilities	1	51,253	62,327	108,912
Residential mental retardation, mental health, substance abuse and other facilities	0	15,484	17,134	27,616
Individual and family services	2	36,473	33,613	53,268
Child day care services	1	21,750	26,061	37,547
Community food, housing, and other relief services, including rehabilitation services	0	10,328	11,633	27,985
Performing arts companies	0	4,644	7,369	16,666
Commercial Sports Except Racing	0	4,699	5,429	16,355
Racing and Track Operation	0	809	1,280	2,857
Independent artists, writers, and performers	1	12,253	14,409	19,803
Promoters of performing arts and sports and agents for public figures	0	5,087	11,082	30,635
Museums, historical sites, zoos, and parks	0	2,223	2,634	5,428
Amusement parks and arcades	0	1,115	3,157	4,410
Gambling industries (except casino hotels)	0	11,074	29,881	46,396
Other amusement and recreation industries	1	11,581	14,181	26,828
Fitness and recreational sports centers	0	6,067	10,309	18,830
Bowling centers	0	1,157	1,868	3,266
Hotels and motels, including casino hotels	0	13,610	28,290	42,866
Other accommodations	0	3,617	4,675	6,250
Full-service restaurants	5	113,812	166,307	310,244
Limited-service restaurants	4	76,466	120,776	289,929
All other food and drinking places	3	71,634	101,891	156,217
Automotive repair and maintenance, except car washes	1	52,614	65,469	101,115
Car washes	1	26,499	41,301	64,070

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Electronic and precision equipment repair and maintenance	0	26,266	39,475	69,683
Commercial and industrial machinery and equipment repair and maintenance	27	1,765,379	2,036,978	3,350,320
Personal and household goods repair and maintenance	1	21,415	15,496	23,377
Personal care services	1	31,076	27,219	36,055
Death care services	0	3,214	4,151	7,173
Dry-cleaning and laundry services	0	8,024	8,814	13,223
Other personal services	1	28,378	26,080	35,846
Religious organizations	1	50,034	29,086	103,238
Grantmaking, giving, and social advocacy organizations	0	10,293	32,645	56,574
Business and professional associations	0	13,474	21,134	45,072
Labor and civic organizations	0	10,961	27,996	50,258
Private households	1	9,880	9,880	9,880
Postal service	0	37,427	37,455	41,547
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	1,523	986	8,138
State government passenger transit	0	312	72	914
State government electric utilities	1	94,247	142,893	430,487
Other state government enterprises	0	1,765	2,328	3,664
Local government passenger transit	0	3,771	490	4,817
Local government electric utilities	0	1,867	6,308	11,997
Other local government enterprises	0	33,614	85,362	157,301
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	18	2,477,888	3,374,245	5,366,269

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 452: Detailed M2M Program Impacts by Types of Impact, South Carolina.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>11</i>	<i>821,740</i>	<i>1,270,174</i>	<i>2,763,408</i>
Oilseed farming	0	2	130	409
Grain farming	0	17	194	854
Vegetable and melon farming	0	73	226	787
Fruit farming	0	101	387	1,052
Tree nut farming	0	19	22	65
Greenhouse, nursery, and floriculture production	0	41	85	298
Tobacco farming	0	24	47	149
Cotton farming	0	6	14	46
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	51	98	363
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2	60	273
Dairy cattle and milk production	0	5	27	224
Poultry and egg production	0	30	66	1,231
Animal production, except cattle and poultry and eggs	0	8	127	307
Forestry, forest products, and timber tract production	0	23	25	33
Commercial logging	0	111	114	191
Commercial fishing	0	(15)	66	74
Commercial hunting and trapping	0	13	73	70
Support activities for agriculture and forestry	0	585	573	682
Oil and gas extraction	0	0	1	1,438
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	48	84	151

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	94	117	200
Sand and gravel mining	0	42	34	52
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	4	5	7
Other nonmetallic minerals	0	290	227	422
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	1
Metal mining services	0	0	0	42
Other nonmetallic minerals services	0	0	0	3
Electric power generation - Hydroelectric	0	51	169	275
Electric power generation - Fossil fuel	0	572	2,439	6,495
Electric power generation - Nuclear	0	1,031	2,654	5,704
Electric power generation - Solar	0	10	40	126
Electric power generation - Wind	0	0	0	0
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	2	7	85
Electric power transmission and distribution	0	1,049	4,548	12,027
Natural gas distribution	0	150	492	941
Water, sewage and other systems	0	170	369	630
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	1,548	2,289	5,437
Maintenance and repair construction of residential structures	0	967	1,598	3,758
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	3	3	6
Dog and cat food manufacturing	0	57	263	959
Other animal food manufacturing	0	39	79	533
Flour milling	0	29	64	430
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	13	38	271
Soybean and other oilseed processing	0	2	5	64
Fats and oils refining and blending	0	1	2	18
Breakfast cereal manufacturing	0	39	91	340
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	13	15	44
Chocolate and confectionery manufacturing from cacao beans	0	4	7	33
Confectionery manufacturing from purchased chocolate	0	8	8	19
Frozen fruits, juices and vegetables manufacturing	0	22	23	49
Frozen specialties manufacturing	0	179	283	1,208
Canned fruits and vegetables manufacturing	0	58	101	400



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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	2	3	28
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	79	135	823
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	2	3	7
Frozen cakes and other pastries manufacturing	0	81	115	221
Poultry processing	0	465	688	3,189
Animal, except poultry, slaughtering	0	117	169	1,220
Meat processed from carcasses	0	220	251	1,943
Rendering and meat byproduct processing	0	15	14	67
Seafood product preparation and packaging	0	55	56	89
Bread and bakery product, except frozen, manufacturing	0	420	524	1,129
Cookie and cracker manufacturing	0	40	51	136
Dry pasta, mixes, and dough manufacturing	0	36	87	353
Tortilla manufacturing	0	11	12	21
Roasted nuts and peanut butter manufacturing	0	30	39	154
Other snack food manufacturing	0	35	43	175
Coffee and tea manufacturing	0	23	38	174
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	17	32	143
Spice and extract manufacturing	0	27	42	171
All other food manufacturing	0	113	137	453
Bottled and canned soft drinks & water	0	129	313	1,415
Manufactured ice	0	9	5	22
Breweries	0	36	135	421
Wineries	0	3	5	24
Distilleries	0	15	147	275
Tobacco product manufacturing	0	16	970	1,433
Fiber, yarn, and thread mills	0	115	202	692
Broadwoven fabric mills	0	286	488	1,444

## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	39	46	128
Nonwoven fabric mills	0	251	510	1,337
Knit fabric mills	0	24	35	96
Textile and fabric finishing mills	0	88	118	385
Fabric coating mills	0	15	21	94
Carpet and rug mills	0	84	165	458
Curtain and linen mills	0	21	31	88
Textile bag and canvas mills	0	20	24	63
Rope, cordage, twine, tire cord and tire fabric mills	0	7	13	32
Other textile product mills	0	60	75	171
Hosiery and sock mills	0	2	4	6
Other apparel knitting mills	0	1	2	7
Cut and sew apparel contractors	0	13	16	28
Mens and boys cut and sew apparel manufacturing	0	3	10	20
Womens and girls cut and sew apparel manufacturing	0	4	23	52
Other cut and sew apparel manufacturing	0	7	25	44
Apparel accessories and other apparel manufacturing	0	5	17	29
Leather and hide tanning and finishing	0	0	2	4
Footwear manufacturing	0	2	4	6
Other leather and allied product manufacturing	0	1	2	5
Sawmills	0	92	154	433
Wood preservation	0	11	44	119
Veneer and plywood manufacturing	0	49	84	244
Engineered wood member and truss manufacturing	0	10	16	44
Reconstituted wood product manufacturing	0	32	100	266
Wood windows and door manufacturing	0	54	84	210
Cut stock, resawing lumber, and planing	0	7	14	39
Other millwork, including flooring	0	23	39	108
Wood container and pallet manufacturing	0	47	62	197
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	12	15	41
All other miscellaneous wood product manufacturing	0	43	62	156
Pulp mills	0	1	1	2
Paper mills	0	257	540	1,779
Paperboard mills	0	184	427	1,575
Paperboard container manufacturing	0	684	1,003	3,743
Paper bag and coated and treated paper manufacturing	0	244	401	1,158
Stationery product manufacturing	0	19	25	64
Sanitary paper product manufacturing	0	217	596	1,792
All other converted paper product manufacturing	0	117	166	469
Printing	0	639	932	1,984
Support activities for printing	0	20	29	45
Petroleum refineries	0	27	350	1,311
Asphalt paving mixture and block manufacturing	0	10	24	101
Asphalt shingle and coating materials manufacturing	0	2	9	21
Petroleum lubricating oil and grease manufacturing	0	46	278	626
All other petroleum and coal products manufacturing	0	58	292	694
Petrochemical manufacturing	0	79	500	3,159
Industrial gas manufacturing	0	442	919	3,779
Synthetic dye and pigment manufacturing	0	144	270	1,047
Other basic inorganic chemical manufacturing	0	78	150	524
Other basic organic chemical manufacturing	0	138	241	1,634
Plastics material and resin manufacturing	0	795	1,234	9,823
Synthetic rubber manufacturing	0	5	7	56
Artificial and synthetic fibers and filaments manufacturing	0	542	744	4,537
Nitrogenous fertilizer manufacturing	0	19	39	126
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	4	6	23

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	32	84	434
Medicinal and botanical manufacturing	0	3	4	11
Pharmaceutical preparation manufacturing	0	331	1,113	4,175
In-vitro diagnostic substance manufacturing	0	0	0	1
Biological product (except diagnostic) manufacturing	0	5	10	32
Paint and coating manufacturing	0	267	457	1,743
Adhesive manufacturing	0	29	44	190
Soap and other detergent manufacturing	0	79	246	834
Polish and other sanitation good manufacturing	0	72	137	485
Surface active agent manufacturing	0	37	108	264
Toilet preparation manufacturing	0	8	17	71
Printing ink manufacturing	0	28	30	113
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	57	104	415
Photographic film and chemical manufacturing	0	66	130	412
Other miscellaneous chemical product manufacturing	0	88	127	501
Plastics packaging materials and unlaminated film and sheet manufacturing	0	519	945	3,000
Unlaminated plastics profile shape manufacturing	0	76	189	439
Plastics pipe and pipe fitting manufacturing	0	8	20	50
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	70	144	414
Polystyrene foam product manufacturing	0	36	65	221
Urethane and other foam product (except polystyrene) manufacturing	0	23	40	137
Plastics bottle manufacturing	0	15	27	103
Other plastics product manufacturing	0	2,067	3,328	9,586
Tire manufacturing	0	313	479	1,888

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Rubber and plastics hoses and belting manufacturing	0	53	93	241
Other rubber product manufacturing	0	70	113	386
Pottery, ceramics, and plumbing fixture manufacturing	0	14	19	39
Brick, tile, and other structural clay product manufacturing	0	18	37	89
Flat glass manufacturing	0	5	11	25
Other pressed and blown glass and glassware manufacturing	0	53	87	179
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	10	19	43
Cement manufacturing	0	15	42	103
Ready-mix concrete manufacturing	0	62	120	381
Concrete block and brick manufacturing	0	18	38	96
Concrete pipe manufacturing	0	4	7	18
Other concrete product manufacturing	0	40	66	142
Lime manufacturing	0	1	2	6
Gypsum product manufacturing	0	6	21	51
Abrasive product manufacturing	0	196	740	1,244
Cut stone and stone product manufacturing	0	12	15	38
Ground or treated mineral and earth manufacturing	0	12	44	110
Mineral wool manufacturing	0	0	0	2
Miscellaneous nonmetallic mineral products manufacturing	0	8	23	45
Iron and steel mills and ferroalloy manufacturing	0	1,643	2,691	10,103
Iron, steel pipe and tube manufacturing from purchased steel	0	22	34	128
Rolled steel shape manufacturing	0	227	533	1,984
Steel wire drawing	0	104	111	536
Alumina refining and primary aluminum production	0	479	1,061	4,620
Secondary smelting and alloying of aluminum	0	75	116	782
Aluminum sheet, plate, and foil manufacturing	0	2,034	3,888	13,092

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Other aluminum rolling, drawing and extruding	0	364	486	2,076
Nonferrous metal (exc aluminum) smelting and refining	0	3	13	31
Copper rolling, drawing, extruding and alloying	0	94	140	849
Nonferrous metal, except copper and aluminum, shaping	0	68	89	318
Secondary processing of other nonferrous metals	0	4	10	52
Ferrous metal foundries	0	127	227	640
Nonferrous metal foundries	0	268	411	950
Custom roll forming	0	31	52	215
Crown and closure manufacturing and metal stamping	0	115	180	499
Iron and steel forging	0	989	1,460	4,347
Nonferrous forging	0	113	151	431
Cutlery, utensil, pot, and pan manufacturing	0	14	50	114
Handtool manufacturing	0	149	267	499
Prefabricated metal buildings and components manufacturing	0	10	15	35
Fabricated structural metal manufacturing	0	1,178	1,901	5,160
Plate work manufacturing	0	81	85	233
Metal window and door manufacturing	0	7	12	35
Sheet metal work manufacturing	0	23	31	83
Ornamental and architectural metal work manufacturing	0	13	18	47
Power boiler and heat exchanger manufacturing	0	5	8	21
Metal tank (heavy gauge) manufacturing	0	26	33	92
Metal cans manufacturing	0	44	115	420
Metal barrels, drums and pails manufacturing	0	39	51	171
Hardware manufacturing	0	314	575	1,565
Spring and wire product manufacturing	0	1,753	2,530	6,647
Machine shops	0	861	1,036	2,084
Turned product and screw, nut, and bolt manufacturing	0	609	906	2,161
Metal heat treating	0	93	157	318

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Metal coating and nonprecious engraving	0	430	836	1,716
Electroplating, anodizing, and coloring metal	0	168	194	405
Valve and fittings, other than plumbing, manufacturing	0	830	1,481	4,037
Plumbing fixture fitting and trim manufacturing	0	12	46	118
Ball and roller bearing manufacturing	0	3,157	6,500	14,041
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	39	110	210
Fabricated pipe and pipe fitting manufacturing	0	510	619	1,503
Other fabricated metal manufacturing	0	112	158	398
Farm machinery and equipment manufacturing	0	0	1	3
Lawn and garden equipment manufacturing	0	21	45	191
Construction machinery manufacturing	0	4	9	25
Mining machinery and equipment manufacturing	0	0	0	1
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	1	2	4
Printing machinery and equipment manufacturing	0	0	0	1
All other industrial machinery manufacturing	0	4	6	15
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	2	4	14

## APPENDIX

Other commercial service industry machinery manufacturing	0	5	12	33
Air purification and ventilation equipment manufacturing	0	2	4	12
Heating equipment (except warm air furnaces) manufacturing	0	15	28	69
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	31	72	189
Industrial mold manufacturing	0	10	12	22
Special tool, die, jig, and fixture manufacturing	0	28	41	72
Cutting tool and machine tool accessory manufacturing	0	110	127	283
Machine tool manufacturing	0	20	24	62
Rolling mill and other metalworking machinery manufacturing	0	2	3	6
Turbine and turbine generator set units manufacturing	0	38	60	140
Speed changer, industrial high-speed drive, and gear manufacturing	0	37	64	136
Mechanical power transmission equipment manufacturing	0	2	3	7
Other engine equipment manufacturing	0	67	155	519
Pump and pumping equipment manufacturing	0	1	3	6
Air and gas compressor manufacturing	0	0	0	1
Elevator and moving stairway manufacturing	0	3	6	15
Conveyor and conveying equipment manufacturing	0	1	1	3
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	1
Industrial truck, trailer, and stacker manufacturing	0	5	9	26
Power-driven handtool manufacturing	0	175	589	1,024
Welding and soldering equipment manufacturing	0	2	3	7
Packaging machinery manufacturing	0	10	19	39



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Industrial process furnace and oven manufacturing	0	1	1	2
Fluid power cylinder and actuator manufacturing	0	30	48	125
Fluid power pump and motor manufacturing	0	728	1,447	3,565
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	25	38	101
Electronic computer manufacturing	0	3	15	37
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	6	23	36
Telephone apparatus manufacturing	0	0	0	1
Broadcast and wireless communications equipment manufacturing	0	7	16	30
Other communications equipment manufacturing	0	5	14	32
Audio and video equipment manufacturing	0	2	7	21
Printed circuit assembly (electronic assembly) manufacturing	0	9	25	63
Bare printed circuit board manufacturing	0	0	0	1
Semiconductor and related device manufacturing	0	7	26	65
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	55	120	175
Electronic connector manufacturing	0	20	53	113
Other electronic component manufacturing	0	10	15	46
Electromedical and electrotherapeutic apparatus manufacturing	0	6	29	47
Search, detection, and navigation instruments manufacturing	0	1	3	6
Automatic environmental control manufacturing	0	18	34	62

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Industrial process variable instruments manufacturing	0	13	32	65
Totalizing fluid meter and counting device manufacturing	0	29	139	223
Electricity and signal testing instruments manufacturing	0	0	0	1
Analytical laboratory instrument manufacturing	0	0	0	1
Irradiation apparatus manufacturing	0	0	1	1
Watch, clock, and other measuring and controlling device manufacturing	0	0	1	2
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	1	1
Electric lamp bulb and part manufacturing	0	9	23	38
Lighting fixture manufacturing	0	15	31	68
Small electrical appliance manufacturing	0	1	4	9
Household cooking appliance manufacturing	0	44	189	331
Household refrigerator and home freezer manufacturing	0	47	264	441
Household laundry equipment manufacturing	0	97	362	857
Other major household appliance manufacturing	0	17	85	135
Power, distribution, and specialty transformer manufacturing	0	4	9	21
Motor and generator manufacturing	0	9	20	49
Switchgear and switchboard apparatus manufacturing	0	28	68	152
Relay and industrial control manufacturing	0	145	257	541
Storage battery manufacturing	0	53	119	270
Primary battery manufacturing	0	96	471	863
Fiber optic cable manufacturing	0	23	54	144
Other communication and energy wire manufacturing	0	260	697	1,711
Wiring device manufacturing	0	55	182	313

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Carbon and graphite product manufacturing	0	866	1,737	4,341
All other miscellaneous electrical equipment and component manufacturing	0	2	3	8
Automobile manufacturing	0	255	665	4,412
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	2	7
Motor vehicle body manufacturing	0	8	10	31
Truck trailer manufacturing	0	0	0	1
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	369	390	969
Motor vehicle gasoline engine and engine parts manufacturing	0	176	231	1,106
Motor vehicle electrical and electronic equipment manufacturing	0	137	164	691
Motor vehicle transmission and power train parts manufacturing	0	462	663	3,030
Motor vehicle seating and interior trim manufacturing	0	203	280	1,595
Motor vehicle metal stamping	0	176	219	740
Other motor vehicle parts manufacturing	0	580	706	3,698
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	286	430	1,598
Aircraft manufacturing	0	305	379	1,556
Aircraft engine and engine parts manufacturing	0	24,938	37,296	119,314
Other aircraft parts and auxiliary equipment manufacturing	2	209,362	281,158	709,056
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	4	4	23
Ship building and repairing	0	11	13	32
Boat building	0	207	248	911
Motorcycle, bicycle, and parts manufacturing	0	1	2	8

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Military armored vehicle, tank, and tank component manufacturing	0	10	14	71
All other transportation equipment manufacturing	0	100	150	639
Wood kitchen cabinet and countertop manufacturing	0	34	96	172
Upholstered household furniture manufacturing	0	2	6	15
Nonupholstered wood household furniture manufacturing	0	4	6	16
Other household nonupholstered furniture manufacturing	0	24	77	132
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	1
Office furniture, except wood, manufacturing	0	0	2	3
Showcase, partition, shelving, and locker manufacturing	0	6	18	33
Mattress manufacturing	0	19	102	197
Blind and shade manufacturing	0	1	1	4
Surgical and medical instrument manufacturing	0	30	58	140
Surgical appliance and supplies manufacturing	0	53	105	251
Dental equipment and supplies manufacturing	0	2	3	4
Ophthalmic goods manufacturing	0	1	2	6
Dental laboratories	0	12	12	22
Jewelry and silverware manufacturing	0	14	23	61
Sporting and athletic goods manufacturing	0	32	43	115
Doll, toy, and game manufacturing	0	10	15	47
Office supplies (except paper) manufacturing	0	9	12	34
Sign manufacturing	0	70	60	136
Gasket, packing, and sealing device manufacturing	0	37	45	114
Musical instrument manufacturing	0	5	5	9
Fasteners, buttons, needles, and pins manufacturing	0	3	4	9

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Broom, brush, and mop manufacturing	0	31	53	134
Burial casket manufacturing	0	2	3	7
All other miscellaneous manufacturing	0	94	113	275
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	312	869	1,838
Wholesale - Professional and commercial equipment and supplies	0	1,486	2,973	4,979
Wholesale - Household appliances and electrical and electronic goods	0	943	2,685	5,279
Wholesale - Machinery, equipment, and supplies	0	4,939	10,325	17,397
Wholesale - Other durable goods merchant wholesalers	0	4,248	7,922	15,041
Wholesale - Drugs and druggists' sundries	0	764	2,660	5,417
Wholesale - Grocery and related product wholesalers	0	1,525	2,287	4,360
Wholesale - Petroleum and petroleum products	0	198	5,267	5,778
Wholesale - Other nondurable goods merchant wholesalers	0	2,213	5,731	10,167
Wholesale - Wholesale electronic markets and agents and brokers	0	3,174	1,726	1,973
Retail - Motor vehicle and parts dealers	0	2,365	3,686	5,429
Retail - Furniture and home furnishings stores	0	1,063	1,423	2,478
Retail - Electronics and appliance stores	0	1,336	1,430	2,332
Retail - Building material and garden equipment and supplies stores	0	1,309	2,421	3,530
Retail - Food and beverage stores	0	4,087	5,817	9,874
Retail - Health and personal care stores	0	2,682	3,320	5,202
Retail - Gasoline stores	0	1,305	2,273	4,378
Retail - Clothing and clothing accessories stores	0	1,990	3,057	6,269
Retail - Sporting goods, hobby, musical instrument and book stores	0	954	1,249	2,130

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Retail - General merchandise stores	0	3,981	5,708	9,501
Retail - Miscellaneous store retailers	0	1,721	2,073	3,547
Retail - Nonstore retailers	0	1,628	5,362	10,226
Air transportation	0	439	1,001	1,539
Rail transportation	0	412	698	1,485
Water transportation	0	185	376	1,456
Truck transportation	0	5,644	6,700	14,628
Transit and ground passenger transportation	0	592	711	1,243
Pipeline transportation	0	38	141	180
Scenic and sightseeing transportation and support activities for transportation	0	1,533	1,788	4,124
Couriers and messengers	0	1,290	1,840	3,367
Warehousing and storage	0	3,235	3,663	7,644
Newspaper publishers	0	380	560	771
Periodical publishers	0	169	233	395
Book publishers	0	178	486	891
Directory, mailing list, and other publishers	0	39	106	185
Greeting card publishing	0	0	0	0
Software publishers	0	1,393	3,106	3,963
Motion picture and video industries	0	353	612	1,886
Sound recording industries	0	73	345	486
Radio and television broadcasting	0	4,852	4,759	5,771
Cable and other subscription programming	0	250	281	565
Wired telecommunications carriers	0	1,879	3,600	8,445
Wireless telecommunications carriers (except satellite)	0	1,017	3,368	10,928
Satellite, telecommunications resellers, and all other telecommunications	0	344	331	894
Data processing, hosting, and related services	0	1,641	3,197	7,528
News syndicates, libraries, archives and all other information services	0	194	336	558
Internet publishing and broadcasting and web search portals	0	498	1,355	3,557

## APPENDIX

Nondepository credit intermediation and related activities	0	6,113	7,208	11,175
Securities and commodity contracts intermediation and brokerage	0	2,914	2,980	6,617
Monetary authorities and depository credit intermediation	0	5,038	7,769	17,803
Other financial investment activities	0	2,296	2,814	9,094
Direct life insurance carriers	0	1,170	2,461	3,797
Insurance carriers, except direct life	0	3,142	10,833	23,419
Insurance agencies, brokerages, and related activities	0	3,896	6,056	15,767
Funds, trusts, and other financial vehicles	0	791	1,284	7,026
Other real estate	0	6,469	17,907	44,648
Tenant-occupied housing	0	1,108	15,588	17,235
Owner-occupied dwellings	0	0	53,271	67,307
Automotive equipment rental and leasing	0	531	1,942	2,671
General and consumer goods rental except video tapes and discs	0	816	1,083	1,659
Video tape and disc rental	0	189	331	532
Commercial and industrial machinery and equipment rental and leasing	0	767	2,079	2,893
Lessors of nonfinancial intangible assets	0	36	1,263	1,640
Legal services	0	4,777	7,681	11,532
Accounting, tax preparation, bookkeeping, and payroll services	0	2,974	4,029	5,746
Architectural, engineering, and related services	0	2,314	2,851	4,975
Specialized design services	0	1,288	1,365	1,684
Custom computer programming services	0	8,517	9,435	13,910
Computer systems design services	0	3,189	3,295	4,440
Other computer related services, including facilities management	0	1,085	1,365	2,731
Management consulting services	0	4,253	4,238	6,580
Environmental and other technical consulting services	0	865	782	1,144

## APPENDIX

Scientific research and development services	0	949	1,422	2,885
Advertising, public relations, and related services	0	1,787	2,598	4,713
Photographic services	0	515	385	550
Veterinary services	0	577	884	1,338
Marketing research and all other miscellaneous professional, scientific, and technical services	0	2,394	2,170	3,022
Management of companies and enterprises	0	11,438	13,590	21,479
Office administrative services	0	2,071	595	1,882
Facilities support services	0	566	744	1,856
Employment services	0	7,844	12,262	19,689
Business support services	0	3,799	3,238	5,771
Travel arrangement and reservation services	0	456	612	1,549
Investigation and security services	0	3,012	3,100	4,445
Services to buildings	0	2,680	2,822	4,816
Landscape and horticultural services	0	1,490	1,593	2,822
Other support services	0	1,372	1,739	3,723
Waste management and remediation services	0	1,464	2,609	4,169
Elementary and secondary schools	0	1,842	1,588	1,999
Junior colleges, colleges, universities, and professional schools	0	1,922	2,566	3,735
Other educational services	0	1,252	1,163	2,495
Offices of physicians	0	14,617	17,551	25,495
Offices of dentists	0	3,282	4,226	6,287
Offices of other health practitioners	0	2,952	2,799	4,067
Outpatient care centers	0	1,732	1,849	3,502
Medical and diagnostic laboratories	0	818	1,286	2,061
Home health care services	0	3,585	2,706	3,871
Other ambulatory health care services	0	866	972	1,730
Hospitals	0	12,461	15,129	29,099
Nursing and community care facilities	0	3,547	4,320	7,352
Residential mental retardation, mental health, substance abuse and other facilities	0	1,200	1,329	2,098



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Individual and family services	0	2,755	2,584	4,070
Child day care services	0	1,540	1,872	2,632
Community food, housing, and other relief services, including rehabilitation services	0	833	950	2,208
Performing arts companies	0	339	520	1,073
Commercial Sports Except Racing	0	263	302	895
Racing and Track Operation	0	65	97	209
Independent artists, writers, and performers	0	687	788	1,039
Promoters of performing arts and sports and agents for public figures	0	350	701	1,820
Museums, historical sites, zoos, and parks	0	167	196	391
Amusement parks and arcades	0	84	209	294
Gambling industries (except casino hotels)	0	808	2,056	3,152
Other amusement and recreation industries	0	728	855	1,613
Fitness and recreational sports centers	0	437	694	1,251
Bowling centers	0	77	120	208
Hotels and motels, including casino hotels	0	987	1,964	2,934
Other accommodations	0	348	443	579
Full-service restaurants	0	6,447	9,477	17,318
Limited-service restaurants	0	5,083	7,982	18,492
All other food and drinking places	0	3,956	5,537	8,266
Automotive repair and maintenance, except car washes	0	3,500	4,197	6,444
Car washes	0	1,708	2,654	4,087
Electronic and precision equipment repair and maintenance	0	406	611	1,051
Commercial and industrial machinery and equipment repair and maintenance	0	1,192	1,352	2,227
Personal and household goods repair and maintenance	0	1,085	710	1,072
Personal care services	0	2,307	1,849	2,476
Death care services	0	249	304	523
Dry-cleaning and laundry services	0	409	443	664
Other personal services	0	1,843	1,492	2,107
Religious organizations	0	4,038	1,827	7,646
Grantmaking, giving, and social advocacy organizations	0	955	2,598	4,502

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Business and professional associations	0	742	1,060	2,176
Labor and civic organizations	0	883	1,995	3,657
Private households	0	757	757	757
Postal service	0	2,036	2,038	2,256
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	100	76	542
State government passenger transit	0	169	40	411
State government electric utilities	0	17,693	27,827	85,090
Other state government enterprises	0	52	67	99
Local government passenger transit	0	216	34	193
Local government electric utilities	0	134	414	767
Other local government enterprises	0	1,866	4,394	8,045
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	246,295	373,785	781,573

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 43. South Dakota

**Table 453: Detailed NASA Impacts by Types of Impact, South Dakota.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>171</i>	<i>12,491,072</i>	<i>18,501,238</i>	<i>27,877,627</i>
Oilseed farming	0	36,881	117,735	328,141
Grain farming	0	5,816	16,139	87,368
Vegetable and melon farming	0	112	190	789
Fruit farming	0	106	204	702
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	1,226	1,728	6,391
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	1,480	2,023	7,376
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	3,406	12,195	77,812
Dairy cattle and milk production	0	725	1,668	18,520
Poultry and egg production	0	381	556	11,720
Animal production, except cattle and poultry and eggs	0	4,236	14,119	37,506
Forestry, forest products, and timber tract production	0	221	236	322
Commercial logging	0	3,590	3,668	5,361
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	367	783	1,596
Support activities for agriculture and forestry	0	3,838	3,158	3,892
Oil and gas extraction	0	354	798	29,865
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	3,625	5,855	9,811
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,048	1,530	3,326
Sand and gravel mining	0	929	1,064	2,024

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Other clay, ceramic, refractory minerals mining	0	340	423	816
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	4
Support activities for oil and gas operations	0	6	7	81
Metal mining services	0	10	22	795
Other nonmetallic minerals services	0	0	1	33
Electric power generation - Hydroelectric	0	129	557	1,661
Electric power generation - Fossil fuel	0	5,093	20,357	63,828
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	1,249	13,021	42,104
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	25,404	92,645	256,951
Natural gas distribution	0	5,253	14,460	32,227
Water, sewage and other systems	0	1,437	3,261	5,788
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	25,654	29,838	82,765
Maintenance and repair construction of residential structures	0	15,840	20,086	56,519
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	88	49	137
Dog and cat food manufacturing	0	524	1,918	8,682
Other animal food manufacturing	0	867	1,488	14,859
Flour milling	0	159	313	2,844
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	71	520	6,679
Fats and oils refining and blending	0	20	40	497
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	28	61	523
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	(19)	(11)	263
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	858	1,372	7,291
Canned fruits and vegetables manufacturing	0	0	0	0
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	3,474	4,798	48,763

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Dry, condensed, and evaporated dairy product manufacturing	0	153	362	3,163
Fluid milk manufacturing	0	1,030	1,570	12,900
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	398	590	1,221
Poultry processing	0	79	215	3,668
Animal, except poultry, slaughtering	0	8,690	11,549	96,838
Meat processed from carcasses	0	4,336	4,572	45,002
Rendering and meat byproduct processing	0	23	23	154
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	441	1,027	5,456
Cookie and cracker manufacturing	0	1,613	2,175	7,872
Dry pasta, mixes, and dough manufacturing	0	400	891	3,858
Tortilla manufacturing	0	(389)	(379)	121
Roasted nuts and peanut butter manufacturing	0	(18)	21	1,332
Other snack food manufacturing	0	73	143	1,364
Coffee and tea manufacturing	0	0	0	0
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	(26)	(22)	54
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	198	311	2,502
Bottled and canned soft drinks & water	0	239	440	4,044
Manufactured ice	0	38	18	148
Breweries	0	191	478	2,750
Wineries	0	16	27	174
Distilleries	0	26	188	843
Tobacco product manufacturing	0	134	3,739	11,086
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0

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Textile and fabric finishing mills	0	31	41	170
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	1	2	17
Textile bag and canvas mills	0	352	457	1,203
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	20	25	114
Hosiery and sock mills	0	2	4	11
Other apparel knitting mills	0	2	4	10
Cut and sew apparel contractors	0	4	8	71
Mens and boys cut and sew apparel manufacturing	0	2	3	11
Womens and girls cut and sew apparel manufacturing	0	1	3	14
Other cut and sew apparel manufacturing	0	2	10	52
Apparel accessories and other apparel manufacturing	0	1	3	8
Leather and hide tanning and finishing	0	1	27	25
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	1	2	3
Sawmills	0	1,766	2,536	8,598
Wood preservation	0	166	489	1,751
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	455	613	1,765
Reconstituted wood product manufacturing	0	321	780	3,240
Wood windows and door manufacturing	0	1,905	2,583	6,470
Cut stock, resawing lumber, and planing	0	1,162	1,977	5,105
Other millwork, including flooring	0	15	24	288
Wood container and pallet manufacturing	0	656	776	2,340
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	235	268	793
All other miscellaneous wood product manufacturing	0	389	489	1,654

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Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	4,524	6,628	31,050
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	108	151	644
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	10,132	15,838	32,944
Support activities for printing	0	69	105	161
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	29	417	2,643
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	3,987	3,525	28,532
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	658	607	626
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	665	575	788
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	110	84	111
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	29	23	42



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Pharmaceutical preparation manufacturing	0	54	42	119
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	5,522	4,329	6,841
Polish and other sanitation good manufacturing	0	2,102	1,704	2,223
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	973	645	1,226
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	99	97	379
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	944	736	4,863
Other miscellaneous chemical product manufacturing	0	622	549	1,006
Plastics packaging materials and unlaminated film and sheet manufacturing	0	2,649	3,890	14,467
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	319	623	2,394
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	89	135	546
Urethane and other foam product (except polystyrene) manufacturing	0	63	92	415
Plastics bottle manufacturing	0	8	12	59
Other plastics product manufacturing	0	1,222	1,663	6,770
Tire manufacturing	0	214	276	1,558
Rubber and plastics hoses and belting manufacturing	0	13	19	83
Other rubber product manufacturing	0	98	134	766

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Pottery, ceramics, and plumbing fixture manufacturing	0	136	208	342
Brick, tile, and other structural clay product manufacturing	0	1,663	4,110	6,527
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	311	1,142	2,588
Ready-mix concrete manufacturing	0	1,396	3,198	9,153
Concrete block and brick manufacturing	0	610	1,593	3,679
Concrete pipe manufacturing	0	121	269	603
Other concrete product manufacturing	0	1,923	3,584	7,732
Lime manufacturing	0	378	1,399	2,348
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	468	606	1,390
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	33	117	271
Iron and steel mills and ferroalloy manufacturing	0	9	18	380
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	197	283	1,675
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	521	703	3,527
Other aluminum rolling, drawing and extruding	0	262	312	1,634
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

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Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	14	19	55
Nonferrous metal foundries	0	93	117	347
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	325	518	1,537
Iron and steel forging	0	652	974	3,670
Nonferrous forging	0	487	655	2,567
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	7	12	47
Prefabricated metal buildings and components manufacturing	0	157	244	676
Fabricated structural metal manufacturing	0	144	236	782
Plate work manufacturing	0	397	412	1,305
Metal window and door manufacturing	0	243	417	1,244
Sheet metal work manufacturing	0	2,255	3,127	8,177
Ornamental and architectural metal work manufacturing	0	177	253	710
Power boiler and heat exchanger manufacturing	0	98	150	421
Metal tank (heavy gauge) manufacturing	0	282	363	1,026
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	43	56	241
Hardware manufacturing	0	374	705	2,043
Spring and wire product manufacturing	0	8	12	39
Machine shops	0	3,220	3,882	8,165
Turned product and screw, nut, and bolt manufacturing	0	39	59	222
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	212	424	1,107
Electroplating, anodizing, and coloring metal	0	35	40	100

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Valve and fittings, other than plumbing, manufacturing	0	151	279	887
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	1,447	4,034	6,924
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	141	421	1,003
Fabricated pipe and pipe fitting manufacturing	0	82	99	238
Other fabricated metal manufacturing	0	287	410	1,274
Farm machinery and equipment manufacturing	0	200	310	1,501
Lawn and garden equipment manufacturing	0	0	1	14
Construction machinery manufacturing	0	65	139	431
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	11	13	35
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	1	2	4
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	2	3	10
Other commercial service industry machinery manufacturing	0	54	106	336
Air purification and ventilation equipment manufacturing	0	149	222	624

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	21	32	123
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	27	54	191
Industrial mold manufacturing	0	26	30	57
Special tool, die, jig, and fixture manufacturing	0	73	96	178
Cutting tool and machine tool accessory manufacturing	0	11	12	30
Machine tool manufacturing	0	51	58	170
Rolling mill and other metalworking machinery manufacturing	0	13	17	41
Turbine and turbine generator set units manufacturing	0	21	30	146
Speed changer, industrial high-speed drive, and gear manufacturing	0	85	132	402
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	2	4	13
Air and gas compressor manufacturing	0	8	13	46
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	36	38	110
Overhead cranes, hoists, and monorail systems manufacturing	0	48	100	299
Industrial truck, trailer, and stacker manufacturing	0	9	14	46
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	3	5	19
Packaging machinery manufacturing	0	0	0	2
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	15	22	62

## APPENDIX

Fluid power pump and motor manufacturing	0	5	8	25
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	57	76	226
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	2	193,479	379,949	1,097,162
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	(0)	(0)	1
Other communications equipment manufacturing	0	4	7	36
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	861	1,437	5,696
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	97	184	659
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	164	248	714
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	749	886	4,124
Electromedical and electrotherapeutic apparatus manufacturing	0	10	23	61
Search, detection, and navigation instruments manufacturing	0	(0)	(0)	0
Automatic environmental control manufacturing	0	5	8	31
Industrial process variable instruments manufacturing	0	(1)	(1)	5
Totalizing fluid meter and counting device manufacturing	0	19	45	127

## APPENDIX

Electricity and signal testing instruments manufacturing	0	10	15	54
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	7	18	36
Small electrical appliance manufacturing	0	11	41	76
Household cooking appliance manufacturing	0	0	4	94
Household refrigerator and home freezer manufacturing	0	0	4	52
Household laundry equipment manufacturing	0	1	4	93
Other major household appliance manufacturing	0	(0)	0	28
Power, distribution, and specialty transformer manufacturing	0	15	34	92
Motor and generator manufacturing	0	5	12	42
Switchgear and switchboard apparatus manufacturing	0	22	61	156
Relay and industrial control manufacturing	0	99	188	514
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	10	14	39

## APPENDIX

Automobile manufacturing	0	6	18	119
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	120	255	1,388
Motor vehicle body manufacturing	0	900	1,125	4,477
Truck trailer manufacturing	0	97	114	448
Motor home manufacturing	0	1,137	1,814	6,863
Travel trailer and camper manufacturing	0	958	1,044	5,628
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0
Motor vehicle electrical and electronic equipment manufacturing	0	1,042	1,294	5,588
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	6	7	24
Other motor vehicle parts manufacturing	0	3,129	4,351	24,280
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	1	3	5
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	11	44	96
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	451	979	2,777



## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	2,530	3,536	8,013
Upholstered household furniture manufacturing	0	2	2	16
Nonupholstered wood household furniture manufacturing	0	434	497	1,292
Other household nonupholstered furniture manufacturing	0	1	2	16
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	3	5	12
Custom architectural woodwork and millwork	0	6	6	20
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	97	135	369
Mattress manufacturing	0	4	8	35
Blind and shade manufacturing	0	12	13	49
Surgical and medical instrument manufacturing	0	328	1,475	2,360
Surgical appliance and supplies manufacturing	0	1,500	6,749	10,629
Dental equipment and supplies manufacturing	0	1	4	9
Ophthalmic goods manufacturing	0	12	55	110
Dental laboratories	0	54	55	103
Jewelry and silverware manufacturing	0	555	1,158	2,122
Sporting and athletic goods manufacturing	0	8	14	54
Doll, toy, and game manufacturing	0	14	17	157
Office supplies (except paper) manufacturing	0	7	8	61
Sign manufacturing	0	11,537	11,500	21,253
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	37	38	125
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	92	268	668
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	1	52,495	73,896	183,960
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	7,982	20,083	42,983
Wholesale - Professional and commercial equipment and supplies	0	33,034	64,856	112,137
Wholesale - Household appliances and electrical and electronic goods	0	22,082	54,735	113,572
Wholesale - Machinery, equipment, and supplies	0	16,431	30,272	53,282
Wholesale - Other durable goods merchant wholesalers	0	35,710	57,427	113,755
Wholesale - Drugs and druggists' sundries	0	14,036	42,522	84,894
Wholesale - Grocery and related product wholesalers	0	18,175	25,412	49,262
Wholesale - Petroleum and petroleum products	0	6,432	68,926	85,091
Wholesale - Other nondurable goods merchant wholesalers	1	66,621	128,035	251,438
Wholesale - Wholesale electronic markets and agents and brokers	0	12,192	7,263	8,176
Retail - Motor vehicle and parts dealers	1	39,140	61,062	88,333
Retail - Furniture and home furnishings stores	0	17,914	24,389	41,617
Retail - Electronics and appliance stores	0	21,633	22,161	39,306
Retail - Building material and garden equipment and supplies stores	0	19,736	36,669	54,150
Retail - Food and beverage stores	2	54,995	80,694	143,409
Retail - Health and personal care stores	1	32,198	38,506	61,371
Retail - Gasoline stores	1	17,862	34,586	68,201
Retail - Clothing and clothing accessories stores	1	19,527	32,116	69,303
Retail - Sporting goods, hobby, musical instrument and book stores	1	15,896	21,589	38,000
Retail - General merchandise stores	2	68,808	79,659	141,942
Retail - Miscellaneous store retailers	1	42,967	46,723	65,808

## APPENDIX

Retail - Nonstore retailers	2	42,797	103,169	241,949
Air transportation	0	11,560	18,776	29,685
Rail transportation	0	6,209	13,141	25,770
Water transportation	0	(1)	(1)	408
Truck transportation	1	57,321	64,082	136,678
Transit and ground passenger transportation	0	13,359	16,335	20,890
Pipeline transportation	0	4,106	9,417	12,772
Scenic and sightseeing transportation and support activities for transportation	0	20,700	23,565	51,477
Couriers and messengers	0	15,940	19,298	37,056
Warehousing and storage	0	10,012	12,691	29,175
Newspaper publishers	0	9,289	16,218	24,107
Periodical publishers	0	2,533	4,052	8,340
Book publishers	0	464	1,601	6,474
Directory, mailing list, and other publishers	0	607	2,225	3,541
Greeting card publishing	0	0	0	0
Software publishers	0	28,450	76,778	94,454
Motion picture and video industries	0	4,082	10,109	30,480
Sound recording industries	0	153	1,026	2,838
Radio and television broadcasting	0	29,246	27,020	101,793
Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	25,721	78,396	149,047
Wireless telecommunications carriers (except satellite)	0	3,601	20,024	43,441
Satellite, telecommunications resellers, and all other telecommunications	0	1,375	1,703	4,087
Data processing, hosting, and related services	0	4,613	16,516	35,960
News syndicates, libraries, archives and all other information services	0	426	768	1,279
Internet publishing and broadcasting and web search portals	0	5,040	22,451	47,670
Nondepository credit intermediation and related activities	1	87,792	155,792	211,048
Securities and commodity contracts intermediation and brokerage	1	37,223	35,153	123,281

## APPENDIX

Monetary authorities and depository credit intermediation	1	112,513	738,903	865,566
Other financial investment activities	2	40,528	44,944	212,973
Direct life insurance carriers	0	34,724	83,982	123,013
Insurance carriers, except direct life	1	40,506	176,917	376,553
Insurance agencies, brokerages, and related activities	2	96,101	164,713	407,259
Funds, trusts, and other financial vehicles	1	25,787	15,960	196,630
Other real estate	4	76,121	162,977	570,347
Tenant-occupied housing	1	24,711	217,443	264,668
Owner-occupied dwellings	0	0	661,172	835,383
Automotive equipment rental and leasing	0	2,655	6,919	13,908
General and consumer goods rental except video tapes and discs	0	10,389	14,057	24,827
Video tape and disc rental	0	3,360	5,810	9,347
Commercial and industrial machinery and equipment rental and leasing	0	5,480	10,830	23,972
Lessors of nonfinancial intangible assets	0	303	14,845	22,319
Legal services	1	51,113	91,440	149,585
Accounting, tax preparation, bookkeeping, and payroll services	1	34,562	43,855	68,316
Architectural, engineering, and related services	0	27,382	32,217	61,684
Specialized design services	0	20,886	25,320	33,369
Custom computer programming services	0	7,533	9,564	14,706
Computer systems design services	0	15,246	16,804	23,628
Other computer related services, including facilities management	0	2,604	5,333	9,604
Management consulting services	1	96,222	98,733	166,220
Environmental and other technical consulting services	0	12,921	11,301	18,453
Scientific research and development services	10	575,426	763,321	1,997,072
Advertising, public relations, and related services	0	23,126	32,364	66,371
Photographic services	0	8,071	4,693	8,611
Veterinary services	0	8,897	12,040	19,493

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	1	27,384	26,412	42,335
Management of companies and enterprises	2	181,176	204,511	312,783
Office administrative services	0	21,791	13,040	26,732
Facilities support services	0	1,118	1,671	4,049
Employment services	1	35,722	64,843	95,430
Business support services	1	26,088	24,623	43,702
Travel arrangement and reservation services	0	4,819	7,433	19,500
Investigation and security services	0	6,417	6,796	10,158
Services to buildings	1	20,234	22,640	40,331
Landscape and horticultural services	1	14,823	16,902	29,189
Other support services	0	5,592	7,672	16,904
Waste management and remediation services	0	6,338	15,884	32,033
Elementary and secondary schools	0	7,455	6,067	8,238
Junior colleges, colleges, universities, and professional schools	1	41,692	50,626	86,148
Other educational services	1	10,764	9,821	25,811
Offices of physicians	2	322,423	362,906	496,022
Offices of dentists	1	64,215	75,373	110,765
Offices of other health practitioners	1	82,414	76,727	100,339
Outpatient care centers	0	17,042	17,694	35,833
Medical and diagnostic laboratories	0	10,375	13,673	20,580
Home health care services	1	44,504	32,731	42,815
Other ambulatory health care services	0	20,395	21,460	35,222
Hospitals	7	529,044	589,221	1,162,968
Nursing and community care facilities	2	81,033	82,799	152,593
Residential mental retardation, mental health, substance abuse and other facilities	1	26,835	27,218	41,874
Individual and family services	1	33,608	26,622	40,199
Child day care services	1	24,140	23,982	36,471
Community food, housing, and other relief services, including rehabilitation services	1	19,321	18,884	44,663
Performing arts companies	0	2,202	3,381	10,578

## APPENDIX

Commercial Sports Except Racing	0	3,094	3,688	14,024
Racing and Track Operation	0	1,091	1,502	6,649
Independent artists, writers, and performers	1	4,773	5,765	8,982
Promoters of performing arts and sports and agents for public figures	0	5,868	10,757	34,285
Museums, historical sites, zoos, and parks	0	4,525	5,070	10,017
Amusement parks and arcades	0	965	2,003	3,133
Gambling industries (except casino hotels)	0	12,734	29,775	54,636
Other amusement and recreation industries	1	8,103	10,862	23,032
Fitness and recreational sports centers	0	4,142	6,982	12,798
Bowling centers	0	1,525	2,300	4,811
Hotels and motels, including casino hotels	0	2,435	4,873	8,116
Other accommodations	0	1,020	1,233	1,759
Full-service restaurants	3	67,527	100,661	193,204
Limited-service restaurants	4	66,940	108,008	248,681
All other food and drinking places	2	50,394	74,149	125,158
Automotive repair and maintenance, except car washes	1	58,506	73,250	108,000
Car washes	1	30,789	48,216	71,935
Electronic and precision equipment repair and maintenance	2	91,405	133,006	232,318
Commercial and industrial machinery and equipment repair and maintenance	0	18,495	22,638	36,766
Personal and household goods repair and maintenance	0	15,203	14,993	18,846
Personal care services	1	29,480	22,313	29,535
Death care services	0	2,869	3,746	6,024
Dry-cleaning and laundry services	0	5,280	6,097	8,849
Other personal services	1	22,385	22,521	28,827
Religious organizations	2	92,014	36,030	179,646
Grantmaking, giving, and social advocacy organizations	0	15,431	42,114	72,451
Business and professional associations	0	13,516	20,674	43,783
Labor and civic organizations	1	12,811	29,893	65,427
Private households	0	4,730	4,730	4,730
Postal service	0	31,656	31,677	35,551
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	2,316	(48,809)	1,743
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	0	0	0
Local government electric utilities	0	2,463	6,050	12,949
Other local government enterprises	1	35,090	67,942	179,700
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	67	7,210,567	9,548,974	9,952,428

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 454: Detailed M2M Program Impacts by Types of Impact, South Dakota.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	4	225,497	340,869	733,343
Oilseed farming	0	617	2,847	8,991
Grain farming	0	92	287	1,414
Vegetable and melon farming	0	2	3	13
Fruit farming	0	2	4	14
Tree nut farming	0	0	0	0

## APPENDIX

Greenhouse, nursery, and floriculture production	0	516	756	2,740
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	88	125	447
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	56	195	1,111
Dairy cattle and milk production	0	15	35	338
Poultry and egg production	0	5	8	160
Animal production, except cattle and poultry and eggs	0	71	268	736
Forestry, forest products, and timber tract production	0	139	147	193
Commercial logging	0	1,693	1,727	2,382
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	6	12	22
Support activities for agriculture and forestry	0	138	113	139
Oil and gas extraction	0	6	19	663
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	60	79	146
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	43	33	73
Sand and gravel mining	0	49	29	46
Other clay, ceramic, refractory minerals mining	0	7	7	13
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	0	0	0
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	0	0	1
Metal mining services	0	2	6	207



## APPENDIX

Other nonmetallic minerals services	0	0	0	1
Electric power generation - Hydroelectric	0	6	24	66
Electric power generation - Fossil fuel	0	165	610	1,857
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	36	357	1,082
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	725	2,615	7,098
Natural gas distribution	0	193	552	1,063
Water, sewage and other systems	0	35	66	106
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	708	827	2,232

## APPENDIX

Maintenance and repair construction of residential structures	0	258	330	897
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1	1	2
Dog and cat food manufacturing	0	7	28	120
Other animal food manufacturing	0	17	30	288
Flour milling	0	2	4	40
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	2	15	186
Fats and oils refining and blending	0	0	1	10
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1	1	9
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	(0)	(0)	4
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	17	27	134
Canned fruits and vegetables manufacturing	0	0	0	0
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	68	93	968
Dry, condensed, and evaporated dairy product manufacturing	0	4	9	66
Fluid milk manufacturing	0	17	27	215
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	0	0
Frozen cakes and other pastries manufacturing	0	7	10	20
Poultry processing	0	1	3	51
Animal, except poultry, slaughtering	0	138	186	1,528
Meat processed from carcasses	0	72	77	729

## APPENDIX

Rendering and meat byproduct processing	0	0	1	3
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	7	17	90
Cookie and cracker manufacturing	0	29	41	136
Dry pasta, mixes, and dough manufacturing	0	7	16	72
Tortilla manufacturing	0	(6)	(6)	2
Roasted nuts and peanut butter manufacturing	0	(0)	0	26
Other snack food manufacturing	0	1	2	23
Coffee and tea manufacturing	0	0	0	0
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	(1)	(0)	1
Spice and extract manufacturing	0	0	0	0
All other food manufacturing	0	4	7	50
Bottled and canned soft drinks & water	0	4	7	62
Manufactured ice	0	1	0	2
Breweries	0	3	8	45
Wineries	0	1	1	6
Distilleries	0	0	4	15
Tobacco product manufacturing	0	2	72	185
Fiber, yarn, and thread mills	0	0	0	0
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	53	71	283
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	2
Textile bag and canvas mills	0	7	9	22
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	1	1	3
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	4

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	1
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	0
Sawmills	0	475	727	2,277
Wood preservation	0	8	26	84
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	94	133	367
Reconstituted wood product manufacturing	0	15	41	188
Wood windows and door manufacturing	0	51	72	174
Cut stock, resawing lumber, and planing	0	299	558	1,299
Other millwork, including flooring	0	0	1	8
Wood container and pallet manufacturing	0	17	20	60
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	9	11	31
All other miscellaneous wood product manufacturing	0	101	129	398
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	1,660	2,315	10,832
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	3	4	17
Sanitary paper product manufacturing	0	0	0	0

## APPENDIX

All other converted paper product manufacturing	0	0	0	0
Printing	0	459	713	1,433
Support activities for printing	0	3	5	8
Petroleum refineries	0	0	0	0
Asphalt paving mixture and block manufacturing	0	1	8	49
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	0	0
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	140	125	1,060
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	319	296	321
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	30	28	35
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	3	3	4
Pesticide and other agricultural chemical manufacturing	0	0	0	0
Medicinal and botanical manufacturing	0	1	1	1
Pharmaceutical preparation manufacturing	0	1	1	3
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	141	145	181

## APPENDIX

Polish and other sanitation good manufacturing	0	69	67	72
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	22	16	28
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	3	3	12
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	38	33	194
Other miscellaneous chemical product manufacturing	0	20	19	35
Plastics packaging materials and unlaminated film and sheet manufacturing	0	802	1,171	4,254
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	6	13	49
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	2	4	14
Urethane and other foam product (except polystyrene) manufacturing	0	3	4	18
Plastics bottle manufacturing	0	0	1	3
Other plastics product manufacturing	0	73	98	379
Tire manufacturing	0	2	3	18
Rubber and plastics hoses and belting manufacturing	0	0	0	2
Other rubber product manufacturing	0	6	9	51
Pottery, ceramics, and plumbing fixture manufacturing	0	2	3	6
Brick, tile, and other structural clay product manufacturing	0	25	59	97
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0

## APPENDIX

Cement manufacturing	0	6	20	47
Ready-mix concrete manufacturing	0	31	68	197
Concrete block and brick manufacturing	0	9	23	53
Concrete pipe manufacturing	0	2	5	11
Other concrete product manufacturing	0	31	56	122
Lime manufacturing	0	7	25	42
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	8	10	22
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	1	3	7
Iron and steel mills and ferroalloy manufacturing	0	3	5	108
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	84	111	726
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	267	312	1,744
Other aluminum rolling, drawing and extruding	0	171	172	981
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	2	2	8
Nonferrous metal foundries	0	53	59	181
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	8	14	39

## APPENDIX

Iron and steel forging	0	29	43	156
Nonferrous forging	0	28	38	140
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	1	1	6
Prefabricated metal buildings and components manufacturing	0	4	6	15
Fabricated structural metal manufacturing	0	4	6	21
Plate work manufacturing	0	33	34	105
Metal window and door manufacturing	0	9	16	47
Sheet metal work manufacturing	0	47	66	166
Ornamental and architectural metal work manufacturing	0	7	10	26
Power boiler and heat exchanger manufacturing	0	38	60	175
Metal tank (heavy gauge) manufacturing	0	54	71	194
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	6	8	32
Hardware manufacturing	0	13	24	67
Spring and wire product manufacturing	0	1	1	3
Machine shops	0	1,419	1,722	3,530
Turned product and screw, nut, and bolt manufacturing	0	9	14	48
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	42	84	220
Electroplating, anodizing, and coloring metal	0	9	10	25
Valve and fittings, other than plumbing, manufacturing	0	6	12	37
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	14	38	66
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	3	9	20



## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	3	3	8
Other fabricated metal manufacturing	0	72	103	305
Farm machinery and equipment manufacturing	0	6	10	43
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	10	23	66
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	1
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	1
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	4	10	31
Air purification and ventilation equipment manufacturing	0	5	8	22
Heating equipment (except warm air furnaces) manufacturing	0	1	1	3
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1	2	8
Industrial mold manufacturing	0	9	11	20
Special tool, die, jig, and fixture manufacturing	0	33	44	77
Cutting tool and machine tool accessory manufacturing	0	6	7	16
Machine tool manufacturing	0	38	44	119

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	2	2	5
Turbine and turbine generator set units manufacturing	0	1	1	4
Speed changer, industrial high-speed drive, and gear manufacturing	0	4	7	18
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	1	3
Air and gas compressor manufacturing	0	1	2	6
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	2	2	6
Overhead cranes, hoists, and monorail systems manufacturing	0	1	3	8
Industrial truck, trailer, and stacker manufacturing	0	0	1	2
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	1
Packaging machinery manufacturing	0	0	0	1
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	1	2	6
Fluid power pump and motor manufacturing	0	1	2	6
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	15	21	55
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	2,877	5,635	16,394

## APPENDIX

Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	(0)	(0)	0
Other communications equipment manufacturing	0	0	1	4
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	37	61	234
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	9	16	56
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	4	5	15
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	21	24	109
Electromedical and electrotherapeutic apparatus manufacturing	0	0	1	2
Search, detection, and navigation instruments manufacturing	0	(0)	(0)	0
Automatic environmental control manufacturing	0	0	1	2
Industrial process variable instruments manufacturing	0	(0)	(0)	0
Totalizing fluid meter and counting device manufacturing	0	1	1	4
Electricity and signal testing instruments manufacturing	0	0	0	1
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	1	1
Small electrical appliance manufacturing	0	2	8	13
Household cooking appliance manufacturing	0	0	0	2
Household refrigerator and home freezer manufacturing	0	0	0	1
Household laundry equipment manufacturing	0	0	0	2
Other major household appliance manufacturing	0	(0)	0	0
Power, distribution, and specialty transformer manufacturing	0	2	4	10
Motor and generator manufacturing	0	0	0	1
Switchgear and switchboard apparatus manufacturing	0	1	1	4
Relay and industrial control manufacturing	0	14	27	71
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	1
Automobile manufacturing	0	0	0	2
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	3	16
Motor vehicle body manufacturing	0	15	19	78
Truck trailer manufacturing	0	4	4	16
Motor home manufacturing	0	10	17	61
Travel trailer and camper manufacturing	0	13	14	78
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	0

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	22	27	105
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	1
Other motor vehicle parts manufacturing	0	192	242	1,534
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	0	0
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	1	2
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	8	18	50
Wood kitchen cabinet and countertop manufacturing	0	48	62	143
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	20	22	56
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	0	0	1
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	3	4	11
Mattress manufacturing	0	0	0	1
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	9	39	58
Surgical appliance and supplies manufacturing	0	94	420	623
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	1	3
Dental laboratories	0	1	1	2
Jewelry and silverware manufacturing	0	12	25	44
Sporting and athletic goods manufacturing	0	0	0	1
Doll, toy, and game manufacturing	0	0	0	4
Office supplies (except paper) manufacturing	0	1	2	12
Sign manufacturing	0	471	482	819
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	1	1	4
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	2	8	16
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	1	61,183	78,930	202,263
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	256	647	1,382
Wholesale - Professional and commercial equipment and supplies	0	831	1,635	2,758
Wholesale - Household appliances and electrical and electronic goods	0	678	1,672	3,412
Wholesale - Machinery, equipment, and supplies	0	1,277	2,367	4,138
Wholesale - Other durable goods merchant wholesalers	0	4,873	7,843	15,375

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	268	802	1,560
Wholesale - Grocery and related product wholesalers	0	379	527	1,020
Wholesale - Petroleum and petroleum products	0	139	1,644	2,001
Wholesale - Other nondurable goods merchant wholesalers	0	5,493	10,953	21,075
Wholesale - Wholesale electronic markets and agents and brokers	0	601	343	385
Retail - Motor vehicle and parts dealers	0	705	1,106	1,586
Retail - Furniture and home furnishings stores	0	277	377	633
Retail - Electronics and appliance stores	0	331	340	592
Retail - Building material and garden equipment and supplies stores	0	356	662	965
Retail - Food and beverage stores	0	891	1,293	2,244
Retail - Health and personal care stores	0	473	570	905
Retail - Gasoline stores	0	319	575	1,070
Retail - Clothing and clothing accessories stores	0	309	505	1,058
Retail - Sporting goods, hobby, musical instrument and book stores	0	240	327	566
Retail - General merchandise stores	0	1,000	1,166	2,063
Retail - Miscellaneous store retailers	0	682	735	999
Retail - Nonstore retailers	0	720	1,756	3,925
Air transportation	0	248	413	643
Rail transportation	0	244	462	957
Water transportation	0	(0)	(0)	21
Truck transportation	0	1,515	1,657	3,441
Transit and ground passenger transportation	0	471	584	695
Pipeline transportation	0	79	191	264
Scenic and sightseeing transportation and support activities for transportation	0	658	759	1,658
Couriers and messengers	0	524	654	1,228
Warehousing and storage	0	311	393	897

## APPENDIX

Newspaper publishers	0	376	631	924
Periodical publishers	0	120	187	354
Book publishers	0	9	29	116
Directory, mailing list, and other publishers	0	19	69	108
Greeting card publishing	0	0	0	0
Software publishers	0	100	281	345
Motion picture and video industries	0	113	283	699
Sound recording industries	0	4	28	72
Radio and television broadcasting	0	1,965	1,999	4,945
Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	685	1,948	3,575
Wireless telecommunications carriers (except satellite)	0	127	597	1,245
Satellite, telecommunications resellers, and all other telecommunications	0	43	48	102
Data processing, hosting, and related services	0	263	880	1,814
News syndicates, libraries, archives and all other information services	0	12	21	32
Internet publishing and broadcasting and web search portals	0	328	1,382	2,497
Nondepository credit intermediation and related activities	0	2,409	4,318	5,496
Securities and commodity contracts intermediation and brokerage	0	1,015	941	3,082
Monetary authorities and depository credit intermediation	0	2,578	17,566	19,930
Other financial investment activities	0	960	1,034	3,908
Direct life insurance carriers	0	460	1,149	1,643
Insurance carriers, except direct life	0	742	3,354	6,838
Insurance agencies, brokerages, and related activities	0	1,669	2,871	6,887
Funds, trusts, and other financial vehicles	0	478	291	3,026
Other real estate	0	2,704	5,782	17,623
Tenant-occupied housing	0	437	3,628	4,352



## APPENDIX

Owner-occupied dwellings	0	0	11,105	14,031
Automotive equipment rental and leasing	0	91	191	366
General and consumer goods rental except video tapes and discs	0	250	316	518
Video tape and disc rental	0	53	89	139
Commercial and industrial machinery and equipment rental and leasing	0	255	426	912
Lessors of nonfinancial intangible assets	0	19	916	1,367
Legal services	0	1,748	3,265	5,202
Accounting, tax preparation, bookkeeping, and payroll services	0	1,214	1,552	2,350
Architectural, engineering, and related services	0	1,381	1,632	3,081
Specialized design services	0	139	169	219
Custom computer programming services	0	263	332	496
Computer systems design services	0	752	826	1,140
Other computer related services, including facilities management	0	102	203	346
Management consulting services	0	1,395	1,434	2,346
Environmental and other technical consulting services	0	422	371	593
Scientific research and development services	0	25,370	34,109	82,477
Advertising, public relations, and related services	0	1,139	1,592	3,105
Photographic services	0	171	106	182
Veterinary services	0	142	195	307
Marketing research and all other miscellaneous professional, scientific, and technical services	0	2,062	1,985	3,106
Management of companies and enterprises	0	9,561	10,901	16,143
Office administrative services	0	769	471	869
Facilities support services	0	27	40	92
Employment services	0	1,026	1,913	2,710
Business support services	0	809	781	1,339
Travel arrangement and reservation services	0	113	176	444
Investigation and security services	0	214	227	327
Services to buildings	0	726	815	1,381

## APPENDIX

Landscape and horticultural services	0	347	397	660
Other support services	0	305	419	918
Waste management and remediation services	0	217	547	1,086
Elementary and secondary schools	0	154	125	167
Junior colleges, colleges, universities, and professional schools	0	964	1,160	1,874
Other educational services	0	197	180	456
Offices of physicians	0	4,846	5,497	7,455
Offices of dentists	0	1,009	1,197	1,735
Offices of other health practitioners	0	1,238	1,162	1,516
Outpatient care centers	0	283	295	589
Medical and diagnostic laboratories	0	161	217	316
Home health care services	0	663	493	650
Other ambulatory health care services	0	320	339	547
Hospitals	0	8,928	9,902	19,072
Nursing and community care facilities	0	1,261	1,290	2,315
Residential mental retardation, mental health, substance abuse and other facilities	0	477	484	729
Individual and family services	0	592	477	716
Child day care services	0	402	406	602
Community food, housing, and other relief services, including rehabilitation services	0	363	359	821
Performing arts companies	0	51	75	213
Commercial Sports Except Racing	0	89	106	392
Racing and Track Operation	0	20	26	110
Independent artists, writers, and performers	0	176	206	306
Promoters of performing arts and sports and agents for public figures	0	142	237	703
Museums, historical sites, zoos, and parks	0	79	87	167
Amusement parks and arcades	0	17	31	49
Gambling industries (except casino hotels)	0	212	467	846
Other amusement and recreation industries	0	133	171	360

## APPENDIX

Fitness and recreational sports centers	0	85	134	242
Bowling centers	0	24	35	72
Hotels and motels, including casino hotels	0	83	158	259
Other accommodations	0	25	30	42
Full-service restaurants	0	1,352	2,027	3,803
Limited-service restaurants	0	1,258	2,018	4,477
All other food and drinking places	0	1,081	1,564	2,562
Automotive repair and maintenance, except car washes	0	1,240	1,493	2,187
Car washes	0	586	914	1,352
Electronic and precision equipment repair and maintenance	0	211	307	514
Commercial and industrial machinery and equipment repair and maintenance	0	624	750	1,206
Personal and household goods repair and maintenance	0	351	306	384
Personal care services	0	504	349	467
Death care services	0	51	63	100
Dry-cleaning and laundry services	0	105	119	172
Other personal services	0	442	388	512
Religious organizations	0	1,724	526	3,089
Grantmaking, giving, and social advocacy organizations	0	334	781	1,343
Business and professional associations	0	348	478	976
Labor and civic organizations	0	240	495	1,107
Private households	0	86	86	86
Postal service	0	1,620	1,621	1,815
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	49	(1,171)	37
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	0	0	0
Local government electric utilities	0	85	190	394
Other local government enterprises	0	860	1,532	4,012

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	16,641	21,601	45,168

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 44. Tennessee

**Table 455: Detailed NASA Impacts by Types of Impact, Tennessee.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	726	50,436,153	65,031,235	135,567,157
Oilseed farming	1	(836)	50,172	150,624
Grain farming	1	1,049	21,904	113,108
Vegetable and melon farming	0	(369)	2,979	19,537
Fruit farming	0	(209)	432	2,604
Tree nut farming	0	80	95	421
Greenhouse, nursery, and floriculture production	1	5,146	10,718	42,498
Tobacco farming	0	3,274	6,742	24,022
Cotton farming	0	595	1,549	6,114
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	1,206	2,992	13,610
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	2	(2,164)	9,880	55,351

## APPENDIX

Dairy cattle and milk production	0	(213)	1,315	14,379
Poultry and egg production	0	790	2,266	44,795
Animal production, except cattle and poultry and eggs	1	(348)	17,984	43,050
Forestry, forest products, and timber tract production	0	931	982	1,288
Commercial logging	0	7,858	7,762	12,836
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	221	668	3,500
Support activities for agriculture and forestry	1	27,362	21,139	27,117
Oil and gas extraction	1	1,407	2,250	134,809
Coal mining	0	735	1,180	3,351
Copper, nickel, lead, and zinc mining	1	68,667	241,046	548,459
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	5,241	7,566	19,637
Sand and gravel mining	0	4,548	5,112	8,109
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	469	525	1,393
Drilling oil and gas wells	0	1	1	8
Support activities for oil and gas operations	0	20	22	172
Metal mining services	0	17	26	1,120
Other nonmetallic minerals services	0	11	13	109
Electric power generation - Hydroelectric	0	531	2,225	3,246
Electric power generation - Fossil fuel	0	324	1,610	3,269
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	229	743	1,071
Electric power generation - Wind	0	144	6,074	30,239

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	410	2,424	7,042
Electric power generation - All other	0	293	179	455
Electric power transmission and distribution	0	33,585	175,893	429,528
Natural gas distribution	0	16,776	62,912	120,079
Water, sewage and other systems	0	4,717	14,684	35,413
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	6,996	3,210	7,699
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	162,836	176,190	452,024
Maintenance and repair construction of residential structures	1	71,943	83,090	218,686
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	256	147	356
Dog and cat food manufacturing	0	8,262	33,996	56,136
Other animal food manufacturing	0	2,021	3,540	23,257
Flour milling	0	6,973	15,027	85,547
Rice milling	0	6,171	11,377	54,032
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	10,507	30,399	160,850
Soybean and other oilseed processing	0	1,889	11,823	78,002
Fats and oils refining and blending	0	371	702	6,115
Breakfast cereal manufacturing	0	10,923	30,087	69,387
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	198	375	1,923
Nonchocolate confectionery manufacturing	0	4,625	7,001	24,470
Chocolate and confectionery manufacturing from cacao beans	0	403	558	3,101
Confectionery manufacturing from purchased chocolate	0	7,658	10,924	37,354
Frozen fruits, juices and vegetables manufacturing	0	11,371	22,053	75,576
Frozen specialties manufacturing	0	17,965	28,320	94,773
Canned fruits and vegetables manufacturing	0	15,683	29,590	79,187
Canned specialties	0	968	1,546	5,114
Dehydrated food products manufacturing	0	341	380	863
Cheese manufacturing	0	17,529	26,228	247,304
Dry, condensed, and evaporated dairy product manufacturing	0	536	1,049	5,873
Fluid milk manufacturing	0	7,016	11,431	68,907
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	3,698	5,749	21,981
Frozen cakes and other pastries manufacturing	0	6,640	9,563	17,022
Poultry processing	1	30,789	42,166	195,541
Animal, except poultry, slaughtering	0	29,366	40,953	328,650
Meat processed from carcasses	0	15,051	16,026	113,994
Rendering and meat byproduct processing	0	648	660	3,119
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	1	36,641	44,057	86,578
Cookie and cracker manufacturing	0	16,580	24,444	70,159
Dry pasta, mixes, and dough manufacturing	0	2,120	4,265	13,941
Tortilla manufacturing	0	1,421	1,691	4,679

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	1,701	1,726	8,098
Other snack food manufacturing	0	7,706	18,730	60,900
Coffee and tea manufacturing	0	7,156	12,128	50,980
Flavoring syrup and concentrate manufacturing	0	249	911	2,043
Mayonnaise, dressing, and sauce manufacturing	0	3,336	6,330	24,245
Spice and extract manufacturing	0	733	829	3,057
All other food manufacturing	0	7,408	9,612	33,446
Bottled and canned soft drinks & water	0	16,337	37,098	177,991
Manufactured ice	0	566	319	1,668
Breweries	0	3,879	10,670	48,192
Wineries	0	251	477	2,848
Distilleries	0	15,376	73,970	194,161
Tobacco product manufacturing	0	9,323	185,776	324,729
Fiber, yarn, and thread mills	0	4,329	7,099	22,753
Broadwoven fabric mills	0	243	394	1,087
Narrow fabric mills and schiffli machine embroidery	0	217	251	756
Nonwoven fabric mills	0	5,799	12,195	30,773
Knit fabric mills	0	434	639	1,715
Textile and fabric finishing mills	0	422	589	1,997
Fabric coating mills	0	508	729	2,815
Carpet and rug mills	0	186	367	1,178
Curtain and linen mills	0	232	366	1,376
Textile bag and canvas mills	0	1,287	1,720	4,698
Rope, cordage, twine, tire cord and tire fabric mills	0	2,998	5,702	14,970
Other textile product mills	0	1,454	1,902	5,231
Hosiery and sock mills	0	1,011	914	2,520
Other apparel knitting mills	0	114	169	492
Cut and sew apparel contractors	0	2,741	2,766	5,821
Mens and boys cut and sew apparel manufacturing	0	3,282	3,036	9,969
Womens and girls cut and sew apparel manufacturing	0	134	164	1,054
Other cut and sew apparel manufacturing	0	265	285	973
Apparel accessories and other apparel manufacturing	0	142	166	543
Leather and hide tanning and finishing	0	93	76	658



## APPENDIX

Footwear manufacturing	0	374	372	1,560
Other leather and allied product manufacturing	0	68	66	308
Sawmills	0	6,362	8,838	36,310
Wood preservation	0	288	744	3,028
Veneer and plywood manufacturing	0	460	693	2,948
Engineered wood member and truss manufacturing	0	1,095	1,464	4,126
Reconstituted wood product manufacturing	0	1,018	2,651	7,739
Wood windows and door manufacturing	0	9,064	12,587	31,259
Cut stock, resawing lumber, and planing	0	1,455	2,408	6,436
Other millwork, including flooring	0	3,288	4,649	13,811
Wood container and pallet manufacturing	0	6,582	7,640	20,646
Manufactured home (mobile home) manufacturing	0	37	65	147
Prefabricated wood building manufacturing	0	1,319	1,493	3,726
All other miscellaneous wood product manufacturing	0	3,971	4,857	14,816
Pulp mills	0	472	774	2,854
Paper mills	0	18,852	45,333	141,112
Paperboard mills	0	3,737	9,462	30,422
Paperboard container manufacturing	0	21,505	32,600	139,322
Paper bag and coated and treated paper manufacturing	0	7,367	13,021	44,164
Stationery product manufacturing	0	2,374	3,327	11,947
Sanitary paper product manufacturing	0	4,472	13,990	41,035
All other converted paper product manufacturing	0	3,140	4,377	14,081
Printing	1	78,953	150,277	267,272
Support activities for printing	0	2,593	5,001	6,494
Petroleum refineries	0	12,343	120,427	460,917
Asphalt paving mixture and block manufacturing	0	1,084	1,916	10,028
Asphalt shingle and coating materials manufacturing	0	1,035	3,714	9,607
Petroleum lubricating oil and grease manufacturing	0	1,573	6,934	16,070

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	979	6,500	48,562
Industrial gas manufacturing	0	2,621	5,473	22,352
Synthetic dye and pigment manufacturing	0	3,171	5,696	17,743
Other basic inorganic chemical manufacturing	0	4,373	7,865	27,349
Other basic organic chemical manufacturing	0	3,092	5,517	44,768
Plastics material and resin manufacturing	0	6,590	10,099	77,757
Synthetic rubber manufacturing	0	19,078	26,951	107,044
Artificial and synthetic fibers and filaments manufacturing	0	14,863	20,659	100,429
Nitrogenous fertilizer manufacturing	0	81	137	593
Phosphatic fertilizer manufacturing	0	29	54	263
Fertilizer mixing	0	159	205	976
Pesticide and other agricultural chemical manufacturing	0	8,311	21,411	77,965
Medicinal and botanical manufacturing	0	368	545	2,385
Pharmaceutical preparation manufacturing	0	6,574	20,143	71,208
In-vitro diagnostic substance manufacturing	0	156	215	553
Biological product (except diagnostic) manufacturing	0	39	76	202
Paint and coating manufacturing	0	1,897	3,021	12,308
Adhesive manufacturing	0	968	1,357	5,235
Soap and other detergent manufacturing	0	4,614	11,282	40,638
Polish and other sanitation good manufacturing	0	2,298	3,319	14,431
Surface active agent manufacturing	0	706	1,772	5,605
Toilet preparation manufacturing	0	9,672	23,427	76,816
Printing ink manufacturing	0	680	729	2,865
Explosives manufacturing	0	1,014	1,146	4,134
Custom compounding of purchased resins	0	5,239	8,292	36,090
Photographic film and chemical manufacturing	0	432	697	3,651
Other miscellaneous chemical product manufacturing	0	3,246	4,373	16,357

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	5,227	9,364	29,811
Unlaminated plastics profile shape manufacturing	0	5,376	13,187	34,448
Plastics pipe and pipe fitting manufacturing	0	2,033	5,392	15,391
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,312	2,722	6,905
Polystyrene foam product manufacturing	0	1,875	3,233	10,610
Urethane and other foam product (except polystyrene) manufacturing	0	2,058	3,564	14,825
Plastics bottle manufacturing	0	1,624	2,975	10,167
Other plastics product manufacturing	0	23,472	37,139	118,987
Tire manufacturing	0	16,929	25,126	96,592
Rubber and plastics hoses and belting manufacturing	0	2,669	4,687	12,292
Other rubber product manufacturing	0	9,383	15,249	49,669
Pottery, ceramics, and plumbing fixture manufacturing	0	1,736	2,207	4,694
Brick, tile, and other structural clay product manufacturing	0	3,501	5,950	14,345
Flat glass manufacturing	0	1,424	2,775	6,465
Other pressed and blown glass and glassware manufacturing	0	2,697	3,855	8,248
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	2,839	4,636	12,727
Cement manufacturing	0	1,018	2,308	6,677
Ready-mix concrete manufacturing	0	6,660	10,679	39,419
Concrete block and brick manufacturing	0	2,920	5,105	13,417
Concrete pipe manufacturing	0	305	485	1,493
Other concrete product manufacturing	0	5,756	8,120	19,073
Lime manufacturing	0	942	2,184	6,982
Gypsum product manufacturing	0	2,404	5,822	20,181
Abrasive product manufacturing	0	310	895	1,685
Cut stone and stone product manufacturing	0	2,776	3,186	7,151

## APPENDIX

Ground or treated mineral and earth manufacturing	0	2,764	7,607	17,105
Mineral wool manufacturing	0	538	1,180	3,245
Miscellaneous nonmetallic mineral products manufacturing	0	114	267	651
Iron and steel mills and ferroalloy manufacturing	0	3,898	6,966	39,344
Iron, steel pipe and tube manufacturing from purchased steel	0	1,091	1,656	4,694
Rolled steel shape manufacturing	0	1,941	4,249	16,829
Steel wire drawing	0	273	437	1,603
Alumina refining and primary aluminum production	0	687	1,466	6,510
Secondary smelting and alloying of aluminum	0	760	1,313	9,919
Aluminum sheet, plate, and foil manufacturing	0	9,623	18,396	51,509
Other aluminum rolling, drawing and extruding	0	751	1,101	5,088
Nonferrous metal (exc aluminum) smelting and refining	0	87	396	1,114
Copper rolling, drawing, extruding and alloying	0	1,427	2,080	16,746
Nonferrous metal, except copper and aluminum, shaping	0	1,410	1,901	7,537
Secondary processing of other nonferrous metals	0	280	1,044	4,071
Ferrous metal foundries	0	2,021	3,784	7,860
Nonferrous metal foundries	0	3,655	5,655	11,531
Custom roll forming	0	162	253	1,522
Crown and closure manufacturing and metal stamping	0	6,968	10,034	29,281
Iron and steel forging	0	7,909	10,824	36,215
Nonferrous forging	0	641	807	2,814
Cutlery, utensil, pot, and pan manufacturing	0	4,524	13,509	28,598
Handtool manufacturing	0	1,649	2,662	5,134
Prefabricated metal buildings and components manufacturing	0	1,302	1,838	4,903
Fabricated structural metal manufacturing	0	7,203	10,543	31,613
Plate work manufacturing	0	2,893	2,985	7,038
Metal window and door manufacturing	0	2,171	3,309	8,502

## APPENDIX

Sheet metal work manufacturing	0	10,786	13,727	32,795
Ornamental and architectural metal work manufacturing	0	1,947	2,512	6,406
Power boiler and heat exchanger manufacturing	0	322	450	1,226
Metal tank (heavy gauge) manufacturing	0	666	817	2,305
Metal cans manufacturing	0	1,087	2,463	10,985
Metal barrels, drums and pails manufacturing	0	325	405	1,917
Hardware manufacturing	0	812	1,354	4,876
Spring and wire product manufacturing	0	1,945	2,655	8,339
Machine shops	0	9,922	11,334	22,526
Turned product and screw, nut, and bolt manufacturing	0	4,182	5,802	14,111
Metal heat treating	0	1,153	1,778	4,460
Metal coating and nonprecious engraving	0	3,440	5,859	14,101
Electroplating, anodizing, and coloring metal	0	2,148	2,402	5,745
Valve and fittings, other than plumbing, manufacturing	0	2,142	3,478	9,150
Plumbing fixture fitting and trim manufacturing	0	2,470	7,764	26,257
Ball and roller bearing manufacturing	0	1,727	3,215	8,405
Small arms ammunition manufacturing	0	186	403	688
Ammunition, except for small arms, manufacturing	0	5,001	6,148	11,313
Small arms, ordnance, and accessories manufacturing	0	1,055	2,537	5,222
Fabricated pipe and pipe fitting manufacturing	0	1,047	1,226	3,449
Other fabricated metal manufacturing	0	2,169	2,836	6,949
Farm machinery and equipment manufacturing	0	238	352	1,281
Lawn and garden equipment manufacturing	0	2,095	4,019	16,592
Construction machinery manufacturing	0	237	500	1,401
Mining machinery and equipment manufacturing	0	21	26	81

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	13	15	56
Semiconductor machinery manufacturing	0	16	19	80
Food product machinery manufacturing	0	6	7	21
Sawmill, woodworking, and paper machinery	0	123	137	389
Printing machinery and equipment manufacturing	0	13	14	71
All other industrial machinery manufacturing	0	104	136	369
Optical instrument and lens manufacturing	0	2	3	9
Photographic and photocopying equipment manufacturing	0	68	105	302
Other commercial service industry machinery manufacturing	0	555	1,068	3,185
Air purification and ventilation equipment manufacturing	0	219	330	848
Heating equipment (except warm air furnaces) manufacturing	0	1,135	1,757	4,929
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	5,265	10,457	31,561
Industrial mold manufacturing	0	170	195	392
Special tool, die, jig, and fixture manufacturing	0	639	820	1,543
Cutting tool and machine tool accessory manufacturing	0	305	335	691
Machine tool manufacturing	0	53	59	159
Rolling mill and other metalworking machinery manufacturing	0	86	107	223
Turbine and turbine generator set units manufacturing	0	4	5	11
Speed changer, industrial high-speed drive, and gear manufacturing	0	299	457	1,197
Mechanical power transmission equipment manufacturing	0	388	588	1,737
Other engine equipment manufacturing	0	3,732	7,492	26,623
Pump and pumping equipment manufacturing	0	85	152	426

## APPENDIX

Air and gas compressor manufacturing	0	17	26	109
Elevator and moving stairway manufacturing	0	181	297	937
Conveyor and conveying equipment manufacturing	0	158	166	451
Overhead cranes, hoists, and monorail systems manufacturing	0	3	4	21
Industrial truck, trailer, and stacker manufacturing	0	138	225	708
Power-driven handtool manufacturing	0	242	671	1,962
Welding and soldering equipment manufacturing	0	132	178	462
Packaging machinery manufacturing	0	13	20	59
Industrial process furnace and oven manufacturing	0	22	28	70
Fluid power cylinder and actuator manufacturing	0	257	365	1,059
Fluid power pump and motor manufacturing	0	346	552	1,589
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	215	283	773
Electronic computer manufacturing	0	937	2,286	7,489
Computer storage device manufacturing	0	70	230	1,504
Computer terminals and other computer peripheral equipment manufacturing	1	109,766	233,355	821,792
Telephone apparatus manufacturing	0	92	181	502
Broadcast and wireless communications equipment manufacturing	0	19	31	104
Other communications equipment manufacturing	0	17	32	125
Audio and video equipment manufacturing	0	165	331	1,203
Printed circuit assembly (electronic assembly) manufacturing	0	8,607	13,702	36,147
Bare printed circuit board manufacturing	0	(40)	(34)	185

## APPENDIX

Semiconductor and related device manufacturing	0	49	162	1,590
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	1,656	2,460	6,172
Electronic connector manufacturing	0	2,274	3,623	9,641
Other electronic component manufacturing	0	812	981	3,776
Electromedical and electrotherapeutic apparatus manufacturing	0	175	399	856
Search, detection, and navigation instruments manufacturing	0	(0)	(0)	1
Automatic environmental control manufacturing	0	2,166	3,009	6,864
Industrial process variable instruments manufacturing	0	165	256	583
Totalizing fluid meter and counting device manufacturing	0	28	65	136
Electricity and signal testing instruments manufacturing	0	1,918	3,010	10,920
Analytical laboratory instrument manufacturing	2	202,021	381,985	823,835
Irradiation apparatus manufacturing	0	27	60	157
Watch, clock, and other measuring and controlling device manufacturing	0	193	361	838
Blank magnetic and optical recording media manufacturing	0	374	1,184	4,188
Software and other prerecorded and record reproducing	0	289	491	1,961
Electric lamp bulb and part manufacturing	0	22	32	172
Lighting fixture manufacturing	0	3,791	6,742	13,618
Small electrical appliance manufacturing	0	3,224	8,426	18,729
Household cooking appliance manufacturing	0	6,192	18,878	40,108
Household refrigerator and home freezer manufacturing	0	6,494	24,688	48,748
Household laundry equipment manufacturing	0	13,477	36,269	107,056



## APPENDIX

Other major household appliance manufacturing	0	2,350	8,117	15,558
Power, distribution, and specialty transformer manufacturing	0	1,080	1,885	4,862
Motor and generator manufacturing	0	1,066	1,984	5,572
Switchgear and switchboard apparatus manufacturing	0	3,666	7,354	15,324
Relay and industrial control manufacturing	0	220	332	1,008
Storage battery manufacturing	0	3,372	6,429	14,250
Primary battery manufacturing	0	10,485	36,644	77,913
Fiber optic cable manufacturing	0	304	582	2,881
Other communication and energy wire manufacturing	0	95	210	928
Wiring device manufacturing	0	1,770	4,482	11,233
Carbon and graphite product manufacturing	0	358	584	1,358
All other miscellaneous electrical equipment and component manufacturing	0	29,262	35,303	110,150
Automobile manufacturing	0	20,911	60,414	324,086
Light truck and utility vehicle manufacturing	0	252	589	3,734
Heavy duty truck manufacturing	0	2	4	21
Motor vehicle body manufacturing	0	635	787	3,493
Truck trailer manufacturing	0	29	34	136
Motor home manufacturing	0	873	1,388	6,134
Travel trailer and camper manufacturing	0	5,892	6,331	30,293
Motor vehicle gasoline engine and engine parts manufacturing	0	14,947	19,711	110,136
Motor vehicle electrical and electronic equipment manufacturing	0	22,804	27,724	141,743
Motor vehicle transmission and power train parts manufacturing	0	15,245	21,354	147,516
Motor vehicle seating and interior trim manufacturing	0	4,508	5,498	38,332
Motor vehicle metal stamping	0	24,260	29,858	121,698
Other motor vehicle parts manufacturing	0	32,109	43,648	228,790
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	14,080	19,423	91,161

## APPENDIX

Aircraft manufacturing	0	48	58	330
Aircraft engine and engine parts manufacturing	0	2	2	6
Other aircraft parts and auxiliary equipment manufacturing	0	14,207	16,367	40,439
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	83	88	641
Ship building and repairing	0	820	855	1,939
Boat building	0	15,844	17,895	60,409
Motorcycle, bicycle, and parts manufacturing	0	538	505	1,607
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	1,522	1,935	9,284
Wood kitchen cabinet and countertop manufacturing	0	5,386	6,285	15,503
Upholstered household furniture manufacturing	0	7,801	9,333	30,585
Nonupholstered wood household furniture manufacturing	0	1,706	1,779	5,086
Other household nonupholstered furniture manufacturing	0	561	716	2,080
Institutional furniture manufacturing	0	200	211	748
Wood office furniture manufacturing	0	818	975	3,714
Custom architectural woodwork and millwork	0	72	69	213
Office furniture, except wood, manufacturing	1	61,365	81,319	324,369
Showcase, partition, shelving, and locker manufacturing	0	2,865	3,408	9,469
Mattress manufacturing	0	1,103	1,685	7,663
Blind and shade manufacturing	0	62	64	254
Surgical and medical instrument manufacturing	0	958	2,057	4,216
Surgical appliance and supplies manufacturing	0	15,477	33,249	62,387

## APPENDIX

Dental equipment and supplies manufacturing	0	75	139	394
Ophthalmic goods manufacturing	0	617	1,384	2,681
Dental laboratories	0	2,861	2,785	4,775
Jewelry and silverware manufacturing	0	1,323	2,023	5,663
Sporting and athletic goods manufacturing	0	1,869	2,699	7,117
Doll, toy, and game manufacturing	0	1,347	2,264	6,935
Office supplies (except paper) manufacturing	0	4,591	6,412	16,521
Sign manufacturing	0	6,077	5,433	13,170
Gasket, packing, and sealing device manufacturing	0	1,073	1,407	3,496
Musical instrument manufacturing	0	1,438	1,462	3,100
Fasteners, buttons, needles, and pins manufacturing	0	554	697	1,651
Broom, brush, and mop manufacturing	0	2,178	3,536	8,474
Burial casket manufacturing	0	1,233	1,491	2,514
All other miscellaneous manufacturing	0	1,744	2,143	6,495
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	25,234	65,827	133,089
Wholesale - Professional and commercial equipment and supplies	2	205,436	381,066	647,476
Wholesale - Household appliances and electrical and electronic goods	1	95,350	242,598	478,304
Wholesale - Machinery, equipment, and supplies	1	62,515	118,737	200,388
Wholesale - Other durable goods merchant wholesalers	2	159,471	270,245	505,433
Wholesale - Drugs and druggists' sundries	1	87,745	281,664	564,303
Wholesale - Grocery and related product wholesalers	2	154,133	223,464	411,863
Wholesale - Petroleum and petroleum products	0	21,175	348,037	392,471
Wholesale - Other nondurable goods merchant wholesalers	3	226,048	500,768	880,021
Wholesale - Wholesale electronic markets and agents and brokers	3	331,325	198,051	223,285
Retail - Motor vehicle and parts dealers	2	150,388	228,676	322,690

## APPENDIX

Retail - Furniture and home furnishings stores	2	82,502	107,811	166,129
Retail - Electronics and appliance stores	2	97,404	99,194	157,048
Retail - Building material and garden equipment and supplies stores	2	83,318	148,871	216,262
Retail - Food and beverage stores	7	223,691	307,107	509,639
Retail - Health and personal care stores	4	178,332	211,517	312,769
Retail - Gasoline stores	2	80,256	139,144	256,524
Retail - Clothing and clothing accessories stores	4	113,093	171,507	340,204
Retail - Sporting goods, hobby, musical instrument and book stores	2	64,579	86,093	136,337
Retail - General merchandise stores	8	250,640	360,790	571,775
Retail - Miscellaneous store retailers	4	131,304	154,821	237,836
Retail - Nonstore retailers	5	175,714	420,295	772,735
Air transportation	1	47,276	171,235	248,407
Rail transportation	0	34,640	88,031	160,807
Water transportation	0	17,496	32,220	125,007
Truck transportation	7	462,213	547,975	1,159,068
Transit and ground passenger transportation	4	90,556	103,129	158,488
Pipeline transportation	0	89,891	75,784	83,758
Scenic and sightseeing transportation and support activities for transportation	2	162,744	183,038	376,679
Couriers and messengers	2	144,997	182,483	261,330
Warehousing and storage	4	184,131	205,778	425,732
Newspaper publishers	1	34,775	55,326	76,066
Periodical publishers	0	31,489	46,695	78,308
Book publishers	0	18,860	57,905	88,170
Directory, mailing list, and other publishers	2	81,075	247,828	404,179
Greeting card publishing	0	11,138	40,509	58,278
Software publishers	2	235,435	555,840	700,866
Motion picture and video industries	1	95,845	147,421	342,775
Sound recording industries	0	32,328	133,302	163,561
Radio and television broadcasting	1	109,782	58,127	379,002

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Cable and other subscription programming	0	97,388	483,017	739,930
Wired telecommunications carriers	1	133,262	266,440	638,438
Wireless telecommunications carriers (except satellite)	0	43,322	161,179	602,808
Satellite, telecommunications resellers, and all other telecommunications	0	10,681	13,867	48,149
Data processing, hosting, and related services	2	215,682	457,977	968,905
News syndicates, libraries, archives and all other information services	0	15,505	23,499	46,003
Internet publishing and broadcasting and web search portals	0	39,328	109,227	395,040
Nondepository credit intermediation and related activities	5	389,266	522,186	944,829
Securities and commodity contracts intermediation and brokerage	2	278,696	276,044	541,166
Monetary authorities and depository credit intermediation	6	574,088	1,283,808	2,251,481
Other financial investment activities	6	198,718	230,578	723,166
Direct life insurance carriers	1	93,181	208,064	284,593
Insurance carriers, except direct life	2	228,726	890,743	1,726,637
Insurance agencies, brokerages, and related activities	19	1,499,676	2,366,725	4,906,227
Funds, trusts, and other financial vehicles	2	67,033	102,115	512,454
Other real estate	21	751,552	1,670,895	4,049,054
Tenant-occupied housing	3	98,056	801,139	920,091
Owner-occupied dwellings	0	0	2,739,857	3,461,778
Automotive equipment rental and leasing	2	110,797	348,436	534,393
General and consumer goods rental except video tapes and discs	1	55,853	70,133	115,706
Video tape and disc rental	0	12,338	19,993	31,633
Commercial and industrial machinery and equipment rental and leasing	2	157,080	357,776	589,969
Lessors of nonfinancial intangible assets	0	6,111	110,609	142,504

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Legal services	6	436,451	753,099	1,144,470
Accounting, tax preparation, bookkeeping, and payroll services	4	460,425	613,043	777,577
Architectural, engineering, and related services	5	424,893	496,130	898,215
Specialized design services	2	105,843	115,736	143,827
Custom computer programming services	2	147,054	181,080	269,138
Computer systems design services	2	168,806	182,405	250,416
Other computer related services, including facilities management	0	32,720	64,877	110,047
Management consulting services	14	1,147,129	1,144,777	1,812,867
Environmental and other technical consulting services	1	99,754	84,919	125,591
Scientific research and development services	57	4,637,582	6,247,959	13,466,920
Advertising, public relations, and related services	3	219,379	294,948	505,636
Photographic services	1	48,008	14,494	33,145
Veterinary services	1	33,491	45,827	74,445
Marketing research and all other miscellaneous professional, scientific, and technical services	4	264,192	246,087	360,422
Management of companies and enterprises	11	1,210,318	1,518,778	2,201,271
Office administrative services	3	243,406	82,641	205,891
Facilities support services	7	301,924	399,605	1,006,706
Employment services	20	718,065	1,113,312	1,850,580
Business support services	16	717,594	618,588	1,076,768
Travel arrangement and reservation services	1	39,078	51,787	125,470
Investigation and security services	3	116,824	121,537	179,477
Services to buildings	6	194,959	205,808	319,098
Landscape and horticultural services	29	983,346	1,055,952	1,736,098
Other support services	3	274,956	355,830	542,986
Waste management and remediation services	1	80,363	164,316	272,096
Elementary and secondary schools	2	101,101	88,531	107,732
Junior colleges, colleges, universities, and professional schools	3	148,524	204,199	292,690
Other educational services	3	74,170	69,136	138,682
Offices of physicians	8	964,534	1,066,050	1,561,607
Offices of dentists	3	202,166	228,478	339,695

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Offices of other health practitioners	3	262,229	246,962	305,228
Outpatient care centers	3	199,250	206,675	362,606
Medical and diagnostic laboratories	1	77,105	100,438	162,143
Home health care services	4	294,759	225,505	274,077
Other ambulatory health care services	1	69,539	73,267	113,960
Hospitals	14	2,108,231	2,024,258	3,194,147
Nursing and community care facilities	6	240,450	258,860	442,630
Residential mental retardation, mental health, substance abuse and other facilities	2	83,327	87,650	132,359
Individual and family services	5	158,039	135,415	204,883
Child day care services	4	82,526	90,930	131,553
Community food, housing, and other relief services, including rehabilitation services	1	41,620	44,452	100,439
Performing arts companies	0	46,490	81,202	98,510
Commercial Sports Except Racing	1	93,328	97,526	124,564
Racing and Track Operation	0	7,911	11,920	18,157
Independent artists, writers, and performers	2	143,883	160,847	171,540
Promoters of performing arts and sports and agents for public figures	1	42,225	97,680	140,959
Museums, historical sites, zoos, and parks	0	12,426	15,667	27,753
Amusement parks and arcades	0	5,254	18,268	21,960
Gambling industries (except casino hotels)	1	49,487	86,992	144,659
Other amusement and recreation industries	2	42,190	59,596	100,207
Fitness and recreational sports centers	1	27,089	46,714	68,957
Bowling centers	0	4,813	7,852	13,074
Hotels and motels, including casino hotels	2	69,649	135,275	208,752
Other accommodations	0	18,763	24,741	33,178
Full-service restaurants	17	422,038	620,089	1,073,831
Limited-service restaurants	14	298,266	465,748	1,014,583
All other food and drinking places	8	271,103	360,780	522,132
Automotive repair and maintenance, except car washes	4	219,207	277,569	398,143
Car washes	2	111,272	170,203	246,417

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Electronic and precision equipment repair and maintenance	33	2,263,015	3,160,536	5,192,198
Commercial and industrial machinery and equipment repair and maintenance	1	95,481	116,214	177,836
Personal and household goods repair and maintenance	2	103,933	86,391	110,141
Personal care services	4	113,201	94,876	122,758
Death care services	0	11,643	15,043	24,541
Dry-cleaning and laundry services	1	31,158	35,017	50,017
Other personal services	3	100,983	88,876	118,950
Religious organizations	4	194,162	89,865	365,818
Grantmaking, giving, and social advocacy organizations	1	43,728	124,766	198,210
Business and professional associations	1	76,091	114,446	223,719
Labor and civic organizations	2	35,908	83,307	178,093
Private households	2	37,870	37,870	37,870
Postal service	2	144,748	144,932	160,416
Federal electric utilities	1	214,178	473,155	1,658,650
Other federal government enterprises	84	5,230,513	(1,897,187)	8,086,347
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	7,185	8,123	14,719
Local government passenger transit	0	11,823	(9,418)	4,167
Local government electric utilities	1	118,649	281,957	607,497
Other local government enterprises	2	196,887	365,780	750,580
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0



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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	58	9,269,805	11,874,187	23,594,812

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 456: Detailed M2M Program Impacts by Types of Impact, Tennessee.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>58</i>	<i>5,737,426</i>	<i>7,846,686</i>	<i>15,010,975</i>
Oilseed farming	0	(81)	7,022	23,636
Grain farming	0	79	1,818	8,535
Vegetable and melon farming	0	(45)	377	2,334
Fruit farming	0	(31)	64	362
Tree nut farming	0	20	24	103
Greenhouse, nursery, and floriculture production	0	290	622	2,411
Tobacco farming	0	552	1,349	5,008
Cotton farming	0	48	125	490
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	110	284	1,255
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(213)	930	4,513
Dairy cattle and milk production	0	(20)	130	1,247
Poultry and egg production	0	70	204	3,952
Animal production, except cattle and poultry and eggs	0	(23)	1,289	3,162
Forestry, forest products, and timber tract production	0	98	103	129
Commercial logging	0	672	661	1,005
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	18	50	234
Support activities for agriculture and forestry	0	2,369	1,813	2,318
Oil and gas extraction	0	53	108	6,526
Coal mining	0	30	42	132
Copper, nickel, lead, and zinc mining	0	2,473	5,709	13,457
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	590	462	1,219
Sand and gravel mining	0	561	339	454
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	36	25	62
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	1	1	6
Metal mining services	0	1	1	52
Other nonmetallic minerals services	0	0	1	5
Electric power generation - Hydroelectric	0	43	169	232
Electric power generation - Fossil fuel	0	22	108	207
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	13	40	56
Electric power generation - Wind	0	7	285	1,341
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	48	229	689
Electric power generation - All other	0	36	18	40
Electric power transmission and distribution	0	1,968	10,932	25,523
Natural gas distribution	0	1,087	4,197	7,165
Water, sewage and other systems	0	419	1,210	2,620
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	11,720	12,736	31,706
Maintenance and repair construction of residential structures	0	8,554	9,939	25,317
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	28	15	37
Dog and cat food manufacturing	0	858	3,664	5,804
Other animal food manufacturing	0	207	379	2,367
Flour milling	0	304	656	3,781
Rice milling	0	181	322	1,512
Malt manufacturing	0	0	0	0
Wet corn milling	0	1,170	3,671	19,568
Soybean and other oilseed processing	0	276	1,754	11,417
Fats and oils refining and blending	0	50	99	792
Breakfast cereal manufacturing	0	1,044	2,813	6,433
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	29	56	283
Nonchocolate confectionery manufacturing	0	589	881	2,819
Chocolate and confectionery manufacturing from cacao beans	0	89	124	638
Confectionery manufacturing from purchased chocolate	0	951	1,370	4,339
Frozen fruits, juices and vegetables manufacturing	0	719	1,413	4,578
Frozen specialties manufacturing	0	1,227	1,908	6,052
Canned fruits and vegetables manufacturing	0	917	1,734	4,615

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Canned specialties	0	48	74	259
Dehydrated food products manufacturing	0	22	24	51
Cheese manufacturing	0	1,012	1,510	14,624
Dry, condensed, and evaporated dairy product manufacturing	0	52	104	527
Fluid milk manufacturing	0	727	1,210	6,983
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	193	310	1,047
Frozen cakes and other pastries manufacturing	0	732	1,042	1,813
Poultry processing	0	2,269	3,280	14,385
Animal, except poultry, slaughtering	0	1,713	2,423	19,099
Meat processed from carcasses	0	1,800	1,945	13,394
Rendering and meat byproduct processing	0	85	86	402
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	3,975	4,784	9,214
Cookie and cracker manufacturing	0	2,078	3,251	8,489
Dry pasta, mixes, and dough manufacturing	0	276	542	1,819
Tortilla manufacturing	0	159	188	509
Roasted nuts and peanut butter manufacturing	0	231	261	1,069
Other snack food manufacturing	0	907	2,214	6,939
Coffee and tea manufacturing	0	403	709	2,778
Flavoring syrup and concentrate manufacturing	0	32	111	255
Mayonnaise, dressing, and sauce manufacturing	0	214	393	1,444
Spice and extract manufacturing	0	70	80	269
All other food manufacturing	0	903	1,176	3,859
Bottled and canned soft drinks & water	0	1,559	3,674	16,870
Manufactured ice	0	58	36	155
Breweries	0	276	784	3,447
Wineries	0	63	120	701
Distilleries	0	1,527	7,646	18,084
Tobacco product manufacturing	0	1,044	27,486	41,889
Fiber, yarn, and thread mills	0	412	752	2,141
Broadwoven fabric mills	0	20	35	94

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Narrow fabric mills and schiffli machine embroidery	0	32	38	106
Nonwoven fabric mills	0	739	1,653	3,785
Knit fabric mills	0	58	87	230
Textile and fabric finishing mills	0	86	121	394
Fabric coating mills	0	56	78	275
Carpet and rug mills	0	29	61	167
Curtain and linen mills	0	32	53	188
Textile bag and canvas mills	0	127	173	453
Rope, cordage, twine, tire cord and tire fabric mills	0	163	327	803
Other textile product mills	0	157	208	541
Hosiery and sock mills	0	118	114	274
Other apparel knitting mills	0	13	19	50
Cut and sew apparel contractors	0	125	126	255
Mens and boys cut and sew apparel manufacturing	0	550	517	1,474
Womens and girls cut and sew apparel manufacturing	0	32	39	220
Other cut and sew apparel manufacturing	0	48	51	157
Apparel accessories and other apparel manufacturing	0	28	32	92
Leather and hide tanning and finishing	0	10	8	70
Footwear manufacturing	0	51	52	206
Other leather and allied product manufacturing	0	12	11	49
Sawmills	0	469	676	2,659
Wood preservation	0	19	52	206
Veneer and plywood manufacturing	0	26	40	171
Engineered wood member and truss manufacturing	0	69	95	263
Reconstituted wood product manufacturing	0	59	159	443
Wood windows and door manufacturing	0	488	700	1,700
Cut stock, resawing lumber, and planing	0	104	184	465
Other millwork, including flooring	0	217	320	895
Wood container and pallet manufacturing	0	526	629	1,659
Manufactured home (mobile home) manufacturing	0	2	4	10

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Prefabricated wood building manufacturing	0	96	110	276
All other miscellaneous wood product manufacturing	0	216	279	773
Pulp mills	0	34	53	201
Paper mills	0	1,455	3,067	10,429
Paperboard mills	0	288	691	2,305
Paperboard container manufacturing	0	2,193	3,240	13,743
Paper bag and coated and treated paper manufacturing	0	637	1,040	3,614
Stationery product manufacturing	0	259	339	1,107
Sanitary paper product manufacturing	0	431	1,219	3,761
All other converted paper product manufacturing	0	327	434	1,397
Printing	0	5,985	11,374	19,458
Support activities for printing	0	189	358	461
Petroleum refineries	0	1,010	8,830	34,485
Asphalt paving mixture and block manufacturing	0	98	168	808
Asphalt shingle and coating materials manufacturing	0	66	223	580
Petroleum lubricating oil and grease manufacturing	0	176	736	1,657
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	67	438	3,288
Industrial gas manufacturing	0	182	402	1,576
Synthetic dye and pigment manufacturing	0	294	539	1,800
Other basic inorganic chemical manufacturing	0	346	661	2,229
Other basic organic chemical manufacturing	0	208	374	3,129
Plastics material and resin manufacturing	0	462	722	5,821
Synthetic rubber manufacturing	0	1,628	2,308	9,516
Artificial and synthetic fibers and filaments manufacturing	0	2,550	3,439	16,778
Nitrogenous fertilizer manufacturing	0	5	10	39
Phosphatic fertilizer manufacturing	0	1	2	12
Fertilizer mixing	0	7	10	45

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Pesticide and other agricultural chemical manufacturing	0	674	1,774	6,388
Medicinal and botanical manufacturing	0	72	116	428
Pharmaceutical preparation manufacturing	0	1,302	4,220	13,441
In-vitro diagnostic substance manufacturing	0	48	66	169
Biological product (except diagnostic) manufacturing	0	10	20	48
Paint and coating manufacturing	0	166	282	1,132
Adhesive manufacturing	0	111	167	596
Soap and other detergent manufacturing	0	467	1,397	4,188
Polish and other sanitation good manufacturing	0	265	442	1,590
Surface active agent manufacturing	0	51	149	426
Toilet preparation manufacturing	0	1,461	4,034	12,006
Printing ink manufacturing	0	62	67	257
Explosives manufacturing	0	65	74	273
Custom compounding of purchased resins	0	469	798	3,437
Photographic film and chemical manufacturing	0	27	47	226
Other miscellaneous chemical product manufacturing	0	247	351	1,330
Plastics packaging materials and unlaminated film and sheet manufacturing	0	494	875	2,730
Unlaminated plastics profile shape manufacturing	0	258	625	1,607
Plastics pipe and pipe fitting manufacturing	0	135	364	1,038
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	88	183	461
Polystyrene foam product manufacturing	0	168	285	932
Urethane and other foam product (except polystyrene) manufacturing	0	219	373	1,543
Plastics bottle manufacturing	0	207	375	1,258
Other plastics product manufacturing	0	1,863	2,938	8,939
Tire manufacturing	0	1,111	1,674	6,806

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Rubber and plastics hoses and belting manufacturing	0	228	391	1,008
Other rubber product manufacturing	0	622	1,002	3,353
Pottery, ceramics, and plumbing fixture manufacturing	0	109	132	301
Brick, tile, and other structural clay product manufacturing	0	162	263	667
Flat glass manufacturing	0	109	200	492
Other pressed and blown glass and glassware manufacturing	0	236	333	716
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	231	367	1,010
Cement manufacturing	0	56	123	362
Ready-mix concrete manufacturing	0	402	627	2,291
Concrete block and brick manufacturing	0	163	273	724
Concrete pipe manufacturing	0	21	33	104
Other concrete product manufacturing	0	324	449	1,061
Lime manufacturing	0	49	116	381
Gypsum product manufacturing	0	50	120	411
Abrasive product manufacturing	0	30	83	160
Cut stone and stone product manufacturing	0	251	285	630
Ground or treated mineral and earth manufacturing	0	147	393	909
Mineral wool manufacturing	0	37	77	212
Miscellaneous nonmetallic mineral products manufacturing	0	9	20	47
Iron and steel mills and ferroalloy manufacturing	0	256	429	2,598
Iron, steel pipe and tube manufacturing from purchased steel	0	80	112	313
Rolled steel shape manufacturing	0	98	202	880
Steel wire drawing	0	30	41	160
Alumina refining and primary aluminum production	0	79	155	667
Secondary smelting and alloying of aluminum	0	71	102	797
Aluminum sheet, plate, and foil manufacturing	0	572	1,004	3,056



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Other aluminum rolling, drawing and extruding	0	77	103	495
Nonferrous metal (exc aluminum) smelting and refining	0	4	15	45
Copper rolling, drawing, extruding and alloying	0	78	109	852
Nonferrous metal, except copper and aluminum, shaping	0	94	119	504
Secondary processing of other nonferrous metals	0	14	36	173
Ferrous metal foundries	0	167	268	611
Nonferrous metal foundries	0	418	587	1,239
Custom roll forming	0	13	20	112
Crown and closure manufacturing and metal stamping	0	376	543	1,550
Iron and steel forging	0	361	495	1,615
Nonferrous forging	0	32	40	133
Cutlery, utensil, pot, and pan manufacturing	0	505	1,602	3,213
Handtool manufacturing	0	214	347	669
Prefabricated metal buildings and components manufacturing	0	66	93	248
Fabricated structural metal manufacturing	0	153	224	670
Plate work manufacturing	0	212	219	499
Metal window and door manufacturing	0	162	247	624
Sheet metal work manufacturing	0	472	602	1,391
Ornamental and architectural metal work manufacturing	0	115	149	368
Power boiler and heat exchanger manufacturing	0	30	43	119
Metal tank (heavy gauge) manufacturing	0	32	39	109
Metal cans manufacturing	0	99	229	1,007
Metal barrels, drums and pails manufacturing	0	26	32	142
Hardware manufacturing	0	59	99	346
Spring and wire product manufacturing	0	213	289	886
Machine shops	0	796	910	1,773
Turned product and screw, nut, and bolt manufacturing	0	393	543	1,274
Metal heat treating	0	104	160	401

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Metal coating and nonprecious engraving	0	282	480	1,156
Electroplating, anodizing, and coloring metal	0	217	243	571
Valve and fittings, other than plumbing, manufacturing	0	169	272	718
Plumbing fixture fitting and trim manufacturing	0	145	463	1,510
Ball and roller bearing manufacturing	0	133	246	625
Small arms ammunition manufacturing	0	12	27	46
Ammunition, except for small arms, manufacturing	0	468	576	1,062
Small arms, ordnance, and accessories manufacturing	0	129	304	586
Fabricated pipe and pipe fitting manufacturing	0	59	69	195
Other fabricated metal manufacturing	0	204	267	622
Farm machinery and equipment manufacturing	0	17	27	85
Lawn and garden equipment manufacturing	0	125	236	888
Construction machinery manufacturing	0	30	65	175
Mining machinery and equipment manufacturing	0	1	1	2
Oil and gas field machinery and equipment manufacturing	0	1	1	2
Semiconductor machinery manufacturing	0	1	1	6
Food product machinery manufacturing	0	1	1	4
Sawmill, woodworking, and paper machinery	0	13	14	37
Printing machinery and equipment manufacturing	0	1	1	6
All other industrial machinery manufacturing	0	15	20	53
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	7	12	32

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Other commercial service industry machinery manufacturing	0	48	99	282
Air purification and ventilation equipment manufacturing	0	11	17	41
Heating equipment (except warm air furnaces) manufacturing	0	137	219	542
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	475	950	2,810
Industrial mold manufacturing	0	12	14	27
Special tool, die, jig, and fixture manufacturing	0	66	85	155
Cutting tool and machine tool accessory manufacturing	0	26	29	59
Machine tool manufacturing	0	6	6	17
Rolling mill and other metalworking machinery manufacturing	0	10	12	25
Turbine and turbine generator set units manufacturing	0	0	0	1
Speed changer, industrial high-speed drive, and gear manufacturing	0	26	41	99
Mechanical power transmission equipment manufacturing	0	25	39	113
Other engine equipment manufacturing	0	508	1,004	3,316
Pump and pumping equipment manufacturing	0	8	15	39
Air and gas compressor manufacturing	0	2	3	13
Elevator and moving stairway manufacturing	0	17	29	89
Conveyor and conveying equipment manufacturing	0	8	9	24
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	2
Industrial truck, trailer, and stacker manufacturing	0	9	15	48
Power-driven handtool manufacturing	0	69	194	505
Welding and soldering equipment manufacturing	0	13	18	44
Packaging machinery manufacturing	0	2	3	10

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Industrial process furnace and oven manufacturing	0	3	3	8
Fluid power cylinder and actuator manufacturing	0	14	21	63
Fluid power pump and motor manufacturing	0	43	71	191
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	18	24	63
Electronic computer manufacturing	0	5	12	46
Computer storage device manufacturing	0	9	28	184
Computer terminals and other computer peripheral equipment manufacturing	0	2,494	5,289	18,768
Telephone apparatus manufacturing	0	7	13	37
Broadcast and wireless communications equipment manufacturing	0	2	3	10
Other communications equipment manufacturing	0	1	2	8
Audio and video equipment manufacturing	0	39	76	260
Printed circuit assembly (electronic assembly) manufacturing	0	370	588	1,516
Bare printed circuit board manufacturing	0	(2)	(2)	9
Semiconductor and related device manufacturing	0	2	6	58
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	81	119	289
Electronic connector manufacturing	0	69	108	294
Other electronic component manufacturing	0	28	34	125
Electromedical and electrotherapeutic apparatus manufacturing	0	34	76	157
Search, detection, and navigation instruments manufacturing	0	(0)	(0)	0
Automatic environmental control manufacturing	0	273	372	790

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Industrial process variable instruments manufacturing	0	11	16	37
Totalizing fluid meter and counting device manufacturing	0	2	4	9
Electricity and signal testing instruments manufacturing	0	167	262	893
Analytical laboratory instrument manufacturing	0	15,144	29,585	57,190
Irradiation apparatus manufacturing	0	4	10	25
Watch, clock, and other measuring and controlling device manufacturing	0	48	88	190
Blank magnetic and optical recording media manufacturing	0	113	350	1,000
Software and other prerecorded and record reproducing	0	23	39	150
Electric lamp bulb and part manufacturing	0	3	4	21
Lighting fixture manufacturing	0	349	585	1,188
Small electrical appliance manufacturing	0	496	1,273	2,672
Household cooking appliance manufacturing	0	697	2,216	4,752
Household refrigerator and home freezer manufacturing	0	760	3,036	6,275
Household laundry equipment manufacturing	0	1,661	4,658	13,687
Other major household appliance manufacturing	0	283	1,024	1,973
Power, distribution, and specialty transformer manufacturing	0	57	100	254
Motor and generator manufacturing	0	75	135	396
Switchgear and switchboard apparatus manufacturing	0	110	211	452
Relay and industrial control manufacturing	0	21	32	92
Storage battery manufacturing	0	373	676	1,516
Primary battery manufacturing	0	1,400	3,982	9,582
Fiber optic cable manufacturing	0	21	41	186
Other communication and energy wire manufacturing	0	5	12	51
Wiring device manufacturing	0	125	318	747

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Carbon and graphite product manufacturing	0	31	50	121
All other miscellaneous electrical equipment and component manufacturing	0	7	9	28
Automobile manufacturing	0	2,681	6,729	38,969
Light truck and utility vehicle manufacturing	0	17	45	263
Heavy duty truck manufacturing	0	0	0	1
Motor vehicle body manufacturing	0	67	84	385
Truck trailer manufacturing	0	2	2	9
Motor home manufacturing	0	60	100	412
Travel trailer and camper manufacturing	0	382	411	1,961
Motor vehicle gasoline engine and engine parts manufacturing	0	1,264	1,674	9,871
Motor vehicle electrical and electronic equipment manufacturing	0	1,306	1,567	7,426
Motor vehicle transmission and power train parts manufacturing	0	1,029	1,476	9,025
Motor vehicle seating and interior trim manufacturing	0	319	404	2,716
Motor vehicle metal stamping	0	1,280	1,602	6,387
Other motor vehicle parts manufacturing	0	2,242	2,809	16,423
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	1,208	1,801	7,911
Aircraft manufacturing	0	6	7	38
Aircraft engine and engine parts manufacturing	0	0	0	1
Other aircraft parts and auxiliary equipment manufacturing	0	17	19	49
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	2	2	16
Ship building and repairing	0	86	91	199
Boat building	0	1,494	1,699	5,609
Motorcycle, bicycle, and parts manufacturing	0	99	88	257

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	181	239	1,130
Wood kitchen cabinet and countertop manufacturing	0	314	337	853
Upholstered household furniture manufacturing	0	1,430	1,702	5,504
Nonupholstered wood household furniture manufacturing	0	138	141	387
Other household nonupholstered furniture manufacturing	0	66	84	229
Institutional furniture manufacturing	0	6	6	23
Wood office furniture manufacturing	0	1	2	7
Custom architectural woodwork and millwork	0	6	5	16
Office furniture, except wood, manufacturing	0	90	119	495
Showcase, partition, shelving, and locker manufacturing	0	85	96	273
Mattress manufacturing	0	132	178	884
Blind and shade manufacturing	0	6	6	27
Surgical and medical instrument manufacturing	0	120	251	486
Surgical appliance and supplies manufacturing	0	2,350	5,128	8,996
Dental equipment and supplies manufacturing	0	12	22	60
Ophthalmic goods manufacturing	0	87	200	389
Dental laboratories	0	458	446	752
Jewelry and silverware manufacturing	0	178	268	721
Sporting and athletic goods manufacturing	0	229	321	823
Doll, toy, and game manufacturing	0	205	325	888
Office supplies (except paper) manufacturing	0	584	824	1,948
Sign manufacturing	0	354	324	737
Gasket, packing, and sealing device manufacturing	0	94	121	295
Musical instrument manufacturing	0	374	378	619
Fasteners, buttons, needles, and pins manufacturing	0	87	108	231

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Broom, brush, and mop manufacturing	0	286	533	1,042
Burial casket manufacturing	0	99	120	197
All other miscellaneous manufacturing	0	203	249	731
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	2,395	6,234	12,621
Wholesale - Professional and commercial equipment and supplies	0	14,645	27,195	45,291
Wholesale - Household appliances and electrical and electronic goods	0	4,861	12,477	24,369
Wholesale - Machinery, equipment, and supplies	0	3,987	7,589	12,772
Wholesale - Other durable goods merchant wholesalers	0	10,067	17,078	31,745
Wholesale - Drugs and druggists' sundries	0	9,906	31,249	61,183
Wholesale - Grocery and related product wholesalers	0	11,985	17,184	31,698
Wholesale - Petroleum and petroleum products	0	1,509	28,532	31,626
Wholesale - Other nondurable goods merchant wholesalers	0	17,883	40,815	70,300
Wholesale - Wholesale electronic markets and agents and brokers	0	11,270	6,321	7,135
Retail - Motor vehicle and parts dealers	0	16,122	24,654	34,508
Retail - Furniture and home furnishings stores	0	9,437	12,327	18,679
Retail - Electronics and appliance stores	0	11,030	11,277	17,509
Retail - Building material and garden equipment and supplies stores	0	8,631	15,410	22,136
Retail - Food and beverage stores	1	27,284	37,057	60,043
Retail - Health and personal care stores	0	19,850	23,687	34,904
Retail - Gasoline stores	0	9,569	15,411	26,786
Retail - Clothing and clothing accessories stores	0	13,444	20,227	38,943
Retail - Sporting goods, hobby, musical instrument and book stores	0	7,232	9,670	15,030



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Retail - General merchandise stores	1	26,818	38,895	61,207
Retail - Miscellaneous store retailers	0	15,422	18,012	26,711
Retail - Nonstore retailers	1	21,248	51,415	90,051
Air transportation	0	3,403	12,634	18,064
Rail transportation	0	2,683	6,023	11,712
Water transportation	0	1,826	3,254	12,439
Truck transportation	0	36,073	41,689	85,552
Transit and ground passenger transportation	0	9,358	10,733	15,529
Pipeline transportation	0	4,136	3,873	4,377
Scenic and sightseeing transportation and support activities for transportation	0	11,185	12,719	26,146
Couriers and messengers	0	11,804	15,321	21,448
Warehousing and storage	0	17,859	19,934	40,847
Newspaper publishers	0	2,344	3,642	4,933
Periodical publishers	0	2,301	3,365	5,207
Book publishers	0	1,312	3,914	5,889
Directory, mailing list, and other publishers	0	406	1,274	2,077
Greeting card publishing	0	317	1,217	1,733
Software publishers	0	46,759	97,248	119,562
Motion picture and video industries	0	10,878	16,859	33,063
Sound recording industries	0	2,072	8,059	9,148
Radio and television broadcasting	0	9,456	5,439	24,688
Cable and other subscription programming	0	8,243	33,182	42,689
Wired telecommunications carriers	0	10,985	20,264	47,393
Wireless telecommunications carriers (except satellite)	0	5,434	16,308	59,485
Satellite, telecommunications resellers, and all other telecommunications	0	888	916	2,830
Data processing, hosting, and related services	0	8,253	16,531	33,618
News syndicates, libraries, archives and all other information services	0	545	833	1,546
Internet publishing and broadcasting and web search portals	0	2,765	7,395	23,530

## APPENDIX

Nondepository credit intermediation and related activities	0	27,806	37,816	64,572
Securities and commodity contracts intermediation and brokerage	0	26,453	25,763	47,338
Monetary authorities and depository credit intermediation	0	42,580	99,335	168,643
Other financial investment activities	1	28,164	31,788	79,536
Direct life insurance carriers	0	8,480	19,543	26,036
Insurance carriers, except direct life	0	19,765	78,839	147,594
Insurance agencies, brokerages, and related activities	0	27,238	43,664	86,683
Funds, trusts, and other financial vehicles	0	8,074	12,034	51,209
Other real estate	1	58,465	128,219	270,659
Tenant-occupied housing	0	13,376	103,044	116,635
Owner-occupied dwellings	0	0	346,040	437,217
Automotive equipment rental and leasing	0	4,821	12,889	19,072
General and consumer goods rental except video tapes and discs	0	5,218	6,159	9,517
Video tape and disc rental	0	1,476	2,307	3,559
Commercial and industrial machinery and equipment rental and leasing	0	4,255	8,471	13,580
Lessors of nonfinancial intangible assets	0	375	6,845	8,776
Legal services	0	26,962	48,211	71,631
Accounting, tax preparation, bookkeeping, and payroll services	0	29,386	39,162	48,619
Architectural, engineering, and related services	0	11,085	13,034	23,193
Specialized design services	0	4,346	4,745	5,817
Custom computer programming services	0	6,580	8,053	11,722
Computer systems design services	0	9,022	9,705	13,125
Other computer related services, including facilities management	0	1,176	2,250	3,674
Management consulting services	1	111,730	111,682	171,922
Environmental and other technical consulting services	0	7,407	6,354	9,243

## APPENDIX

Scientific research and development services	2	147,676	201,600	401,877
Advertising, public relations, and related services	0	14,878	19,882	32,650
Photographic services	0	4,174	1,317	2,855
Veterinary services	0	3,814	5,292	8,369
Marketing research and all other miscellaneous professional, scientific, and technical services	1	40,619	37,782	54,372
Management of companies and enterprises	1	81,707	103,390	145,292
Office administrative services	0	19,323	6,655	15,201
Facilities support services	(0)	(2,561)	(3,243)	(7,467)
Employment services	1	41,340	65,558	105,296
Business support services	0	12,286	10,777	18,219
Travel arrangement and reservation services	0	3,501	4,673	10,907
Investigation and security services	0	8,948	9,328	13,407
Services to buildings	0	15,500	16,398	24,269
Landscape and horticultural services	0	10,113	10,884	17,216
Other support services	0	6,785	8,795	13,293
Waste management and remediation services	0	6,022	12,386	20,238
Elementary and secondary schools	0	14,942	13,025	15,589
Junior colleges, colleges, universities, and professional schools	0	24,147	32,902	44,806
Other educational services	0	9,666	9,036	17,467
Offices of physicians	1	109,549	122,032	177,357
Offices of dentists	0	24,110	27,538	40,374
Offices of other health practitioners	0	29,877	28,365	34,976
Outpatient care centers	0	25,024	26,061	45,039
Medical and diagnostic laboratories	0	9,027	12,072	18,863
Home health care services	0	33,346	25,804	31,579
Other ambulatory health care services	0	8,185	8,676	13,276
Hospitals	2	267,264	255,559	393,519
Nursing and community care facilities	1	29,046	31,318	52,157
Residential mental retardation, mental health, substance abuse and other facilities	0	11,259	11,850	17,530

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Individual and family services	1	20,784	18,123	27,258
Child day care services	0	10,166	11,367	16,046
Community food, housing, and other relief services, including rehabilitation services	0	5,844	6,319	13,799
Performing arts companies	0	5,889	9,959	11,016
Commercial Sports Except Racing	0	7,560	7,882	9,903
Racing and Track Operation	0	1,016	1,455	2,133
Independent artists, writers, and performers	0	13,758	15,020	15,364
Promoters of performing arts and sports and agents for public figures	0	4,915	10,452	14,169
Museums, historical sites, zoos, and parks	0	1,626	2,027	3,480
Amusement parks and arcades	0	683	2,073	2,518
Gambling industries (except casino hotels)	0	6,296	10,433	17,133
Other amusement and recreation industries	0	4,619	6,253	10,491
Fitness and recreational sports centers	0	3,382	5,451	7,944
Bowling centers	0	560	881	1,450
Hotels and motels, including casino hotels	0	7,139	13,291	20,225
Other accommodations	0	3,172	4,115	5,405
Full-service restaurants	2	42,406	62,677	106,315
Limited-service restaurants	1	34,408	53,418	112,306
All other food and drinking places	1	27,843	36,457	51,363
Automotive repair and maintenance, except car washes	0	22,608	27,624	39,404
Car washes	0	11,752	17,929	25,781
Electronic and precision equipment repair and maintenance	1	46,652	65,225	101,148
Commercial and industrial machinery and equipment repair and maintenance	0	6,455	7,719	11,790
Personal and household goods repair and maintenance	0	7,655	5,795	7,396
Personal care services	0	14,643	11,231	14,693
Death care services	0	1,575	1,924	3,122
Dry-cleaning and laundry services	0	2,709	3,002	4,281
Other personal services	0	12,014	9,297	12,796
Religious organizations	1	27,294	9,833	47,190
Grantmaking, giving, and social advocacy organizations	0	7,053	17,267	27,430

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Business and professional associations	0	4,807	6,611	12,463
Labor and civic organizations	0	5,036	10,334	22,556
Private households	0	5,046	5,046	5,046
Postal service	0	12,066	12,082	13,349
Federal electric utilities	0	5,636	12,810	43,990
Other federal government enterprises	0	9,617	(4,247)	10,843
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	358	394	675
Local government passenger transit	0	1,053	(1,017)	263
Local government electric utilities	0	7,068	15,500	32,632
Other local government enterprises	0	17,808	30,697	62,631
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	18	3,169,567	3,816,730	7,948,328

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 45. Texas

**Table 457: Detailed NASA Impacts by Types of Impact, Texas.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>40,321</i>	<i>2,976,727,709</i>	<i>4,583,835,228</i>	<i>8,717,564,052</i>
Oilseed farming	2	118,889	313,642	695,775
Grain farming	53	1,014,196	2,179,657	9,855,160
Vegetable and melon farming	11	227,599	342,940	977,068
Fruit farming	8	111,414	186,310	454,051
Tree nut farming	6	117,681	122,464	188,290
Greenhouse, nursery, and floriculture production	21	543,969	700,744	1,703,021
Tobacco farming	0	0	0	0
Cotton farming	10	295,449	387,575	919,677
Sugarcane and sugar beet farming	1	27,438	40,503	120,804
All other crop farming	120	574,318	662,406	1,730,609
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	238	1,064,499	3,556,867	16,193,895
Dairy cattle and milk production	18	296,898	565,590	4,764,899
Poultry and egg production	24	493,840	710,615	9,131,769
Animal production, except cattle and poultry and eggs	47	650,837	2,276,614	3,785,612
Forestry, forest products, and timber tract production	3	152,268	167,173	233,079
Commercial logging	11	327,124	344,882	705,490
Commercial fishing	8	(12,986)	562,443	619,821
Commercial hunting and trapping	4	57,134	199,012	268,750
Support activities for agriculture and forestry	99	3,513,429	3,128,621	3,878,814
Oil and gas extraction	144	15,856,437	58,418,637	89,171,208
Coal mining	14	1,507,015	3,836,697	6,324,225
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	(29,320)	(6,164)	120,699
Gold ore mining	1	(5,616)	13,858	151,886
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	4	360,927	33,505,928	631,004
Other metal ore mining	0	0	0	0
Stone mining and quarrying	5	134,341	534,656	1,116,996
Sand and gravel mining	5	289,731	527,854	941,934

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Other clay, ceramic, refractory minerals mining	1	27,869	53,143	112,146
Potash, soda, and borate mineral mining	0	17,418	29,525	58,779
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	1	38,911	104,764	196,962
Other nonmetallic minerals	1	22,418	47,809	104,672
Drilling oil and gas wells	0	8,628	18,630	38,329
Support activities for oil and gas operations	2	199,274	330,778	688,738
Metal mining services	10	749,758	3,049,404	5,200,717
Other nonmetallic minerals services	0	25,884	103,824	169,453
Electric power generation - Hydroelectric	9	932,563	2,241,620	4,241,155
Electric power generation - Fossil fuel	19	2,901,863	9,681,124	25,444,517
Electric power generation - Nuclear	5	1,158,472	2,373,123	5,011,096
Electric power generation - Solar	1	73,599	138,929	225,268
Electric power generation - Wind	10	1,186,784	6,749,253	12,427,145
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	33,750	84,784	183,346
Electric power generation - All other	0	35,965	13,589	59,275
Electric power transmission and distribution	71	9,691,934	30,708,075	85,842,712
Natural gas distribution	18	2,389,593	5,787,674	13,145,759
Water, sewage and other systems	16	1,240,714	2,225,262	4,100,651
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	187	13,774,351	8,012,521	16,503,874
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	160	11,150,622	14,492,771	32,799,163
Maintenance and repair construction of residential structures	60	3,988,189	5,652,191	12,848,788
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	13,307	9,189	19,717
Dog and cat food manufacturing	3	191,775	927,562	4,105,794
Other animal food manufacturing	10	731,050	1,356,714	9,829,235
Flour milling	4	385,752	906,674	5,139,082
Rice milling	1	67,687	132,382	713,691
Malt manufacturing	0	12,982	26,694	208,784
Wet corn milling	1	30,860	95,860	1,147,519
Soybean and other oilseed processing	1	84,713	584,775	5,596,107
Fats and oils refining and blending	1	88,570	206,047	1,785,677
Breakfast cereal manufacturing	0	19,344	50,519	299,637
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	1	83,158	228,937	811,638
Nonchocolate confectionery manufacturing	2	130,344	206,878	993,966
Chocolate and confectionery manufacturing from cacao beans	0	4,508	8,501	76,563
Confectionery manufacturing from purchased chocolate	9	489,452	736,844	3,083,662
Frozen fruits, juices and vegetables manufacturing	2	58,358	116,180	654,212
Frozen specialties manufacturing	15	795,097	1,337,338	5,784,906
Canned fruits and vegetables manufacturing	4	255,312	508,779	2,151,354
Canned specialties	4	262,947	774,301	3,149,514
Dehydrated food products manufacturing	1	35,621	70,239	277,613
Cheese manufacturing	3	194,694	308,445	2,994,324



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Dry, condensed, and evaporated dairy product manufacturing	5	405,746	1,198,900	7,304,601
Fluid milk manufacturing	6	353,503	643,650	4,014,267
Creamery butter manufacturing	1	50,230	261,787	1,451,681
Ice cream and frozen dessert manufacturing	2	96,405	166,615	847,723
Frozen cakes and other pastries manufacturing	29	944,931	1,398,670	2,563,881
Poultry processing	48	2,227,540	3,187,899	14,750,716
Animal, except poultry, slaughtering	35	2,139,300	3,211,543	24,527,368
Meat processed from carcasses	27	1,569,998	1,741,456	13,769,065
Rendering and meat byproduct processing	2	136,780	145,289	695,342
Seafood product preparation and packaging	5	359,146	455,662	2,243,157
Bread and bakery product, except frozen, manufacturing	66	2,855,509	3,950,198	9,463,825
Cookie and cracker manufacturing	5	215,487	314,772	1,627,526
Dry pasta, mixes, and dough manufacturing	3	164,713	447,023	1,538,582
Tortilla manufacturing	5	235,855	294,314	1,167,310
Roasted nuts and peanut butter manufacturing	4	224,151	448,749	1,638,819
Other snack food manufacturing	11	845,620	2,151,314	6,496,093
Coffee and tea manufacturing	3	194,068	380,020	1,892,614
Flavoring syrup and concentrate manufacturing	3	511,743	4,640,053	9,501,816
Mayonnaise, dressing, and sauce manufacturing	3	158,867	348,151	1,494,348
Spice and extract manufacturing	3	255,583	423,897	1,802,351
All other food manufacturing	8	391,345	533,792	2,771,095
Bottled and canned soft drinks & water	16	1,295,957	3,120,428	12,639,059
Manufactured ice	1	52,646	34,764	173,216
Breweries	13	918,898	2,687,859	6,544,027
Wineries	3	81,915	158,960	757,298
Distilleries	5	407,002	2,419,812	5,375,229
Tobacco product manufacturing	0	12,743	438,990	893,805
Fiber, yarn, and thread mills	1	30,305	51,239	303,697
Broadwoven fabric mills	2	109,885	180,011	567,973
Narrow fabric mills and schiffli machine embroidery	0	11,070	12,759	37,395
Nonwoven fabric mills	2	139,770	297,815	1,020,226
Knit fabric mills	0	2,947	4,265	11,564

## APPENDIX

Textile and fabric finishing mills	1	45,557	63,796	314,296
Fabric coating mills	1	75,113	108,515	495,567
Carpet and rug mills	1	66,852	134,389	481,098
Curtain and linen mills	3	126,044	207,068	708,865
Textile bag and canvas mills	3	141,649	191,911	537,046
Rope, cordage, twine, tire cord and tire fabric mills	2	117,433	223,251	580,575
Other textile product mills	6	200,904	266,212	796,963
Hosiery and sock mills	1	25,763	40,418	106,795
Other apparel knitting mills	1	17,076	29,513	89,047
Cut and sew apparel contractors	6	149,678	161,047	330,516
Mens and boys cut and sew apparel manufacturing	5	126,891	144,993	554,856
Womens and girls cut and sew apparel manufacturing	2	29,358	43,511	388,320
Other cut and sew apparel manufacturing	3	57,367	71,834	265,465
Apparel accessories and other apparel manufacturing	4	85,748	100,980	342,301
Leather and hide tanning and finishing	1	35,959	45,165	234,444
Footwear manufacturing	7	341,751	366,358	1,220,847
Other leather and allied product manufacturing	2	55,126	56,908	204,281
Sawmills	7	407,078	613,556	2,096,838
Wood preservation	1	57,349	184,374	572,436
Veneer and plywood manufacturing	4	244,649	382,641	1,051,339
Engineered wood member and truss manufacturing	3	177,637	250,494	703,039
Reconstituted wood product manufacturing	2	151,188	418,524	1,285,474
Wood windows and door manufacturing	9	512,662	727,040	2,006,208
Cut stock, resawing lumber, and planing	1	42,061	74,286	225,765
Other millwork, including flooring	6	283,055	414,004	1,188,469
Wood container and pallet manufacturing	8	404,347	484,106	1,302,170
Manufactured home (mobile home) manufacturing	0	1,600	2,896	7,153
Prefabricated wood building manufacturing	1	33,744	39,114	110,211
All other miscellaneous wood product manufacturing	4	205,353	254,433	756,162

## APPENDIX

Pulp mills	0	2,270	3,088	17,662
Paper mills	2	179,226	314,899	1,576,669
Paperboard mills	10	1,051,033	2,024,129	8,280,637
Paperboard container manufacturing	21	1,678,532	2,211,026	10,200,500
Paper bag and coated and treated paper manufacturing	14	968,116	1,443,944	6,259,150
Stationery product manufacturing	2	133,851	169,049	767,319
Sanitary paper product manufacturing	6	742,168	1,620,136	5,074,550
All other converted paper product manufacturing	2	181,104	233,271	744,928
Printing	96	5,056,122	6,378,771	14,807,179
Support activities for printing	4	233,679	294,122	498,401
Petroleum refineries	14	3,285,804	27,899,053	121,699,339
Asphalt paving mixture and block manufacturing	1	151,609	210,175	731,834
Asphalt shingle and coating materials manufacturing	1	113,488	305,597	740,795
Petroleum lubricating oil and grease manufacturing	10	1,769,360	4,441,249	12,100,281
All other petroleum and coal products manufacturing	1	139,071	377,790	893,961
Petrochemical manufacturing	19	3,282,609	27,522,808	112,642,782
Industrial gas manufacturing	7	1,459,021	3,714,808	8,932,517
Synthetic dye and pigment manufacturing	3	426,507	937,025	2,316,039
Other basic inorganic chemical manufacturing	7	1,094,180	2,367,430	6,096,025
Other basic organic chemical manufacturing	20	3,082,498	6,203,268	31,181,902
Plastics material and resin manufacturing	15	2,676,744	4,372,774	21,082,346
Synthetic rubber manufacturing	1	218,742	346,390	1,411,175
Artificial and synthetic fibers and filaments manufacturing	0	71,452	108,418	247,779
Nitrogenous fertilizer manufacturing	1	95,617	222,459	681,268
Phosphatic fertilizer manufacturing	0	17,173	44,390	141,290
Fertilizer mixing	1	88,451	159,247	562,745
Pesticide and other agricultural chemical manufacturing	3	381,800	1,267,373	4,373,532
Medicinal and botanical manufacturing	1	84,116	145,184	431,630

## APPENDIX

Pharmaceutical preparation manufacturing	22	2,688,974	10,435,563	28,706,081
In-vitro diagnostic substance manufacturing	0	33,628	52,818	137,828
Biological product (except diagnostic) manufacturing	1	110,386	274,024	726,283
Paint and coating manufacturing	7	908,267	1,769,054	5,772,921
Adhesive manufacturing	3	347,086	570,350	2,138,228
Soap and other detergent manufacturing	5	470,321	1,475,841	6,056,529
Polish and other sanitation good manufacturing	5	394,942	760,118	2,901,160
Surface active agent manufacturing	1	49,306	144,900	528,034
Toilet preparation manufacturing	8	751,667	2,368,539	6,323,260
Printing ink manufacturing	2	167,827	177,082	739,787
Explosives manufacturing	1	63,034	72,290	205,742
Custom compounding of purchased resins	4	352,702	637,043	2,420,236
Photographic film and chemical manufacturing	3	335,213	732,280	2,408,746
Other miscellaneous chemical product manufacturing	8	1,199,317	1,813,311	5,405,527
Plastics packaging materials and unlaminated film and sheet manufacturing	18	1,228,870	2,372,717	8,261,079
Unlaminated plastics profile shape manufacturing	4	206,466	559,327	1,670,690
Plastics pipe and pipe fitting manufacturing	5	481,142	1,411,464	3,182,036
Laminated plastics plate, sheet (except packaging), and shape manufacturing	4	260,472	570,645	1,336,388
Polystyrene foam product manufacturing	9	542,263	1,054,799	3,331,365
Urethane and other foam product (except polystyrene) manufacturing	10	600,942	1,117,748	3,728,648
Plastics bottle manufacturing	5	328,293	636,174	2,384,871
Other plastics product manufacturing	38	2,142,008	3,574,732	10,669,566
Tire manufacturing	2	140,192	210,165	898,832
Rubber and plastics hoses and belting manufacturing	2	163,930	301,201	744,432
Other rubber product manufacturing	13	987,539	1,660,646	4,515,375

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	2	187,806	241,887	461,862
Brick, tile, and other structural clay product manufacturing	3	221,215	383,246	775,857
Flat glass manufacturing	1	116,909	253,352	582,011
Other pressed and blown glass and glassware manufacturing	5	458,765	672,936	1,402,243
Glass container manufacturing	2	243,016	429,840	1,014,643
Glass product manufacturing made of purchased glass	5	456,583	725,015	1,469,261
Cement manufacturing	1	134,592	352,057	843,469
Ready-mix concrete manufacturing	8	697,670	1,213,030	3,558,038
Concrete block and brick manufacturing	2	122,140	232,193	561,429
Concrete pipe manufacturing	1	80,591	139,891	308,421
Other concrete product manufacturing	6	391,112	588,961	1,392,553
Lime manufacturing	1	112,225	292,644	779,525
Gypsum product manufacturing	5	434,391	1,191,872	3,173,960
Abrasive product manufacturing	1	105,795	359,615	628,527
Cut stone and stone product manufacturing	3	231,860	262,795	500,164
Ground or treated mineral and earth manufacturing	0	27,379	73,664	184,020
Mineral wool manufacturing	1	107,683	273,290	607,991
Miscellaneous nonmetallic mineral products manufacturing	1	63,231	150,218	354,585
Iron and steel mills and ferroalloy manufacturing	9	912,573	1,670,578	8,381,771
Iron, steel pipe and tube manufacturing from purchased steel	3	219,781	350,122	1,291,044
Rolled steel shape manufacturing	3	296,587	678,579	2,133,997
Steel wire drawing	1	68,514	113,326	454,081
Alumina refining and primary aluminum production	1	51,917	117,450	529,953
Secondary smelting and alloying of aluminum	0	19,355	35,814	301,849
Aluminum sheet, plate, and foil manufacturing	1	60,963	129,984	621,624
Other aluminum rolling, drawing and extruding	3	211,510	318,580	1,368,715
Nonferrous metal (exc aluminum) smelting and refining	1	75,756	374,863	897,537

## APPENDIX

Copper rolling, drawing, extruding and alloying	6	521,592	767,894	5,327,489
Nonferrous metal, except copper and aluminum, shaping	0	33,233	46,682	182,117
Secondary processing of other nonferrous metals	0	7,671	33,071	172,220
Ferrous metal foundries	4	314,484	623,952	1,333,067
Nonferrous metal foundries	3	182,998	298,166	743,654
Custom roll forming	0	14,608	24,267	105,068
Crown and closure manufacturing and metal stamping	6	382,049	582,934	1,604,394
Iron and steel forging	4	391,340	558,847	1,521,071
Nonferrous forging	1	28,549	37,650	136,533
Cutlery, utensil, pot, and pan manufacturing	1	55,109	190,450	466,502
Handtool manufacturing	3	181,623	318,061	634,466
Prefabricated metal buildings and components manufacturing	4	287,676	431,123	1,161,646
Fabricated structural metal manufacturing	28	2,076,273	3,273,361	9,246,950
Plate work manufacturing	8	617,540	643,947	1,767,666
Metal window and door manufacturing	6	364,165	594,886	1,486,526
Sheet metal work manufacturing	12	730,836	984,275	2,497,069
Ornamental and architectural metal work manufacturing	6	356,406	497,843	1,267,594
Power boiler and heat exchanger manufacturing	1	125,491	182,288	396,596
Metal tank (heavy gauge) manufacturing	4	272,316	344,024	922,382
Metal cans manufacturing	2	206,056	505,783	1,843,740
Metal barrels, drums and pails manufacturing	2	105,018	135,757	495,133
Hardware manufacturing	2	144,812	257,722	743,404
Spring and wire product manufacturing	5	326,013	468,077	1,301,230
Machine shops	33	2,079,276	2,474,190	4,872,980
Turned product and screw, nut, and bolt manufacturing	5	360,749	529,065	1,341,608
Metal heat treating	4	349,880	577,349	1,251,069
Metal coating and nonprecious engraving	9	605,199	1,159,726	2,450,647
Electroplating, anodizing, and coloring metal	7	372,985	427,193	962,565

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	5	488,091	839,904	1,888,343
Plumbing fixture fitting and trim manufacturing	1	69,682	241,660	686,920
Ball and roller bearing manufacturing	2	141,827	283,363	581,463
Small arms ammunition manufacturing	0	9,888	27,986	60,232
Ammunition, except for small arms, manufacturing	1	92,436	116,999	219,759
Small arms, ordnance, and accessories manufacturing	1	61,738	176,114	445,939
Fabricated pipe and pipe fitting manufacturing	4	306,561	365,675	859,097
Other fabricated metal manufacturing	7	453,434	630,978	1,554,577
Farm machinery and equipment manufacturing	0	32,450	57,575	218,242
Lawn and garden equipment manufacturing	0	23,902	58,793	215,919
Construction machinery manufacturing	0	16,509	45,299	119,266
Mining machinery and equipment manufacturing	0	26,534	36,725	77,663
Oil and gas field machinery and equipment manufacturing	1	168,643	219,193	528,886
Semiconductor machinery manufacturing	0	5,516	6,768	21,586
Food product machinery manufacturing	0	4,315	6,117	19,236
Sawmill, woodworking, and paper machinery	0	6,049	7,137	20,479
Printing machinery and equipment manufacturing	0	2,785	3,983	18,056
All other industrial machinery manufacturing	1	111,787	173,564	372,864
Optical instrument and lens manufacturing	0	2,697	5,410	14,007
Photographic and photocopying equipment manufacturing	0	215	1,459	8,038
Other commercial service industry machinery manufacturing	1	42,445	115,391	304,450
Air purification and ventilation equipment manufacturing	1	59,136	109,491	303,534

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	1	46,417	99,483	282,736
Air conditioning, refrigeration, and warm air heating equipment manufacturing	7	530,287	1,304,490	3,345,676
Industrial mold manufacturing	0	20,463	27,197	66,580
Special tool, die, jig, and fixture manufacturing	0	12,857	21,861	47,052
Cutting tool and machine tool accessory manufacturing	1	42,348	50,032	110,812
Machine tool manufacturing	0	7,541	10,096	38,511
Rolling mill and other metalworking machinery manufacturing	0	8,928	13,706	35,032
Turbine and turbine generator set units manufacturing	0	10,430	17,088	55,717
Speed changer, industrial high-speed drive, and gear manufacturing	1	78,724	142,248	356,591
Mechanical power transmission equipment manufacturing	3	246,509	459,383	1,026,828
Other engine equipment manufacturing	3	345,145	905,621	2,860,256
Pump and pumping equipment manufacturing	0	30,233	71,535	179,585
Air and gas compressor manufacturing	0	20,699	40,641	94,858
Elevator and moving stairway manufacturing	0	4,459	8,767	21,762
Conveyor and conveying equipment manufacturing	0	20,113	21,533	65,575
Overhead cranes, hoists, and monorail systems manufacturing	0	7,277	20,089	51,425
Industrial truck, trailer, and stacker manufacturing	1	53,343	102,504	282,946
Power-driven handtool manufacturing	0	984	7,325	25,209
Welding and soldering equipment manufacturing	0	23,206	37,147	97,902
Packaging machinery manufacturing	0	6,032	12,064	30,500
Industrial process furnace and oven manufacturing	0	5,380	7,962	19,719
Fluid power cylinder and actuator manufacturing	1	104,786	172,561	376,807



## APPENDIX

Fluid power pump and motor manufacturing	0	14,936	28,963	83,385
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	31,271	48,371	136,787
Electronic computer manufacturing	2	444,475	1,237,420	2,886,886
Computer storage device manufacturing	0	10,016	37,809	88,932
Computer terminals and other computer peripheral equipment manufacturing	10	1,708,247	3,824,173	7,866,570
Telephone apparatus manufacturing	3	468,269	1,068,614	2,283,767
Broadcast and wireless communications equipment manufacturing	0	28,652	49,066	112,076
Other communications equipment manufacturing	1	147,254	284,138	600,152
Audio and video equipment manufacturing	0	25,847	58,265	175,686
Printed circuit assembly (electronic assembly) manufacturing	22	1,432,469	2,622,415	7,845,460
Bare printed circuit board manufacturing	3	271,484	397,205	792,798
Semiconductor and related device manufacturing	116	19,118,537	40,540,890	88,923,434
Capacitor, resistor, coil, transformer, and other inductor manufacturing	1	54,080	90,241	246,217
Electronic connector manufacturing	14	1,018,419	1,795,456	4,790,554
Other electronic component manufacturing	16	1,565,029	1,874,771	4,516,141
Electromedical and electrotherapeutic apparatus manufacturing	0	30,481	83,217	162,880
Search, detection, and navigation instruments manufacturing	1	161,742	318,600	550,603
Automatic environmental control manufacturing	2	98,535	152,276	406,759
Industrial process variable instruments manufacturing	1	94,423	161,876	337,944
Totalizing fluid meter and counting device manufacturing	1	100,210	278,511	549,457

## APPENDIX

Electricity and signal testing instruments manufacturing	0	22,009	37,619	113,608
Analytical laboratory instrument manufacturing	2	189,420	412,192	776,147
Irradiation apparatus manufacturing	0	1,060	2,788	7,216
Watch, clock, and other measuring and controlling device manufacturing	0	20,980	46,904	122,854
Blank magnetic and optical recording media manufacturing	0	10,385	40,440	83,689
Software and other prerecorded and record reproducing	1	146,612	252,869	434,277
Electric lamp bulb and part manufacturing	2	189,720	257,912	634,961
Lighting fixture manufacturing	4	355,631	452,616	1,262,192
Small electrical appliance manufacturing	1	67,242	103,941	421,723
Household cooking appliance manufacturing	1	35,497	57,270	303,020
Household refrigerator and home freezer manufacturing	0	31,781	57,387	220,942
Household laundry equipment manufacturing	1	59,285	92,243	557,493
Other major household appliance manufacturing	0	13,170	21,749	94,113
Power, distribution, and specialty transformer manufacturing	0	29,229	37,879	124,593
Motor and generator manufacturing	3	289,826	380,956	1,070,080
Switchgear and switchboard apparatus manufacturing	6	611,592	849,579	2,272,284
Relay and industrial control manufacturing	2	194,187	232,157	605,702
Storage battery manufacturing	1	79,188	106,565	341,609
Primary battery manufacturing	2	211,456	228,986	905,986
Fiber optic cable manufacturing	4	409,529	563,314	2,543,373
Other communication and energy wire manufacturing	1	112,189	163,487	632,805
Wiring device manufacturing	3	309,399	467,262	1,302,618
Carbon and graphite product manufacturing	2	139,014	174,349	538,237
All other miscellaneous electrical equipment and component manufacturing	2	168,589	181,390	523,488

## APPENDIX

Automobile manufacturing	5	680,972	5,031,138	12,424,006
Light truck and utility vehicle manufacturing	4	473,111	2,690,507	10,990,193
Heavy duty truck manufacturing	0	3,000	11,359	33,780
Motor vehicle body manufacturing	1	36,381	59,820	190,107
Truck trailer manufacturing	0	4,293	6,700	22,508
Motor home manufacturing	0	43,109	93,396	233,387
Travel trailer and camper manufacturing	10	675,745	778,225	3,124,875
Motor vehicle gasoline engine and engine parts manufacturing	4	350,525	643,718	2,468,535
Motor vehicle electrical and electronic equipment manufacturing	17	1,231,381	2,153,434	8,787,685
Motor vehicle transmission and power train parts manufacturing	4	325,885	673,576	2,832,575
Motor vehicle seating and interior trim manufacturing	4	352,035	642,211	2,609,108
Motor vehicle metal stamping	7	518,941	875,648	3,042,211
Other motor vehicle parts manufacturing	18	1,446,146	3,158,833	10,879,629
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	2	186,317	401,408	1,291,871
Aircraft manufacturing	1	109,277	214,919	580,649
Aircraft engine and engine parts manufacturing	3	272,133	665,823	1,777,071
Other aircraft parts and auxiliary equipment manufacturing	4	452,013	727,486	1,435,470
Guided missile and space vehicle manufacturing	1	147,332	198,052	400,577
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	4,083	5,576	12,844
Railroad rolling stock manufacturing	0	28,819	44,534	193,829
Ship building and repairing	1	47,165	59,410	138,010
Boat building	4	210,527	286,945	1,054,234
Motorcycle, bicycle, and parts manufacturing	0	17,416	52,466	204,420
Military armored vehicle, tank, and tank component manufacturing	0	22,563	47,056	213,683
All other transportation equipment manufacturing	1	94,937	179,854	747,467

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	18	817,106	946,587	2,334,332
Upholstered household furniture manufacturing	6	296,891	344,199	1,144,328
Nonupholstered wood household furniture manufacturing	4	170,413	178,960	506,382
Other household nonupholstered furniture manufacturing	1	49,569	61,062	269,815
Institutional furniture manufacturing	0	11,940	12,445	38,687
Wood office furniture manufacturing	0	5,476	6,383	20,982
Custom architectural woodwork and millwork	0	11,274	10,681	33,601
Office furniture, except wood, manufacturing	1	74,908	93,819	323,418
Showcase, partition, shelving, and locker manufacturing	2	94,601	109,857	313,016
Mattress manufacturing	5	262,246	369,509	1,632,974
Blind and shade manufacturing	1	53,688	55,022	219,171
Surgical and medical instrument manufacturing	1	99,603	163,258	495,393
Surgical appliance and supplies manufacturing	4	403,640	646,518	1,660,193
Dental equipment and supplies manufacturing	0	22,249	31,822	77,973
Ophthalmic goods manufacturing	4	220,492	367,611	1,014,475
Dental laboratories	5	240,815	228,224	404,849
Jewelry and silverware manufacturing	7	452,053	610,964	1,377,173
Sporting and athletic goods manufacturing	4	395,489	479,846	1,109,851
Doll, toy, and game manufacturing	2	100,841	125,423	422,984
Office supplies (except paper) manufacturing	2	100,097	119,415	436,916
Sign manufacturing	6	401,647	334,966	762,271
Gasket, packing, and sealing device manufacturing	4	335,345	386,239	909,893
Musical instrument manufacturing	0	22,001	22,254	50,287
Fasteners, buttons, needles, and pins manufacturing	0	14,447	16,001	37,538
Broom, brush, and mop manufacturing	1	37,254	45,133	166,297
Burial casket manufacturing	0	18,571	20,608	43,158

## APPENDIX

All other miscellaneous manufacturing	7	419,714	476,974	1,175,586
Wholesale - Motor vehicle and motor vehicle parts and supplies	27	2,101,036	5,979,869	11,483,759
Wholesale - Professional and commercial equipment and supplies	79	9,967,203	19,303,426	30,242,474
Wholesale - Household appliances and electrical and electronic goods	52	5,890,945	16,235,448	28,766,234
Wholesale - Machinery, equipment, and supplies	55	5,237,846	10,450,713	16,622,048
Wholesale - Other durable goods merchant wholesalers	112	9,166,729	15,851,512	28,643,408
Wholesale - Drugs and druggists' sundries	36	5,087,738	18,384,946	33,666,223
Wholesale - Grocery and related product wholesalers	108	7,640,262	11,474,002	21,551,295
Wholesale - Petroleum and petroleum products	25	3,750,201	24,806,469	29,101,743
Wholesale - Other nondurable goods merchant wholesalers	143	12,351,632	25,504,118	45,135,232
Wholesale - Wholesale electronic markets and agents and brokers	76	8,302,800	5,410,657	6,027,209
Retail - Motor vehicle and parts dealers	132	8,945,951	13,557,043	18,753,995
Retail - Furniture and home furnishings stores	98	4,405,749	5,888,371	9,306,066
Retail - Electronics and appliance stores	97	5,604,807	5,926,192	9,466,165
Retail - Building material and garden equipment and supplies stores	101	4,350,070	8,140,089	11,669,083
Retail - Food and beverage stores	402	13,357,780	19,021,087	30,545,653
Retail - Health and personal care stores	196	8,578,913	10,528,508	16,039,823
Retail - Gasoline stores	160	5,620,495	10,052,126	18,048,857
Retail - Clothing and clothing accessories stores	242	6,588,679	10,797,395	21,584,748
Retail - Sporting goods, hobby, musical instrument and book stores	124	3,496,927	4,643,005	7,346,225
Retail - General merchandise stores	446	13,954,646	20,592,962	32,706,636
Retail - Miscellaneous store retailers	253	6,055,702	7,485,123	12,172,242

## APPENDIX

Retail - Nonstore retailers	242	7,033,821	20,140,798	37,684,814
Air transportation	90	11,214,350	19,754,764	31,216,479
Rail transportation	26	3,399,092	7,079,962	13,069,880
Water transportation	12	1,424,829	2,498,351	8,902,594
Truck transportation	974	60,098,892	71,242,877	157,730,185
Transit and ground passenger transportation	189	3,028,299	3,540,900	6,381,755
Pipeline transportation	13	20,811,235	10,424,059	12,351,873
Scenic and sightseeing transportation and support activities for transportation	253	19,660,086	21,907,448	42,732,781
Couriers and messengers	150	5,612,168	7,596,161	14,783,830
Warehousing and storage	204	10,159,331	12,735,198	24,678,942
Newspaper publishers	26	1,413,940	2,078,004	2,813,915
Periodical publishers	16	1,215,388	1,694,127	2,995,717
Book publishers	9	819,901	2,228,296	4,024,815
Directory, mailing list, and other publishers	8	647,539	1,768,350	2,594,945
Greeting card publishing	0	5,951	15,997	28,990
Software publishers	72	12,068,523	26,055,475	30,951,402
Motion picture and video industries	54	2,425,364	4,288,455	11,567,658
Sound recording industries	6	292,853	1,373,768	2,138,716
Radio and television broadcasting	43	4,592,354	3,266,608	14,102,137
Cable and other subscription programming	5	527,587	3,998,170	10,481,562
Wired telecommunications carriers	69	8,482,845	23,701,211	40,516,390
Wireless telecommunications carriers (except satellite)	22	2,946,674	17,020,882	39,106,904
Satellite, telecommunications resellers, and all other telecommunications	18	2,425,962	3,728,898	7,217,533
Data processing, hosting, and related services	91	9,803,486	20,465,739	41,473,422
News syndicates, libraries, archives and all other information services	10	599,566	960,619	1,593,434
Internet publishing and broadcasting and web search portals	33	3,569,019	9,214,648	28,696,699
Nondepository credit intermediation and related activities	207	19,085,719	24,403,823	41,295,880
Securities and commodity contracts intermediation and brokerage	138	18,986,504	18,898,836	37,064,817

## APPENDIX

Monetary authorities and depository credit intermediation	374	35,857,954	74,155,007	131,939,645
Other financial investment activities	528	16,919,791	19,364,609	63,113,328
Direct life insurance carriers	62	6,941,875	14,315,100	21,628,680
Insurance carriers, except direct life	156	17,715,388	60,175,089	118,772,558
Insurance agencies, brokerages, and related activities	344	22,706,066	35,628,044	81,353,797
Funds, trusts, and other financial vehicles	113	5,894,313	4,854,724	34,831,719
Other real estate	1,708	50,591,588	105,810,543	301,984,511
Tenant-occupied housing	231	6,121,238	51,076,613	59,985,697
Owner-occupied dwellings	0	0	154,508,189	195,219,298
Automotive equipment rental and leasing	47	2,578,243	9,023,448	13,049,909
General and consumer goods rental except video tapes and discs	52	3,467,769	4,888,002	7,243,405
Video tape and disc rental	14	711,353	1,267,331	1,906,077
Commercial and industrial machinery and equipment rental and leasing	48	4,526,221	12,570,964	18,066,721
Lessors of nonfinancial intangible assets	6	817,970	13,067,997	15,276,120
Legal services	487	50,417,870	83,290,381	115,769,154
Accounting, tax preparation, bookkeeping, and payroll services	283	22,356,767	29,800,455	40,763,242
Architectural, engineering, and related services	451	47,768,866	56,927,135	93,383,723
Specialized design services	51	3,447,523	3,651,362	4,472,198
Custom computer programming services	83	9,357,791	10,976,363	15,159,550
Computer systems design services	110	12,524,918	13,556,643	17,613,552
Other computer related services, including facilities management	27	3,346,517	7,537,747	10,985,885
Management consulting services	1,052	105,745,613	104,564,760	152,613,483
Environmental and other technical consulting services	119	11,409,692	9,848,314	13,706,336
Scientific research and development services	6,572	616,500,438	961,265,906	1,792,894,125
Advertising, public relations, and related services	145	12,115,412	16,580,540	27,581,496
Photographic services	50	2,779,564	1,647,344	2,589,674
Veterinary services	46	2,208,739	3,140,190	4,844,360

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	560	41,249,662	36,702,332	50,763,640
Management of companies and enterprises	674	72,508,307	82,535,958	125,281,784
Office administrative services	217	18,392,156	8,138,453	16,281,405
Facilities support services	735	40,745,787	57,459,645	119,468,420
Employment services	1,219	57,487,957	96,717,682	140,974,259
Business support services	275	12,511,752	11,234,730	19,166,725
Travel arrangement and reservation services	54	3,510,604	5,080,475	10,843,340
Investigation and security services	227	8,276,474	8,675,860	12,744,635
Services to buildings	626	15,894,228	17,160,057	28,507,995
Landscape and horticultural services	227	7,370,092	8,103,704	13,489,474
Other support services	69	3,073,287	4,126,986	7,878,376
Waste management and remediation services	67	5,118,776	10,391,019	16,580,623
Elementary and secondary schools	149	7,094,815	6,573,439	7,898,611
Junior colleges, colleges, universities, and professional schools	101	5,547,130	8,237,883	11,067,195
Other educational services	229	6,128,325	5,959,631	11,435,742
Offices of physicians	425	48,580,060	56,629,008	81,582,611
Offices of dentists	149	9,961,586	12,296,840	18,622,008
Offices of other health practitioners	186	12,730,306	11,866,509	15,910,040
Outpatient care centers	120	8,741,836	9,075,941	16,248,684
Medical and diagnostic laboratories	48	3,705,490	5,399,062	8,794,108
Home health care services	421	13,756,940	10,037,533	15,332,789
Other ambulatory health care services	54	3,386,489	3,657,806	5,949,366
Hospitals	726	63,818,218	70,939,658	130,776,045
Nursing and community care facilities	246	9,320,029	10,251,459	18,361,047
Residential mental retardation, mental health, substance abuse and other facilities	77	3,403,368	3,549,567	5,264,953
Individual and family services	324	8,325,876	7,118,850	11,359,394
Child day care services	250	5,871,337	6,443,850	9,284,708
Community food, housing, and other relief services, including rehabilitation services	71	2,672,927	2,809,641	6,244,742
Performing arts companies	40	1,433,977	2,174,007	3,992,138



## APPENDIX

Commercial Sports Except Racing	47	4,375,724	4,595,574	6,602,803
Racing and Track Operation	8	282,069	508,292	880,279
Independent artists, writers, and performers	172	5,228,874	5,918,550	6,887,760
Promoters of performing arts and sports and agents for public figures	43	1,421,791	2,904,411	6,928,008
Museums, historical sites, zoos, and parks	21	853,026	1,028,894	1,791,059
Amusement parks and arcades	22	462,721	1,571,791	2,031,591
Gambling industries (except casino hotels)	57	1,878,742	4,402,190	7,475,081
Other amusement and recreation industries	91	2,218,576	2,981,962	5,079,446
Fitness and recreational sports centers	85	1,449,558	2,532,810	3,988,894
Bowling centers	14	304,066	468,738	822,926
Hotels and motels, including casino hotels	307	10,839,060	21,206,164	33,655,831
Other accommodations	76	3,346,976	4,533,854	6,099,476
Full-service restaurants	966	24,672,029	36,606,152	63,090,131
Limited-service restaurants	799	17,216,987	27,334,708	58,949,716
All other food and drinking places	559	18,380,615	23,680,097	35,171,373
Automotive repair and maintenance, except car washes	302	16,806,241	21,339,277	30,719,740
Car washes	141	7,971,618	12,084,676	17,571,157
Electronic and precision equipment repair and maintenance	1,301	98,689,027	156,850,006	235,980,358
Commercial and industrial machinery and equipment repair and maintenance	69	5,944,122	7,645,100	11,054,246
Personal and household goods repair and maintenance	125	6,245,444	5,959,141	7,704,786
Personal care services	267	7,433,205	6,599,117	8,516,205
Death care services	19	836,478	1,114,222	1,701,385
Dry-cleaning and laundry services	60	2,029,398	2,302,289	3,402,451
Other personal services	250	7,092,967	6,259,037	8,433,580
Religious organizations	287	13,713,485	9,170,754	28,437,265
Grantmaking, giving, and social advocacy organizations	48	2,393,409	8,130,960	12,261,332
Business and professional associations	47	3,148,822	5,198,007	8,957,452
Labor and civic organizations	105	2,677,923	7,233,142	12,469,536
Private households	183	2,763,395	2,763,395	2,763,395
Postal service	85	7,750,954	7,756,167	8,543,975
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	33	1,901,498	1,249,978	7,162,487
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	5	825,535	1,054,611	1,629,096
Local government passenger transit	23	1,684,819	(208,994)	1,844,379
Local government electric utilities	13	1,528,768	4,742,857	8,320,730
Other local government enterprises	124	10,076,981	24,095,802	43,819,105
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2,856	512,774,261	589,734,452	1,230,701,640

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 458: Detailed M2M Program Impacts by Types of Impact, Texas.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>10,108</i>	<i>818,485,571</i>	<i>10,108</i>	<i>2,318,945,694</i>
Oilseed farming	1	30,218	1	296,049
Grain farming	14	243,279	14	2,396,653
Vegetable and melon farming	3	64,492	3	273,891
Fruit farming	2	41,099	2	159,861
Tree nut farming	3	67,694	3	106,612

## APPENDIX

Greenhouse, nursery, and floriculture production	5	131,414	5	415,479
Tobacco farming	0	0	0	0
Cotton farming	2	67,689	2	208,494
Sugarcane and sugar beet farming	0	5,970	0	25,126
All other crop farming	25	129,946	25	395,781
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	52	287,484	52	3,732,970
Dairy cattle and milk production	5	97,402	5	1,410,568
Poultry and egg production	5	114,445	5	2,115,929
Animal production, except cattle and poultry and eggs	11	123,704	11	827,670
Forestry, forest products, and timber tract production	1	47,899	1	69,925
Commercial logging	2	81,232	2	161,929
Commercial fishing	2	(4,699)	2	170,952
Commercial hunting and trapping	1	16,237	1	63,445
Support activities for agriculture and forestry	27	966,265	27	1,054,763
Oil and gas extraction	24	2,105,320	24	15,081,440
Coal mining	2	228,277	2	927,646
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	(49,844)	0	44,607
Gold ore mining	0	(869)	0	21,304
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	1	70,023	1	106,807
Other metal ore mining	0	0	0	0
Stone mining and quarrying	1	57,493	1	246,455
Sand and gravel mining	1	158,847	1	218,070
Other clay, ceramic, refractory minerals mining	0	7,152	0	22,740
Potash, soda, and borate mineral mining	0	4,731	0	15,528
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	13,409	0	42,538
Other nonmetallic minerals	0	11,536	0	27,105
Drilling oil and gas wells	0	1,580	0	7,382
Support activities for oil and gas operations	0	27,829	0	99,161
Metal mining services	2	111,428	2	963,292

## APPENDIX

Other nonmetallic minerals services	0	4,151	0	33,225
Electric power generation - Hydroelectric	2	293,639	2	1,132,376
Electric power generation - Fossil fuel	4	684,659	4	5,511,117
Electric power generation - Nuclear	1	275,123	1	1,218,824
Electric power generation - Solar	0	14,584	0	41,527
Electric power generation - Wind	2	222,913	2	2,102,902
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	14,589	0	62,016
Electric power generation - All other	0	16,202	0	18,186
Electric power transmission and distribution	14	1,988,641	14	17,513,140
Natural gas distribution	4	737,503	4	3,689,891
Water, sewage and other systems	3	331,651	3	852,141
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	39	2,849,297	39	8,176,382

## APPENDIX

Maintenance and repair construction of residential structures	16	1,102,551	16	3,458,278
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	3,542	0	5,067
Dog and cat food manufacturing	1	45,936	1	978,717
Other animal food manufacturing	3	208,292	3	2,788,311
Flour milling	1	90,653	1	1,238,819
Rice milling	0	26,314	0	274,675
Malt manufacturing	0	3,307	0	45,284
Wet corn milling	0	10,315	0	419,683
Soybean and other oilseed processing	0	32,230	0	2,122,034
Fats and oils refining and blending	0	30,478	0	584,977
Breakfast cereal manufacturing	0	4,358	0	65,633
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	30,186	0	294,272
Nonchocolate confectionery manufacturing	1	43,338	1	298,948
Chocolate and confectionery manufacturing from cacao beans	0	2,488	0	39,404
Confectionery manufacturing from purchased chocolate	2	152,119	2	894,933
Frozen fruits, juices and vegetables manufacturing	1	19,887	1	209,858
Frozen specialties manufacturing	5	264,182	5	1,794,707
Canned fruits and vegetables manufacturing	2	99,138	2	823,857
Canned specialties	1	76,818	1	906,016
Dehydrated food products manufacturing	0	14,480	0	102,947
Cheese manufacturing	1	62,139	1	974,069
Dry, condensed, and evaporated dairy product manufacturing	2	150,204	2	2,476,556
Fluid milk manufacturing	2	102,133	2	1,137,441
Creamery butter manufacturing	0	18,055	0	479,460
Ice cream and frozen dessert manufacturing	1	29,746	1	239,504
Frozen cakes and other pastries manufacturing	8	280,096	8	733,375
Poultry processing	11	518,092	11	3,429,234
Animal, except poultry, slaughtering	8	489,033	8	5,577,150
Meat processed from carcasses	7	445,683	7	3,839,341

## APPENDIX

Rendering and meat byproduct processing	1	46,018	1	230,134
Seafood product preparation and packaging	1	88,778	1	514,047
Bread and bakery product, except frozen, manufacturing	18	819,676	18	2,666,771
Cookie and cracker manufacturing	1	66,672	1	486,184
Dry pasta, mixes, and dough manufacturing	1	53,023	1	497,490
Tortilla manufacturing	1	63,677	1	306,608
Roasted nuts and peanut butter manufacturing	1	76,389	1	542,164
Other snack food manufacturing	3	249,311	3	1,853,355
Coffee and tea manufacturing	1	60,564	1	569,624
Flavoring syrup and concentrate manufacturing	1	224,770	1	4,042,100
Mayonnaise, dressing, and sauce manufacturing	1	52,539	1	460,034
Spice and extract manufacturing	1	108,125	1	707,088
All other food manufacturing	3	139,521	3	935,094
Bottled and canned soft drinks & water	4	338,942	4	3,285,374
Manufactured ice	0	14,335	0	43,164
Breweries	3	253,578	3	1,796,216
Wineries	1	49,848	1	449,837
Distilleries	1	125,464	1	1,556,312
Tobacco product manufacturing	0	3,266	0	263,955
Fiber, yarn, and thread mills	0	7,433	0	73,823
Broadwoven fabric mills	1	25,537	1	142,132
Narrow fabric mills and schiffli machine embroidery	0	4,287	0	13,530
Nonwoven fabric mills	1	49,266	1	346,492
Knit fabric mills	0	1,530	0	6,073
Textile and fabric finishing mills	0	11,197	0	75,664
Fabric coating mills	1	32,186	1	188,494
Carpet and rug mills	0	23,611	0	156,602
Curtain and linen mills	1	41,487	1	227,615
Textile bag and canvas mills	1	41,091	1	152,285
Rope, cordage, twine, tire cord and tire fabric mills	0	23,436	0	113,162
Other textile product mills	2	64,465	2	245,461
Hosiery and sock mills	0	7,252	0	28,064
Other apparel knitting mills	0	7,208	0	33,004
Cut and sew apparel contractors	2	74,093	2	153,943

## APPENDIX

Mens and boys cut and sew apparel manufacturing	2	54,405	2	208,280
Womens and girls cut and sew apparel manufacturing	1	16,264	1	187,394
Other cut and sew apparel manufacturing	1	25,637	1	104,438
Apparel accessories and other apparel manufacturing	1	38,613	1	134,786
Leather and hide tanning and finishing	0	9,290	0	60,505
Footwear manufacturing	2	108,678	2	372,291
Other leather and allied product manufacturing	1	22,492	1	76,776
Sawmills	2	90,496	2	461,586
Wood preservation	0	10,906	0	112,941
Veneer and plywood manufacturing	1	48,104	1	211,607
Engineered wood member and truss manufacturing	1	36,719	1	146,937
Reconstituted wood product manufacturing	0	29,008	0	263,298
Wood windows and door manufacturing	2	120,484	2	475,259
Cut stock, resawing lumber, and planing	0	10,884	0	58,295
Other millwork, including flooring	1	70,186	1	289,042
Wood container and pallet manufacturing	2	96,061	2	310,771
Manufactured home (mobile home) manufacturing	0	267	0	1,223
Prefabricated wood building manufacturing	0	6,113	0	19,572
All other miscellaneous wood product manufacturing	1	56,498	1	196,868
Pulp mills	0	433	0	3,334
Paper mills	0	38,810	0	326,288
Paperboard mills	2	231,839	2	1,789,238
Paperboard container manufacturing	6	497,797	6	2,914,768
Paper bag and coated and treated paper manufacturing	4	254,624	4	1,552,563
Stationery product manufacturing	1	43,919	1	210,794
Sanitary paper product manufacturing	1	173,374	1	1,126,250

## APPENDIX

All other converted paper product manufacturing	1	54,511	1	213,008
Printing	24	1,338,438	24	3,760,618
Support activities for printing	1	76,092	1	157,426
Petroleum refineries	3	732,340	3	24,704,097
Asphalt paving mixture and block manufacturing	0	36,147	0	154,517
Asphalt shingle and coating materials manufacturing	0	25,925	0	157,517
Petroleum lubricating oil and grease manufacturing	3	552,254	3	3,702,968
All other petroleum and coal products manufacturing	0	22,996	0	140,977
Petrochemical manufacturing	4	658,609	4	22,584,083
Industrial gas manufacturing	1	102,093	1	639,261
Synthetic dye and pigment manufacturing	1	121,229	1	729,042
Other basic inorganic chemical manufacturing	2	250,049	2	1,443,558
Other basic organic chemical manufacturing	5	732,994	5	7,760,566
Plastics material and resin manufacturing	4	640,348	4	5,382,843
Synthetic rubber manufacturing	0	53,715	0	363,403
Artificial and synthetic fibers and filaments manufacturing	0	18,820	0	63,290
Nitrogenous fertilizer manufacturing	0	30,647	0	215,609
Phosphatic fertilizer manufacturing	0	3,463	0	29,494
Fertilizer mixing	0	23,795	0	157,487
Pesticide and other agricultural chemical manufacturing	1	93,228	1	1,082,887
Medicinal and botanical manufacturing	0	38,614	0	182,286
Pharmaceutical preparation manufacturing	9	1,235,285	9	12,574,369
In-vitro diagnostic substance manufacturing	0	24,050	0	98,413
Biological product (except diagnostic) manufacturing	1	71,133	1	453,237
Paint and coating manufacturing	2	251,508	2	1,671,045
Adhesive manufacturing	1	112,177	1	692,300
Soap and other detergent manufacturing	1	119,840	1	1,585,324



## APPENDIX

Polish and other sanitation good manufacturing	1	128,350	1	910,820
Surface active agent manufacturing	0	10,005	0	113,247
Toilet preparation manufacturing	3	267,864	3	2,337,126
Printing ink manufacturing	1	59,131	1	259,505
Explosives manufacturing	0	15,805	0	53,832
Custom compounding of purchased resins	1	102,819	1	793,006
Photographic film and chemical manufacturing	1	93,027	1	667,656
Other miscellaneous chemical product manufacturing	2	309,580	2	1,495,104
Plastics packaging materials and unlaminated film and sheet manufacturing	6	399,281	6	2,599,923
Unlaminated plastics profile shape manufacturing	1	55,176	1	433,114
Plastics pipe and pipe fitting manufacturing	1	93,129	1	620,668
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	69,215	1	351,483
Polystyrene foam product manufacturing	2	146,929	2	883,457
Urethane and other foam product (except polystyrene) manufacturing	3	178,669	3	1,085,459
Plastics bottle manufacturing	2	118,482	2	834,056
Other plastics product manufacturing	10	605,240	10	2,848,715
Tire manufacturing	0	21,359	0	147,898
Rubber and plastics hoses and belting manufacturing	1	43,047	1	186,782
Other rubber product manufacturing	4	305,413	4	1,427,946
Pottery, ceramics, and plumbing fixture manufacturing	1	41,136	1	101,822
Brick, tile, and other structural clay product manufacturing	1	44,372	1	155,081
Flat glass manufacturing	0	27,341	0	133,442
Other pressed and blown glass and glassware manufacturing	2	169,956	2	511,053
Glass container manufacturing	1	69,002	1	282,630
Glass product manufacturing made of purchased glass	1	133,435	1	416,591

## APPENDIX

Cement manufacturing	0	27,394	0	165,318
Ready-mix concrete manufacturing	2	150,441	2	742,594
Concrete block and brick manufacturing	0	24,618	0	108,748
Concrete pipe manufacturing	0	9,531	0	36,611
Other concrete product manufacturing	1	69,184	1	241,421
Lime manufacturing	0	22,481	0	161,880
Gypsum product manufacturing	1	121,726	1	878,826
Abrasive product manufacturing	0	36,510	0	211,718
Cut stone and stone product manufacturing	1	55,068	1	116,908
Ground or treated mineral and earth manufacturing	0	6,462	0	43,290
Mineral wool manufacturing	0	30,310	0	161,311
Miscellaneous nonmetallic mineral products manufacturing	0	11,991	0	62,439
Iron and steel mills and ferroalloy manufacturing	2	225,190	2	1,941,546
Iron, steel pipe and tube manufacturing from purchased steel	1	65,538	1	344,077
Rolled steel shape manufacturing	1	62,551	1	460,961
Steel wire drawing	0	20,897	0	120,735
Alumina refining and primary aluminum production	0	25,001	0	222,534
Secondary smelting and alloying of aluminum	0	7,737	0	103,115
Aluminum sheet, plate, and foil manufacturing	0	13,516	0	137,765
Other aluminum rolling, drawing and extruding	1	72,435	1	439,186
Nonferrous metal (exc aluminum) smelting and refining	0	10,146	0	111,933
Copper rolling, drawing, extruding and alloying	1	133,556	1	1,256,374
Nonferrous metal, except copper and aluminum, shaping	0	12,560	0	68,741
Secondary processing of other nonferrous metals	0	1,873	0	33,748
Ferrous metal foundries	1	78,170	1	305,511
Nonferrous metal foundries	1	64,652	1	244,903
Custom roll forming	0	5,139	0	33,613
Crown and closure manufacturing and metal stamping	2	103,754	2	427,479

## APPENDIX

Iron and steel forging	1	110,039	1	417,206
Nonferrous forging	0	8,881	0	40,459
Cutlery, utensil, pot, and pan manufacturing	0	19,296	0	165,024
Handtool manufacturing	1	69,428	1	243,229
Prefabricated metal buildings and components manufacturing	0	35,949	0	141,618
Fabricated structural metal manufacturing	7	499,868	7	2,201,134
Plate work manufacturing	2	153,955	2	425,936
Metal window and door manufacturing	1	86,783	1	347,630
Sheet metal work manufacturing	2	162,449	2	538,139
Ornamental and architectural metal work manufacturing	1	84,821	1	289,559
Power boiler and heat exchanger manufacturing	0	43,091	0	141,680
Metal tank (heavy gauge) manufacturing	1	56,859	1	189,248
Metal cans manufacturing	1	56,532	1	506,094
Metal barrels, drums and pails manufacturing	0	29,665	0	129,695
Hardware manufacturing	1	40,277	1	201,745
Spring and wire product manufacturing	1	100,614	1	389,966
Machine shops	8	497,560	8	1,144,276
Turned product and screw, nut, and bolt manufacturing	2	115,552	2	413,438
Metal heat treating	1	111,980	1	399,351
Metal coating and nonprecious engraving	2	156,098	2	632,439
Electroplating, anodizing, and coloring metal	2	125,721	2	319,177
Valve and fittings, other than plumbing, manufacturing	2	144,347	2	550,738
Plumbing fixture fitting and trim manufacturing	0	19,178	0	184,762
Ball and roller bearing manufacturing	0	19,812	0	78,440
Small arms ammunition manufacturing	0	1,610	0	9,842
Ammunition, except for small arms, manufacturing	0	23,307	0	55,601
Small arms, ordnance, and accessories manufacturing	0	18,507	0	122,491

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	1	67,589	1	190,198
Other fabricated metal manufacturing	2	126,331	2	412,523
Farm machinery and equipment manufacturing	0	11,624	0	73,380
Lawn and garden equipment manufacturing	0	8,780	0	71,233
Construction machinery manufacturing	0	10,659	0	77,464
Mining machinery and equipment manufacturing	0	4,635	0	13,334
Oil and gas field machinery and equipment manufacturing	0	31,499	0	98,834
Semiconductor machinery manufacturing	0	3,206	0	11,388
Food product machinery manufacturing	0	1,836	0	8,138
Sawmill, woodworking, and paper machinery	0	2,349	0	7,268
Printing machinery and equipment manufacturing	0	959	0	5,668
All other industrial machinery manufacturing	0	11,400	0	37,490
Optical instrument and lens manufacturing	0	1,310	0	6,517
Photographic and photocopying equipment manufacturing	0	85	0	3,109
Other commercial service industry machinery manufacturing	0	8,450	0	62,604
Air purification and ventilation equipment manufacturing	0	13,707	0	69,697
Heating equipment (except warm air furnaces) manufacturing	0	16,236	0	90,378
Air conditioning, refrigeration, and warm air heating equipment manufacturing	2	129,308	2	815,604
Industrial mold manufacturing	0	6,317	0	20,038
Special tool, die, jig, and fixture manufacturing	0	4,980	0	17,667
Cutting tool and machine tool accessory manufacturing	0	13,863	0	36,021
Machine tool manufacturing	0	3,054	0	14,912

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Rolling mill and other metalworking machinery manufacturing	0	2,472	0	9,380
Turbine and turbine generator set units manufacturing	0	2,931	0	13,646
Speed changer, industrial high-speed drive, and gear manufacturing	0	28,132	0	118,557
Mechanical power transmission equipment manufacturing	1	73,515	1	305,689
Other engine equipment manufacturing	1	81,125	1	621,533
Pump and pumping equipment manufacturing	0	8,517	0	49,116
Air and gas compressor manufacturing	0	5,470	0	25,535
Elevator and moving stairway manufacturing	0	1,327	0	6,406
Conveyor and conveying equipment manufacturing	0	4,454	0	14,502
Overhead cranes, hoists, and monorail systems manufacturing	0	662	0	4,890
Industrial truck, trailer, and stacker manufacturing	0	12,263	0	66,418
Power-driven handtool manufacturing	0	648	0	14,932
Welding and soldering equipment manufacturing	0	8,196	0	29,986
Packaging machinery manufacturing	0	2,919	0	14,785
Industrial process furnace and oven manufacturing	0	2,116	0	7,565
Fluid power cylinder and actuator manufacturing	0	20,668	0	79,083
Fluid power pump and motor manufacturing	0	6,017	0	31,983
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	9,912	0	41,322
Electronic computer manufacturing	1	127,075	1	827,573
Computer storage device manufacturing	0	4,363	0	37,833
Computer terminals and other computer peripheral equipment manufacturing	1	136,478	1	649,784

## APPENDIX

Telephone apparatus manufacturing	1	123,448	1	593,992
Broadcast and wireless communications equipment manufacturing	0	10,193	0	38,019
Other communications equipment manufacturing	0	38,418	0	162,944
Audio and video equipment manufacturing	0	14,159	0	88,361
Printed circuit assembly (electronic assembly) manufacturing	2	156,490	2	839,556
Bare printed circuit board manufacturing	1	56,074	1	173,789
Semiconductor and related device manufacturing	10	1,828,788	10	8,143,173
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	12,841	0	55,557
Electronic connector manufacturing	3	175,207	3	832,887
Other electronic component manufacturing	2	162,897	2	454,836
Electromedical and electrotherapeutic apparatus manufacturing	0	13,858	0	69,769
Search, detection, and navigation instruments manufacturing	0	2,759	0	9,510
Automatic environmental control manufacturing	1	44,535	1	166,925
Industrial process variable instruments manufacturing	0	26,152	0	91,440
Totalizing fluid meter and counting device manufacturing	0	25,614	0	140,871
Electricity and signal testing instruments manufacturing	0	5,010	0	24,765
Analytical laboratory instrument manufacturing	0	40,632	0	155,593
Irradiation apparatus manufacturing	0	462	0	3,020
Watch, clock, and other measuring and controlling device manufacturing	0	13,008	0	69,444
Blank magnetic and optical recording media manufacturing	0	14,312	0	88,329

## APPENDIX

Software and other prerecorded and record reproducing	0	48,535	0	130,866
Electric lamp bulb and part manufacturing	1	63,093	1	211,194
Lighting fixture manufacturing	1	111,963	1	377,221
Small electrical appliance manufacturing	0	24,722	0	143,208
Household cooking appliance manufacturing	0	9,852	0	88,260
Household refrigerator and home freezer manufacturing	0	8,934	0	68,302
Household laundry equipment manufacturing	0	16,862	0	164,490
Other major household appliance manufacturing	0	3,729	0	28,042
Power, distribution, and specialty transformer manufacturing	0	12,314	0	51,024
Motor and generator manufacturing	1	76,647	1	284,540
Switchgear and switchboard apparatus manufacturing	2	189,777	2	700,257
Relay and industrial control manufacturing	1	69,706	1	208,826
Storage battery manufacturing	0	28,728	0	119,166
Primary battery manufacturing	1	71,404	1	279,856
Fiber optic cable manufacturing	2	175,091	2	956,063
Other communication and energy wire manufacturing	0	27,252	0	145,822
Wiring device manufacturing	1	92,340	1	363,418
Carbon and graphite product manufacturing	0	33,797	0	136,008
All other miscellaneous electrical equipment and component manufacturing	0	12,568	0	41,868
Automobile manufacturing	2	202,270	2	3,461,564
Light truck and utility vehicle manufacturing	1	74,947	1	1,789,670
Heavy duty truck manufacturing	0	537	0	5,744
Motor vehicle body manufacturing	0	9,017	0	48,961
Truck trailer manufacturing	0	845	0	4,330
Motor home manufacturing	0	6,817	0	36,134
Travel trailer and camper manufacturing	2	156,825	2	728,913
Motor vehicle gasoline engine and engine parts manufacturing	1	85,027	1	632,798

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Motor vehicle electrical and electronic equipment manufacturing	4	294,129	4	1,911,554
Motor vehicle transmission and power train parts manufacturing	1	114,529	1	882,174
Motor vehicle seating and interior trim manufacturing	1	61,243	1	455,263
Motor vehicle metal stamping	1	97,880	1	568,754
Other motor vehicle parts manufacturing	4	308,460	4	2,385,995
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	1	46,703	1	327,635
Aircraft manufacturing	0	11,013	0	62,267
Aircraft engine and engine parts manufacturing	0	36,766	0	250,535
Other aircraft parts and auxiliary equipment manufacturing	0	30,464	0	96,776
Guided missile and space vehicle manufacturing	0	4,972	0	12,574
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	554	0	1,652
Railroad rolling stock manufacturing	0	7,512	0	47,750
Ship building and repairing	0	17,289	0	49,973
Boat building	1	45,974	1	226,763
Motorcycle, bicycle, and parts manufacturing	0	7,545	0	76,803
Military armored vehicle, tank, and tank component manufacturing	0	7,803	0	63,438
All other transportation equipment manufacturing	0	27,658	0	223,028
Wood kitchen cabinet and countertop manufacturing	5	217,071	5	581,841
Upholstered household furniture manufacturing	2	129,530	2	490,170
Nonupholstered wood household furniture manufacturing	1	51,686	1	143,515
Other household nonupholstered furniture manufacturing	0	16,747	0	84,855
Institutional furniture manufacturing	0	3,193	0	10,081
Wood office furniture manufacturing	0	756	0	2,790



## APPENDIX

Custom architectural woodwork and millwork	0	2,868	0	8,164
Office furniture, except wood, manufacturing	0	6,943	0	29,623
Showcase, partition, shelving, and locker manufacturing	0	25,512	0	80,675
Mattress manufacturing	1	72,117	1	434,095
Blind and shade manufacturing	0	12,053	0	53,236
Surgical and medical instrument manufacturing	0	32,105	0	145,887
Surgical appliance and supplies manufacturing	1	157,593	1	614,357
Dental equipment and supplies manufacturing	0	7,974	0	26,475
Ophthalmic goods manufacturing	1	71,883	1	339,155
Dental laboratories	2	88,482	2	146,333
Jewelry and silverware manufacturing	2	140,577	2	405,301
Sporting and athletic goods manufacturing	1	112,136	1	297,271
Doll, toy, and game manufacturing	0	37,467	0	131,474
Office supplies (except paper) manufacturing	1	37,825	1	152,385
Sign manufacturing	1	88,659	1	160,585
Gasket, packing, and sealing device manufacturing	1	85,006	1	221,258
Musical instrument manufacturing	0	13,418	0	23,551
Fasteners, buttons, needles, and pins manufacturing	0	5,272	0	12,287
Broom, brush, and mop manufacturing	0	12,637	0	52,653
Burial casket manufacturing	0	3,414	0	7,776
All other miscellaneous manufacturing	2	116,932	2	313,985
Wholesale - Motor vehicle and motor vehicle parts and supplies	7	551,537	7	3,013,667
Wholesale - Professional and commercial equipment and supplies	21	2,783,456	21	8,272,870
Wholesale - Household appliances and electrical and electronic goods	9	1,066,037	9	5,164,576
Wholesale - Machinery, equipment, and supplies	13	1,237,653	13	3,924,512
Wholesale - Other durable goods merchant wholesalers	28	2,294,710	28	7,124,045

## APPENDIX

Wholesale - Drugs and druggists' sundries	9	1,382,995	9	8,796,129
Wholesale - Grocery and related product wholesalers	28	2,003,339	28	5,603,617
Wholesale - Petroleum and petroleum products	4	679,182	4	5,933,357
Wholesale - Other nondurable goods merchant wholesalers	37	3,249,815	37	12,018,131
Wholesale - Wholesale electronic markets and agents and brokers	19	2,129,199	19	1,466,272
Retail - Motor vehicle and parts dealers	32	2,250,563	32	4,706,039
Retail - Furniture and home furnishings stores	25	1,168,501	25	2,426,148
Retail - Electronics and appliance stores	24	1,470,324	24	2,444,788
Retail - Building material and garden equipment and supplies stores	24	1,093,375	24	2,898,351
Retail - Food and beverage stores	104	3,729,248	104	8,237,033
Retail - Health and personal care stores	50	2,194,562	50	4,113,778
Retail - Gasoline stores	29	1,295,983	29	3,611,949
Retail - Clothing and clothing accessories stores	62	1,803,928	62	5,690,833
Retail - Sporting goods, hobby, musical instrument and book stores	31	906,928	31	1,875,446
Retail - General merchandise stores	108	3,426,624	108	8,034,523
Retail - Miscellaneous store retailers	62	1,649,290	62	3,170,097
Retail - Nonstore retailers	61	1,951,728	61	10,076,142
Air transportation	24	3,030,498	24	8,515,960
Rail transportation	6	744,598	6	2,695,620
Water transportation	4	529,600	4	3,148,373
Truck transportation	68	4,568,280	68	11,288,876
Transit and ground passenger transportation	59	1,097,790	59	2,188,071
Pipeline transportation	3	3,165,720	3	2,091,696
Scenic and sightseeing transportation and support activities for transportation	59	4,546,580	59	10,011,447
Couriers and messengers	32	1,229,792	32	3,268,496
Warehousing and storage	50	2,521,436	50	6,059,483

## APPENDIX

Newspaper publishers	6	355,252	6	676,347
Periodical publishers	4	399,209	4	889,605
Book publishers	2	223,886	2	1,044,748
Directory, mailing list, and other publishers	2	137,153	2	557,827
Greeting card publishing	0	1,146	0	5,838
Software publishers	15	2,874,876	15	7,018,918
Motion picture and video industries	14	866,137	14	3,465,680
Sound recording industries	1	105,638	1	671,550
Radio and television broadcasting	10	1,774,634	10	4,039,054
Cable and other subscription programming	1	208,858	1	2,744,124
Wired telecommunications carriers	16	2,316,210	16	9,954,768
Wireless telecommunications carriers (except satellite)	6	1,077,447	6	11,363,872
Satellite, telecommunications resellers, and all other telecommunications	4	835,119	4	1,850,279
Data processing, hosting, and related services	23	2,841,335	23	10,768,441
News syndicates, libraries, archives and all other information services	3	206,591	3	513,598
Internet publishing and broadcasting and web search portals	11	1,604,375	11	10,628,054
Nondepository credit intermediation and related activities	53	5,534,857	53	11,433,190
Securities and commodity contracts intermediation and brokerage	34	5,316,125	34	9,548,887
Monetary authorities and depository credit intermediation	89	8,886,157	89	32,879,500
Other financial investment activities	134	6,161,334	134	17,817,429
Direct life insurance carriers	14	1,581,824	14	4,968,928
Insurance carriers, except direct life	37	4,329,487	37	28,733,358
Insurance agencies, brokerages, and related activities	80	5,484,585	80	19,185,303
Funds, trusts, and other financial vehicles	29	1,878,395	29	9,215,132
Other real estate	441	16,652,705	441	85,768,707
Tenant-occupied housing	59	1,911,950	59	17,410,712

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Owner-occupied dwellings	0	0	0	56,714,048
Automotive equipment rental and leasing	11	831,211	11	3,306,923
General and consumer goods rental except video tapes and discs	11	917,784	11	1,680,938
Video tape and disc rental	3	195,661	3	493,200
Commercial and industrial machinery and equipment rental and leasing	11	1,325,266	11	4,403,361
Lessors of nonfinancial intangible assets	1	222,937	1	4,092,093
Legal services	134	14,374,651	134	33,507,971
Accounting, tax preparation, bookkeeping, and payroll services	69	5,963,041	69	10,648,753
Architectural, engineering, and related services	108	11,809,307	108	22,840,641
Specialized design services	13	943,164	13	1,200,766
Custom computer programming services	19	2,384,187	19	3,743,388
Computer systems design services	28	3,468,536	28	4,777,509
Other computer related services, including facilities management	7	1,045,660	7	3,156,111
Management consulting services	225	24,401,957	225	34,290,698
Environmental and other technical consulting services	36	3,573,565	36	4,256,824
Scientific research and development services	2,011	221,505,879	2,011	603,457,892
Advertising, public relations, and related services	34	3,197,162	34	6,916,828
Photographic services	12	720,414	12	667,380
Veterinary services	12	595,434	12	1,289,133
Marketing research and all other miscellaneous professional, scientific, and technical services	149	11,488,152	149	13,886,404
Management of companies and enterprises	168	19,740,494	168	33,353,948
Office administrative services	63	6,218,236	63	5,077,258
Facilities support services	189	12,167,129	189	32,849,183
Employment services	301	15,459,879	301	37,457,498
Business support services	62	2,995,347	62	4,531,945
Travel arrangement and reservation services	15	1,024,509	15	3,062,938
Investigation and security services	56	2,264,193	56	3,388,332
Services to buildings	131	3,754,169	131	6,428,897

## APPENDIX

Landscape and horticultural services	54	1,934,320	54	3,418,462
Other support services	17	771,348	17	1,967,444
Waste management and remediation services	17	1,370,644	17	4,406,158
Elementary and secondary schools	46	2,434,185	46	2,653,292
Junior colleges, colleges, universities, and professional schools	31	2,096,142	31	3,937,340
Other educational services	61	1,750,204	61	3,158,714
Offices of physicians	109	12,680,064	109	21,293,405
Offices of dentists	40	2,728,107	40	5,082,562
Offices of other health practitioners	49	3,331,442	49	4,187,404
Outpatient care centers	33	2,522,694	33	4,637,371
Medical and diagnostic laboratories	12	996,754	12	2,350,747
Home health care services	114	3,573,948	114	4,056,951
Other ambulatory health care services	14	919,906	14	1,599,618
Hospitals	200	18,611,366	200	37,063,899
Nursing and community care facilities	64	2,574,576	64	4,947,557
Residential mental retardation, mental health, substance abuse and other facilities	23	1,055,295	23	1,600,241
Individual and family services	98	2,521,847	98	3,480,621
Child day care services	66	1,668,908	66	2,613,353
Community food, housing, and other relief services, including rehabilitation services	22	864,231	22	1,975,664
Performing arts companies	10	462,284	10	1,130,519
Commercial Sports Except Racing	12	1,168,319	12	1,721,956
Racing and Track Operation	2	84,135	2	240,030
Independent artists, writers, and performers	43	1,718,020	43	2,108,884
Promoters of performing arts and sports and agents for public figures	11	450,690	11	1,882,460
Museums, historical sites, zoos, and parks	6	256,853	6	516,692
Amusement parks and arcades	6	140,480	6	543,951
Gambling industries (except casino hotels)	15	548,348	15	2,030,865
Other amusement and recreation industries	23	580,372	23	1,270,174

## APPENDIX

Fitness and recreational sports centers	23	434,362	23	1,101,727
Bowling centers	3	81,473	3	210,238
Hotels and motels, including casino hotels	99	3,814,800	99	11,167,986
Other accommodations	27	1,342,698	27	2,356,896
Full-service restaurants	246	6,593,368	246	16,599,066
Limited-service restaurants	207	4,806,596	207	15,783,364
All other food and drinking places	148	5,394,615	148	9,867,870
Automotive repair and maintenance, except car washes	70	4,139,265	70	7,244,547
Car washes	37	2,165,559	37	4,722,062
Electronic and precision equipment repair and maintenance	43	3,776,775	43	8,555,406
Commercial and industrial machinery and equipment repair and maintenance	16	1,390,684	16	2,528,885
Personal and household goods repair and maintenance	30	1,688,445	30	1,860,119
Personal care services	76	2,208,940	76	2,341,683
Death care services	5	259,334	5	496,174
Dry-cleaning and laundry services	14	495,361	14	816,406
Other personal services	71	2,132,065	71	2,285,599
Religious organizations	91	4,435,604	91	8,440,698
Grantmaking, giving, and social advocacy organizations	15	890,726	15	3,914,370
Business and professional associations	11	918,117	11	2,278,535
Labor and civic organizations	32	864,973	32	3,636,717
Private households	50	850,175	50	850,175
Postal service	20	1,878,571	20	2,066,902
Federal electric utilities	0	0	0	0
Other federal government enterprises	4	264,850	4	926,297
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	1	120,636	1	217,693
Local government passenger transit	6	514,997	6	382,517
Local government electric utilities	3	389,626	3	1,889,481
Other local government enterprises	32	2,837,862	32	11,320,494

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	793	140,430,317	793	342,682,705

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 46. Utah

**Table 459: Detailed NASA Impacts by Types of Impact, Utah.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>4,831</i>	<i>280,926,294</i>	<i>451,957,691</i>	<i>914,714,255</i>
Oilseed farming	0	2,005	2,365	13,564
Grain farming	1	26,404	73,633	266,264
Vegetable and melon farming	1	22,135	36,330	86,267
Fruit farming	1	23,210	43,275	86,934
Tree nut farming	0	1,155	1,211	1,601
Greenhouse, nursery, and floriculture production	2	73,773	99,973	204,326
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	8	72,945	91,182	195,886
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	5	38,440	150,835	655,842

## APPENDIX

Dairy cattle and milk production	1	25,753	55,896	399,643
Poultry and egg production	1	20,303	27,770	330,535
Animal production, except cattle and poultry and eggs	8	153,883	548,318	956,049
Forestry, forest products, and timber tract production	0	9,234	10,450	13,251
Commercial logging	1	21,424	23,424	43,685
Commercial fishing	0	30,307	48,710	83,971
Commercial hunting and trapping	1	25,950	21,090	33,445
Support activities for agriculture and forestry	12	325,060	261,317	349,989
Oil and gas extraction	5	213,792	986,738	2,174,862
Coal mining	1	180,145	379,672	650,928
Copper, nickel, lead, and zinc mining	5	626,278	3,965,083	6,354,472
Iron ore mining	0	(13,378)	(27,228)	12,569
Gold ore mining	0	223	2,637	15,803
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(3,907)	(2,443,260)	78,352
Other metal ore mining	0	5,536	13,835	32,874
Stone mining and quarrying	1	(55,764)	(25,084)	40,788
Sand and gravel mining	1	11,798	52,781	154,633
Other clay, ceramic, refractory minerals mining	0	(613)	3,248	15,482
Potash, soda, and borate mineral mining	0	1,884	3,929	12,497
Phosphate rock mining	0	1,204	1,393	3,001
Other chemical and fertilizer mineral mining	0	590	8,028	24,952
Other nonmetallic minerals	0	2,629	11,474	30,149
Drilling oil and gas wells	0	80	163	498
Support activities for oil and gas operations	0	4,930	6,833	20,078
Metal mining services	0	26,315	57,157	141,754
Other nonmetallic minerals services	0	992	2,494	6,161
Electric power generation - Hydroelectric	0	1,512	5,387	11,268
Electric power generation - Fossil fuel	3	391,315	1,495,576	3,676,724
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	1	105,313	200,660	377,257
Electric power generation - Wind	0	14,194	64,501	179,618



## APPENDIX

Electric power generation - Geothermal	0	7,588	18,253	32,283
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	2,314	624	2,280
Electric power transmission and distribution	4	586,502	2,155,241	5,524,730
Natural gas distribution	4	365,376	1,013,907	2,634,818
Water, sewage and other systems	1	63,816	118,682	256,013
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	26	1,605,791	2,399,829	5,414,789
Maintenance and repair construction of residential structures	6	338,566	565,476	1,265,908
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1,191	991	2,067
Dog and cat food manufacturing	1	73,163	260,842	1,187,826
Other animal food manufacturing	1	52,757	84,934	731,354
Flour milling	0	33,703	61,871	431,728
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	4,154	7,618	67,856
Breakfast cereal manufacturing	0	57,169	132,317	418,393
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	25,236	34,432	163,354
Chocolate and confectionery manufacturing from cacao beans	0	1,751	2,521	21,983
Confectionery manufacturing from purchased chocolate	0	15,252	18,330	124,609
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	2	95,016	135,099	585,129
Canned fruits and vegetables manufacturing	0	9,985	13,780	67,136
Canned specialties	0	30,180	68,189	327,915
Dehydrated food products manufacturing	0	2,381	2,584	11,147
Cheese manufacturing	2	96,237	133,958	1,374,996
Dry, condensed, and evaporated dairy product manufacturing	0	16,951	38,279	373,090
Fluid milk manufacturing	1	56,154	85,502	630,361
Creamery butter manufacturing	0	3,698	12,928	127,641
Ice cream and frozen dessert manufacturing	0	18,408	27,272	146,090
Frozen cakes and other pastries manufacturing	1	42,299	56,825	114,482
Poultry processing	2	97,486	123,097	619,719
Animal, except poultry, slaughtering	2	143,817	191,863	1,680,284
Meat processed from carcasses	3	168,676	180,695	1,409,186
Rendering and meat byproduct processing	0	4,109	4,458	23,498
Seafood product preparation and packaging	0	18,678	20,986	90,907
Bread and bakery product, except frozen, manufacturing	6	235,648	288,134	776,752
Cookie and cracker manufacturing	2	124,186	165,844	632,375
Dry pasta, mixes, and dough manufacturing	0	12,207	26,009	116,816
Tortilla manufacturing	0	8,232	8,979	26,461

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	16,324	20,195	99,645
Other snack food manufacturing	1	50,352	94,509	436,267
Coffee and tea manufacturing	0	5,683	7,507	38,240
Flavoring syrup and concentrate manufacturing	0	10,818	39,596	206,022
Mayonnaise, dressing, and sauce manufacturing	0	7,765	13,734	74,112
Spice and extract manufacturing	0	14,363	20,408	92,043
All other food manufacturing	1	58,277	70,126	296,304
Bottled and canned soft drinks & water	1	82,603	153,714	789,148
Manufactured ice	0	6,677	3,659	19,694
Breweries	1	41,357	89,019	297,050
Wineries	0	240	339	1,534
Distilleries	0	8,619	34,852	87,847
Tobacco product manufacturing	0	2,388	49,369	101,998
Fiber, yarn, and thread mills	0	1,766	3,395	13,194
Broadwoven fabric mills	0	37	103	1,123
Narrow fabric mills and schiffli machine embroidery	0	72	92	524
Nonwoven fabric mills	0	6,472	17,063	47,404
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	3,957	6,281	27,304
Fabric coating mills	0	5,208	8,523	34,958
Carpet and rug mills	0	5,072	12,766	62,614
Curtain and linen mills	0	3,085	6,016	22,477
Textile bag and canvas mills	0	20,305	30,643	77,622
Rope, cordage, twine, tire cord and tire fabric mills	0	14,494	34,021	99,256
Other textile product mills	0	4,955	7,421	26,983
Hosiery and sock mills	0	1,119	1,312	3,958
Other apparel knitting mills	0	938	1,234	4,418
Cut and sew apparel contractors	0	2,584	2,914	10,443
Mens and boys cut and sew apparel manufacturing	0	967	1,279	6,769
Womens and girls cut and sew apparel manufacturing	0	710	1,032	9,860
Other cut and sew apparel manufacturing	0	2,519	3,055	11,010
Apparel accessories and other apparel manufacturing	0	1,804	2,169	9,206
Leather and hide tanning and finishing	0	111	170	2,071

## APPENDIX

Footwear manufacturing	0	387	428	1,719
Other leather and allied product manufacturing	0	1,103	1,141	3,555
Sawmills	0	7,521	9,920	60,903
Wood preservation	0	2,961	6,803	33,859
Veneer and plywood manufacturing	0	66	113	2,836
Engineered wood member and truss manufacturing	0	21,525	26,351	86,472
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	2	75,352	94,581	375,822
Cut stock, resawing lumber, and planing	0	1,784	2,756	22,572
Other millwork, including flooring	1	38,070	48,640	197,946
Wood container and pallet manufacturing	1	39,341	43,742	139,564
Manufactured home (mobile home) manufacturing	0	5	7	26
Prefabricated wood building manufacturing	0	6,059	6,711	21,233
All other miscellaneous wood product manufacturing	1	15,015	17,629	89,316
Pulp mills	0	133	305	1,294
Paper mills	1	56,989	184,244	500,102
Paperboard mills	0	0	0	0
Paperboard container manufacturing	2	174,526	313,810	1,091,127
Paper bag and coated and treated paper manufacturing	1	117,113	268,589	765,803
Stationery product manufacturing	0	13,483	22,969	90,684
Sanitary paper product manufacturing	1	132,340	567,240	1,362,990
All other converted paper product manufacturing	0	2,036	5,557	26,927
Printing	14	711,901	1,236,457	2,434,948
Support activities for printing	1	44,415	77,221	120,535
Petroleum refineries	1	291,678	1,718,966	11,131,629
Asphalt paving mixture and block manufacturing	0	14,414	21,238	111,533
Asphalt shingle and coating materials manufacturing	0	2,462	5,946	20,614
Petroleum lubricating oil and grease manufacturing	0	10,339	20,611	135,789

## APPENDIX

All other petroleum and coal products manufacturing	0	6,234	15,306	58,048
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	31,974	43,483	230,014
Synthetic dye and pigment manufacturing	0	1,190	1,508	8,981
Other basic inorganic chemical manufacturing	1	72,624	93,406	464,210
Other basic organic chemical manufacturing	0	804	1,048	19,591
Plastics material and resin manufacturing	0	2,262	2,757	52,608
Synthetic rubber manufacturing	0	2,248	2,719	38,620
Artificial and synthetic fibers and filaments manufacturing	0	231	270	2,936
Nitrogenous fertilizer manufacturing	0	4,030	5,144	35,208
Phosphatic fertilizer manufacturing	0	362	497	2,744
Fertilizer mixing	0	762	794	4,001
Pesticide and other agricultural chemical manufacturing	0	6,125	9,327	77,735
Medicinal and botanical manufacturing	0	27,808	30,158	168,606
Pharmaceutical preparation manufacturing	1	118,067	211,670	1,313,113
In-vitro diagnostic substance manufacturing	0	251	280	1,084
Biological product (except diagnostic) manufacturing	0	178	234	650
Paint and coating manufacturing	0	19,024	21,124	150,628
Adhesive manufacturing	0	7,478	8,163	48,649
Soap and other detergent manufacturing	2	206,393	319,816	1,712,142
Polish and other sanitation good manufacturing	0	28,373	31,576	225,565
Surface active agent manufacturing	0	22,814	35,117	145,436
Toilet preparation manufacturing	0	28,823	39,143	189,308
Printing ink manufacturing	0	12,264	12,563	62,094
Explosives manufacturing	0	949	984	4,019
Custom compounding of purchased resins	0	2,654	2,977	25,346
Photographic film and chemical manufacturing	0	9,232	11,562	101,112
Other miscellaneous chemical product manufacturing	0	19,463	20,946	114,155

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	1	54,649	95,649	338,245
Unlaminated plastics profile shape manufacturing	0	14,505	34,463	103,075
Plastics pipe and pipe fitting manufacturing	0	17,477	44,964	137,097
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	43,567	85,757	233,152
Polystyrene foam product manufacturing	1	33,134	59,116	232,301
Urethane and other foam product (except polystyrene) manufacturing	0	8,218	13,740	60,511
Plastics bottle manufacturing	0	15,804	27,777	118,880
Other plastics product manufacturing	6	288,521	448,562	1,506,420
Tire manufacturing	0	19,173	27,614	132,073
Rubber and plastics hoses and belting manufacturing	0	18,064	30,702	98,725
Other rubber product manufacturing	3	196,649	305,856	886,335
Pottery, ceramics, and plumbing fixture manufacturing	0	2,416	2,897	9,667
Brick, tile, and other structural clay product manufacturing	0	13,451	22,683	55,601
Flat glass manufacturing	0	5,372	10,331	33,816
Other pressed and blown glass and glassware manufacturing	0	3,924	5,464	16,965
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	1	34,761	55,723	162,653
Cement manufacturing	0	17,221	38,375	109,720
Ready-mix concrete manufacturing	1	85,501	137,995	474,851
Concrete block and brick manufacturing	0	8,149	14,164	44,450
Concrete pipe manufacturing	0	3,877	6,072	14,798
Other concrete product manufacturing	1	36,934	52,061	134,865
Lime manufacturing	0	10,033	23,245	68,045
Gypsum product manufacturing	0	14,401	35,764	112,826
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	24,313	28,153	65,097

## APPENDIX

Ground or treated mineral and earth manufacturing	0	27,406	75,297	164,485
Mineral wool manufacturing	0	6,733	14,984	41,146
Miscellaneous nonmetallic mineral products manufacturing	0	9,727	22,494	56,820
Iron and steel mills and ferroalloy manufacturing	1	231,128	449,493	1,530,425
Iron, steel pipe and tube manufacturing from purchased steel	0	7,254	12,688	56,177
Rolled steel shape manufacturing	0	3,256	8,706	30,270
Steel wire drawing	0	941	1,710	5,676
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	20,034	32,388	134,432
Nonferrous metal (exc aluminum) smelting and refining	0	21,704	133,659	285,351
Copper rolling, drawing, extruding and alloying	0	82	143	1,602
Nonferrous metal, except copper and aluminum, shaping	0	24,320	35,062	109,894
Secondary processing of other nonferrous metals	0	263	1,294	4,669
Ferrous metal foundries	1	38,141	86,121	180,370
Nonferrous metal foundries	0	15,736	27,779	63,566
Custom roll forming	0	1,927	2,937	18,598
Crown and closure manufacturing and metal stamping	0	8,521	12,034	38,498
Iron and steel forging	0	10,958	14,715	59,227
Nonferrous forging	0	91	95	565
Cutlery, utensil, pot, and pan manufacturing	0	4,414	12,631	31,969
Handtool manufacturing	0	3,005	4,658	11,533
Prefabricated metal buildings and components manufacturing	0	16,866	23,614	61,491
Fabricated structural metal manufacturing	2	127,452	186,986	552,757
Plate work manufacturing	1	44,616	46,242	136,717
Metal window and door manufacturing	0	28,911	43,609	111,497

## APPENDIX

Sheet metal work manufacturing	1	76,407	97,498	244,745
Ornamental and architectural metal work manufacturing	1	48,892	63,658	162,460
Power boiler and heat exchanger manufacturing	0	456	632	2,118
Metal tank (heavy gauge) manufacturing	0	7,138	8,652	25,321
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	7,925	9,910	49,495
Hardware manufacturing	0	3,516	5,620	21,278
Spring and wire product manufacturing	0	17,049	22,968	71,103
Machine shops	4	244,460	280,294	563,128
Turned product and screw, nut, and bolt manufacturing	0	16,069	21,983	60,837
Metal heat treating	0	5,248	8,054	23,753
Metal coating and nonprecious engraving	1	30,550	51,948	133,584
Electroplating, anodizing, and coloring metal	1	39,883	44,501	109,296
Valve and fittings, other than plumbing, manufacturing	0	29,638	47,348	125,527
Plumbing fixture fitting and trim manufacturing	0	20,437	61,955	178,043
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	1	56,015	123,500	266,238
Ammunition, except for small arms, manufacturing	0	109	129	311
Small arms, ordnance, and accessories manufacturing	0	16,312	38,817	104,555
Fabricated pipe and pipe fitting manufacturing	0	10,785	12,477	34,260
Other fabricated metal manufacturing	1	75,987	99,556	285,522
Farm machinery and equipment manufacturing	0	1,891	2,691	11,800
Lawn and garden equipment manufacturing	0	1,493	2,637	14,329
Construction machinery manufacturing	0	387	756	3,346
Mining machinery and equipment manufacturing	0	3,925	4,747	14,969



## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	2,013	2,365	7,151
Semiconductor machinery manufacturing	0	156	176	648
Food product machinery manufacturing	0	72	86	254
Sawmill, woodworking, and paper machinery	0	570	638	2,802
Printing machinery and equipment manufacturing	0	53	65	680
All other industrial machinery manufacturing	0	658	828	2,728
Optical instrument and lens manufacturing	0	24	36	117
Photographic and photocopying equipment manufacturing	0	9	17	586
Other commercial service industry machinery manufacturing	0	9,140	16,403	46,627
Air purification and ventilation equipment manufacturing	0	4,146	5,912	16,933
Heating equipment (except warm air furnaces) manufacturing	0	8,132	11,816	38,443
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	6,159	11,129	28,632
Industrial mold manufacturing	0	4,571	5,169	12,589
Special tool, die, jig, and fixture manufacturing	0	1,047	1,302	2,750
Cutting tool and machine tool accessory manufacturing	0	2,944	3,183	7,232
Machine tool manufacturing	0	142	162	856
Rolling mill and other metalworking machinery manufacturing	0	102	125	405
Turbine and turbine generator set units manufacturing	0	133	178	764
Speed changer, industrial high-speed drive, and gear manufacturing	0	540	783	3,233
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	3,476	6,524	39,390
Pump and pumping equipment manufacturing	0	1,191	2,037	5,782

## APPENDIX

Air and gas compressor manufacturing	0	63	97	304
Elevator and moving stairway manufacturing	0	67	102	352
Conveyor and conveying equipment manufacturing	0	692	720	2,049
Overhead cranes, hoists, and monorail systems manufacturing	0	159	291	899
Industrial truck, trailer, and stacker manufacturing	0	4,858	7,304	21,210
Power-driven handtool manufacturing	0	60	161	1,427
Welding and soldering equipment manufacturing	0	924	1,246	7,349
Packaging machinery manufacturing	0	1,739	2,528	7,860
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	30,111	40,348	92,400
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1,536	1,944	5,746
Electronic computer manufacturing	0	670	1,559	6,480
Computer storage device manufacturing	0	58	212	1,298
Computer terminals and other computer peripheral equipment manufacturing	0	17,675	32,467	91,336
Telephone apparatus manufacturing	0	196	438	1,803
Broadcast and wireless communications equipment manufacturing	0	413	620	1,905
Other communications equipment manufacturing	0	(1,221)	(1,013)	2,988
Audio and video equipment manufacturing	0	1,562	2,889	10,029
Printed circuit assembly (electronic assembly) manufacturing	0	1,011	1,749	9,106
Bare printed circuit board manufacturing	0	3,840	5,091	17,681

## APPENDIX

Semiconductor and related device manufacturing	0	18,324	32,378	113,874
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	589	895	2,746
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	3,558	4,144	15,018
Electromedical and electrotherapeutic apparatus manufacturing	0	770	1,811	5,425
Search, detection, and navigation instruments manufacturing	0	7,259	11,532	29,341
Automatic environmental control manufacturing	0	4,028	5,496	12,262
Industrial process variable instruments manufacturing	0	2,876	4,427	12,235
Totalizing fluid meter and counting device manufacturing	0	349	775	1,912
Electricity and signal testing instruments manufacturing	0	8,344	11,859	31,659
Analytical laboratory instrument manufacturing	0	35,760	64,356	168,394
Irradiation apparatus manufacturing	0	1,176	2,248	5,797
Watch, clock, and other measuring and controlling device manufacturing	0	753	1,316	3,560
Blank magnetic and optical recording media manufacturing	0	719	4,336	29,246
Software and other prerecorded and record reproducing	0	3,769	6,071	14,838
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	2,140	3,827	16,004
Small electrical appliance manufacturing	0	3,480	8,821	21,625
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0

## APPENDIX

Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	37	66	432
Motor and generator manufacturing	0	4,475	8,096	15,561
Switchgear and switchboard apparatus manufacturing	0	1,121	2,218	6,348
Relay and industrial control manufacturing	0	2,309	3,452	8,362
Storage battery manufacturing	0	768	1,460	6,482
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	973	2,090	9,022
Wiring device manufacturing	0	1,414	3,516	9,738
Carbon and graphite product manufacturing	1	103,563	169,805	412,139
All other miscellaneous electrical equipment and component manufacturing	0	364	442	1,416
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	524	2,157	6,305
Motor vehicle body manufacturing	0	566	993	3,611
Truck trailer manufacturing	0	854	1,424	4,934
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	1	66,727	79,108	347,782
Motor vehicle gasoline engine and engine parts manufacturing	0	3,265	6,547	31,903
Motor vehicle electrical and electronic equipment manufacturing	0	13,966	25,973	93,241
Motor vehicle transmission and power train parts manufacturing	0	6,339	14,126	61,538
Motor vehicle seating and interior trim manufacturing	0	451	890	5,654
Motor vehicle metal stamping	0	5,550	9,662	25,556
Other motor vehicle parts manufacturing	5	404,199	949,480	2,948,436
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	18,733	43,823	134,188

## APPENDIX

Aircraft manufacturing	0	342	723	2,441
Aircraft engine and engine parts manufacturing	2	159,235	387,090	1,019,112
Other aircraft parts and auxiliary equipment manufacturing	3	226,358	365,121	863,143
Guided missile and space vehicle manufacturing	0	9,844	13,229	34,239
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	10,741	14,630	35,161
Railroad rolling stock manufacturing	0	266	418	2,731
Ship building and repairing	0	258	325	878
Boat building	0	8,089	11,112	43,888
Motorcycle, bicycle, and parts manufacturing	0	8,083	26,771	81,753
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	7,267	14,015	68,416
Wood kitchen cabinet and countertop manufacturing	2	85,868	205,240	368,179
Upholstered household furniture manufacturing	0	13,843	28,551	78,758
Nonupholstered wood household furniture manufacturing	0	17,714	26,825	66,474
Other household nonupholstered furniture manufacturing	0	2,483	6,357	18,253
Institutional furniture manufacturing	0	965	1,220	3,224
Wood office furniture manufacturing	0	55	133	394
Custom architectural woodwork and millwork	0	2,738	2,749	7,452
Office furniture, except wood, manufacturing	0	1,496	4,974	9,708
Showcase, partition, shelving, and locker manufacturing	0	4,150	9,711	19,901
Mattress manufacturing	0	18,004	86,004	159,013
Blind and shade manufacturing	0	10,048	11,340	40,291
Surgical and medical instrument manufacturing	1	87,327	177,201	443,849
Surgical appliance and supplies manufacturing	0	21,794	45,147	117,649

## APPENDIX

Dental equipment and supplies manufacturing	0	7,682	13,470	33,418
Ophthalmic goods manufacturing	0	5,508	11,687	25,609
Dental laboratories	0	21,317	20,389	37,760
Jewelry and silverware manufacturing	1	42,218	60,440	161,710
Sporting and athletic goods manufacturing	2	103,439	146,914	421,322
Doll, toy, and game manufacturing	0	(1,590)	1,883	51,052
Office supplies (except paper) manufacturing	0	4,484	6,345	23,802
Sign manufacturing	1	46,786	37,697	113,134
Gasket, packing, and sealing device manufacturing	0	29,431	38,135	99,382
Musical instrument manufacturing	0	97	194	8,568
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	3,788	6,371	20,983
Burial casket manufacturing	0	1,336	1,730	5,872
All other miscellaneous manufacturing	1	27,525	35,852	141,463
Wholesale - Motor vehicle and motor vehicle parts and supplies	3	235,288	530,777	1,145,684
Wholesale - Professional and commercial equipment and supplies	8	939,790	1,605,351	2,764,879
Wholesale - Household appliances and electrical and electronic goods	4	406,551	881,597	1,862,217
Wholesale - Machinery, equipment, and supplies	8	718,671	1,226,056	2,135,280
Wholesale - Other durable goods merchant wholesalers	13	1,022,403	1,589,075	3,108,931
Wholesale - Drugs and druggists' sundries	5	576,237	1,555,923	3,570,555
Wholesale - Grocery and related product wholesalers	10	720,985	970,507	1,916,135
Wholesale - Petroleum and petroleum products	1	92,946	1,241,379	1,421,660
Wholesale - Other nondurable goods merchant wholesalers	14	997,222	2,028,951	3,941,077
Wholesale - Wholesale electronic markets and agents and brokers	7	705,785	379,222	438,144
Retail - Motor vehicle and parts dealers	16	947,902	1,335,306	1,944,237

## APPENDIX

Retail - Furniture and home furnishings stores	11	469,513	618,880	991,632
Retail - Electronics and appliance stores	10	595,398	557,499	933,662
Retail - Building material and garden equipment and supplies stores	12	508,083	823,771	1,244,828
Retail - Food and beverage stores	39	1,178,869	1,553,211	2,678,326
Retail - Health and personal care stores	17	1,220,522	1,331,395	1,809,548
Retail - Gasoline stores	14	403,596	691,856	1,370,315
Retail - Clothing and clothing accessories stores	24	664,756	965,231	2,028,920
Retail - Sporting goods, hobby, musical instrument and book stores	15	372,300	493,221	815,791
Retail - General merchandise stores	47	1,487,887	2,045,274	3,320,468
Retail - Miscellaneous store retailers	28	706,226	800,407	1,318,294
Retail - Nonstore retailers	29	1,472,658	3,219,709	5,293,057
Air transportation	9	1,116,883	2,605,892	3,825,854
Rail transportation	2	247,747	575,738	1,067,457
Water transportation	0	6,483	14,730	183,038
Truck transportation	26	1,598,061	2,029,038	4,332,547
Transit and ground passenger transportation	16	238,916	473,330	711,015
Pipeline transportation	1	174,688	437,638	519,702
Scenic and sightseeing transportation and support activities for transportation	23	2,651,878	2,791,910	4,713,249
Couriers and messengers	14	631,299	733,202	1,377,493
Warehousing and storage	18	964,139	1,084,037	2,166,127
Newspaper publishers	3	175,479	252,612	342,799
Periodical publishers	1	84,111	112,482	200,599
Book publishers	1	89,580	215,581	492,203
Directory, mailing list, and other publishers	1	68,158	168,737	303,821
Greeting card publishing	0	19,903	59,127	91,292
Software publishers	16	2,530,114	5,348,347	6,428,086
Motion picture and video industries	12	564,786	1,126,432	2,756,088
Sound recording industries	1	30,352	124,753	211,393
Radio and television broadcasting	7	769,061	634,918	2,305,709

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Cable and other subscription programming	0	68,674	200,552	701,007
Wired telecommunications carriers	7	581,228	1,758,805	3,379,680
Wireless telecommunications carriers (except satellite)	1	106,512	732,274	1,875,274
Satellite, telecommunications resellers, and all other telecommunications	3	413,779	596,908	1,270,438
Data processing, hosting, and related services	15	1,186,722	2,425,825	5,924,181
News syndicates, libraries, archives and all other information services	3	179,809	303,835	490,520
Internet publishing and broadcasting and web search portals	14	1,503,465	4,067,005	12,336,908
Nondepository credit intermediation and related activities	22	1,739,599	3,373,493	5,175,207
Securities and commodity contracts intermediation and brokerage	13	1,363,047	1,370,442	3,183,345
Monetary authorities and depository credit intermediation	43	3,281,208	19,116,808	24,867,334
Other financial investment activities	63	1,052,491	1,250,526	6,629,515
Direct life insurance carriers	2	264,897	499,706	776,433
Insurance carriers, except direct life	14	1,234,020	3,777,805	9,083,906
Insurance agencies, brokerages, and related activities	35	2,187,381	3,238,099	7,943,068
Funds, trusts, and other financial vehicles	11	379,304	654,082	3,522,699
Other real estate	386	9,432,158	23,251,354	67,510,460
Tenant-occupied housing	13	350,719	5,271,737	5,804,137
Owner-occupied dwellings	0	0	16,406,885	20,729,907
Automotive equipment rental and leasing	3	223,657	663,597	955,520
General and consumer goods rental except video tapes and discs	6	440,592	536,394	821,318
Video tape and disc rental	2	75,626	116,863	195,666
Commercial and industrial machinery and equipment rental and leasing	5	606,878	1,221,686	1,851,606
Lessors of nonfinancial intangible assets	1	59,151	1,889,260	2,319,413



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Legal services	80	6,737,403	8,990,790	14,453,981
Accounting, tax preparation, bookkeeping, and payroll services	40	2,162,007	3,660,639	5,218,082
Architectural, engineering, and related services	46	3,555,038	4,807,454	8,477,096
Specialized design services	9	367,395	393,095	535,918
Custom computer programming services	16	1,512,357	1,682,579	2,485,415
Computer systems design services	10	935,414	984,734	1,337,039
Other computer related services, including facilities management	10	762,896	1,193,336	2,400,948
Management consulting services	124	8,380,088	8,437,745	14,233,370
Environmental and other technical consulting services	14	884,209	867,233	1,312,925
Scientific research and development services	1,488	113,203,757	163,268,154	350,912,866
Advertising, public relations, and related services	25	1,437,482	2,526,984	4,421,405
Photographic services	9	243,747	214,670	375,567
Veterinary services	4	168,838	303,853	460,853
Marketing research and all other miscellaneous professional, scientific, and technical services	130	6,609,877	6,404,706	9,765,570
Management of companies and enterprises	140	9,736,438	11,212,731	20,181,856
Office administrative services	28	1,725,595	695,793	1,737,423
Facilities support services	3	92,176	122,839	352,208
Employment services	151	6,105,189	9,887,165	15,370,990
Business support services	40	1,807,977	1,551,375	2,714,770
Travel arrangement and reservation services	10	489,930	692,520	1,804,454
Investigation and security services	16	640,093	654,127	938,903
Services to buildings	55	1,309,639	1,365,061	2,370,035
Landscape and horticultural services	30	1,006,804	1,066,024	1,784,257
Other support services	10	452,285	594,806	1,144,932
Waste management and remediation services	8	510,772	977,019	1,692,820
Elementary and secondary schools	18	659,135	564,793	721,875
Junior colleges, colleges, universities, and professional schools	25	911,548	1,218,340	1,899,618
Other educational services	21	629,221	554,125	1,054,989
Offices of physicians	42	3,963,571	4,648,028	7,109,673
Offices of dentists	17	763,688	953,995	1,673,146

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Offices of other health practitioners	22	982,687	906,318	1,398,001
Outpatient care centers	7	414,537	431,959	853,015
Medical and diagnostic laboratories	4	295,340	452,067	745,520
Home health care services	19	863,432	572,069	816,425
Other ambulatory health care services	5	270,379	295,551	517,230
Hospitals	70	5,133,608	6,156,006	11,885,064
Nursing and community care facilities	26	868,126	1,037,372	1,905,769
Residential mental retardation, mental health, substance abuse and other facilities	12	456,359	492,993	759,028
Individual and family services	37	1,004,222	932,827	1,419,001
Child day care services	21	435,073	526,107	760,208
Community food, housing, and other relief services, including rehabilitation services	7	261,443	294,816	658,166
Performing arts companies	7	166,188	263,462	616,142
Commercial Sports Except Racing	8	537,829	567,063	905,484
Racing and Track Operation	1	27,678	46,804	92,395
Independent artists, writers, and performers	31	433,052	521,926	708,049
Promoters of performing arts and sports and agents for public figures	8	187,669	424,126	1,131,573
Museums, historical sites, zoos, and parks	2	76,814	90,852	180,756
Amusement parks and arcades	3	54,872	247,289	299,182
Gambling industries (except casino hotels)	7	212,835	354,339	710,962
Other amusement and recreation industries	16	395,102	521,034	881,781
Fitness and recreational sports centers	11	139,073	296,487	491,423
Bowling centers	2	35,030	59,622	114,951
Hotels and motels, including casino hotels	8	239,893	430,398	737,899
Other accommodations	2	66,888	90,168	131,455
Full-service restaurants	82	1,826,186	2,686,496	4,932,216
Limited-service restaurants	79	1,490,145	2,376,554	5,511,264
All other food and drinking places	60	1,463,009	2,023,185	3,259,777
Automotive repair and maintenance, except car washes	30	1,536,484	2,012,203	2,939,841
Car washes	17	873,382	1,254,310	1,907,216

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Electronic and precision equipment repair and maintenance	9	571,857	823,820	1,381,885
Commercial and industrial machinery and equipment repair and maintenance	61	4,802,042	5,825,740	8,799,852
Personal and household goods repair and maintenance	10	488,159	596,563	739,823
Personal care services	25	528,989	561,460	738,069
Death care services	1	53,788	111,736	153,558
Dry-cleaning and laundry services	5	176,788	223,689	320,478
Other personal services	28	620,298	698,253	938,511
Religious organizations	17	1,436,477	1,435,271	2,571,335
Grantmaking, giving, and social advocacy organizations	2	115,957	1,260,044	1,450,561
Business and professional associations	3	253,935	920,277	1,156,881
Labor and civic organizations	4	115,065	913,233	1,133,873
Private households	14	142,128	142,128	142,128
Postal service	10	820,687	821,326	915,447
Federal electric utilities	0	0	0	0
Other federal government enterprises	1	71,888	60,925	309,039
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	6	195,451	199,546	898,943
Local government passenger transit	10	628,699	(145,313)	700,916
Local government electric utilities	1	90,897	271,109	524,097
Other local government enterprises	10	856,830	1,892,391	3,407,328
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	11	1,540,370	2,102,032	3,451,341

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 460: Detailed M2M Program Impacts by Types of Impact, Utah.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>4,121</i>	<i>268,236,857</i>	<i>433,503,305</i>	<i>831,432,652</i>
Oilseed farming	0	1,723	3,003	19,762
Grain farming	1	21,019	65,064	215,541
Vegetable and melon farming	1	21,569	37,119	83,150
Fruit farming	1	29,479	55,558	105,405
Tree nut farming	0	2,280	2,382	3,111
Greenhouse, nursery, and floriculture production	2	61,062	85,568	170,890
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	6	55,357	71,847	150,113
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	4	34,237	129,792	504,260
Dairy cattle and milk production	1	27,890	62,310	390,642
Poultry and egg production	0	15,910	22,177	258,690
Animal production, except cattle and poultry and eggs	6	94,539	375,144	672,261
Forestry, forest products, and timber tract production	0	9,322	10,496	12,765
Commercial logging	0	19,375	21,116	36,589
Commercial fishing	0	37,289	44,921	77,936
Commercial hunting and trapping	0	24,813	19,017	26,679
Support activities for agriculture and forestry	10	277,348	220,632	295,138
Oil and gas extraction	4	127,055	768,252	1,647,524
Coal mining	1	103,097	189,522	360,548
Copper, nickel, lead, and zinc mining	2	336,621	1,496,878	2,522,970
Iron ore mining	0	(53,110)	(24,313)	9,521
Gold ore mining	0	128	1,264	8,219

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(2,150)	170,788	37,633
Other metal ore mining	0	4,373	8,552	21,886
Stone mining and quarrying	1	(85,905)	(19,033)	31,777
Sand and gravel mining	1	23,501	51,913	127,089
Other clay, ceramic, refractory minerals mining	0	(582)	2,408	11,592
Potash, soda, and borate mineral mining	0	1,789	3,433	11,476
Phosphate rock mining	0	662	774	1,660
Other chemical and fertilizer mineral mining	0	725	6,720	19,081
Other nonmetallic minerals	0	4,329	10,101	24,573
Drilling oil and gas wells	0	51	108	330
Support activities for oil and gas operations	0	2,708	3,905	11,322
Metal mining services	0	12,978	35,750	87,207
Other nonmetallic minerals services	0	546	1,744	4,154
Electric power generation - Hydroelectric	0	2,086	6,673	12,917
Electric power generation - Fossil fuel	2	381,330	1,381,653	3,265,908
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	1	87,526	159,684	290,365
Electric power generation - Wind	0	11,622	50,485	131,670
Electric power generation - Geothermal	0	12,787	27,578	49,496
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	4,471	926	2,921
Electric power transmission and distribution	4	503,946	1,877,262	4,676,112
Natural gas distribution	3	368,635	1,058,367	2,412,893
Water, sewage and other systems	1	75,672	121,645	235,552
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	21	1,337,647	2,007,898	4,400,996
Maintenance and repair construction of residential structures	5	321,396	540,208	1,169,986
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1,062	857	1,780
Dog and cat food manufacturing	1	60,006	221,925	969,523
Other animal food manufacturing	1	48,865	82,364	673,536
Flour milling	0	27,073	50,231	355,345
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	4,894	9,278	76,010
Breakfast cereal manufacturing	0	44,193	100,119	314,414
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	28,740	38,729	168,301
Chocolate and confectionery manufacturing from cacao beans	0	3,308	4,796	38,715
Confectionery manufacturing from purchased chocolate	0	16,231	19,706	123,844
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	2	107,519	151,720	618,559
Canned fruits and vegetables manufacturing	0	13,171	18,221	87,345

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Canned specialties	0	29,766	66,301	318,578
Dehydrated food products manufacturing	0	3,301	3,543	14,108
Cheese manufacturing	2	104,133	144,771	1,515,396
Dry, condensed, and evaporated dairy product manufacturing	0	21,306	49,403	429,439
Fluid milk manufacturing	1	55,437	86,407	610,209
Creamery butter manufacturing	0	4,541	15,143	144,039
Ice cream and frozen dessert manufacturing	0	19,071	29,233	138,731
Frozen cakes and other pastries manufacturing	1	42,999	57,074	112,305
Poultry processing	2	77,140	102,813	490,090
Animal, except poultry, slaughtering	2	111,268	150,881	1,292,975
Meat processed from carcasses	3	162,311	176,422	1,331,342
Rendering and meat byproduct processing	0	4,671	5,003	26,284
Seafood product preparation and packaging	0	15,588	18,161	70,243
Bread and bakery product, except frozen, manufacturing	6	232,008	284,164	750,703
Cookie and cracker manufacturing	2	131,312	186,379	645,729
Dry pasta, mixes, and dough manufacturing	0	13,448	28,022	129,251
Tortilla manufacturing	0	7,610	8,249	23,799
Roasted nuts and peanut butter manufacturing	0	18,933	26,098	112,126
Other snack food manufacturing	1	50,532	95,250	423,454
Coffee and tea manufacturing	0	6,106	8,205	39,670
Flavoring syrup and concentrate manufacturing	0	15,545	53,673	286,462
Mayonnaise, dressing, and sauce manufacturing	0	8,750	15,108	77,757
Spice and extract manufacturing	0	20,438	29,646	121,534
All other food manufacturing	1	70,845	85,601	341,037
Bottled and canned soft drinks & water	1	73,522	142,111	697,873
Manufactured ice	0	6,188	3,731	16,697
Breweries	1	39,041	86,762	278,968
Wineries	0	499	704	3,114
Distilleries	0	9,044	38,153	86,563
Tobacco product manufacturing	0	2,100	57,367	103,337
Fiber, yarn, and thread mills	0	1,535	3,284	11,383
Broadwoven fabric mills	0	29	90	962

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Narrow fabric mills and schiffli machine embroidery	0	89	115	597
Nonwoven fabric mills	0	7,498	21,055	52,878
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	9,310	14,762	61,776
Fabric coating mills	0	7,400	11,764	44,080
Carpet and rug mills	0	6,400	17,343	72,674
Curtain and linen mills	0	3,526	7,181	25,063
Textile bag and canvas mills	0	19,879	30,442	74,266
Rope, cordage, twine, tire cord and tire fabric mills	0	9,323	22,932	62,298
Other textile product mills	0	5,389	8,228	28,155
Hosiery and sock mills	0	1,070	1,341	3,535
Other apparel knitting mills	0	1,282	1,619	5,303
Cut and sew apparel contractors	0	4,047	4,520	15,329
Mens and boys cut and sew apparel manufacturing	0	1,195	1,601	7,345
Womens and girls cut and sew apparel manufacturing	0	1,341	1,932	16,220
Other cut and sew apparel manufacturing	0	3,902	4,665	14,975
Apparel accessories and other apparel manufacturing	0	2,612	3,150	11,672
Leather and hide tanning and finishing	0	100	159	1,866
Footwear manufacturing	0	423	478	1,801
Other leather and allied product manufacturing	0	1,552	1,609	4,604
Sawmills	0	6,325	8,735	50,652
Wood preservation	0	2,179	5,467	25,758
Veneer and plywood manufacturing	0	49	86	2,159
Engineered wood member and truss manufacturing	0	16,718	21,203	67,923
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	1	57,236	74,356	287,238
Cut stock, resawing lumber, and planing	0	1,676	2,784	21,064
Other millwork, including flooring	1	31,560	42,284	160,705
Wood container and pallet manufacturing	1	34,255	39,154	121,974
Manufactured home (mobile home) manufacturing	0	4	6	21



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Prefabricated wood building manufacturing	0	5,886	6,638	19,989
All other miscellaneous wood product manufacturing	1	14,347	17,555	80,406
Pulp mills	0	86	191	833
Paper mills	0	43,391	122,384	363,678
Paperboard mills	0	0	0	0
Paperboard container manufacturing	2	180,269	313,913	1,085,005
Paper bag and coated and treated paper manufacturing	1	103,814	216,996	640,094
Stationery product manufacturing	0	16,105	25,420	90,108
Sanitary paper product manufacturing	1	107,260	413,478	1,047,949
All other converted paper product manufacturing	0	2,020	5,207	25,438
Printing	12	664,945	1,152,179	2,173,521
Support activities for printing	1	49,263	83,849	129,615
Petroleum refineries	1	295,122	1,560,837	10,296,445
Asphalt paving mixture and block manufacturing	0	12,511	17,434	85,601
Asphalt shingle and coating materials manufacturing	0	2,060	4,477	16,001
Petroleum lubricating oil and grease manufacturing	0	6,220	12,376	77,284
All other petroleum and coal products manufacturing	0	3,465	8,051	30,707
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	28,062	40,538	205,877
Synthetic dye and pigment manufacturing	0	1,046	1,362	8,726
Other basic inorganic chemical manufacturing	1	58,003	79,902	384,609
Other basic organic chemical manufacturing	0	651	858	16,605
Plastics material and resin manufacturing	0	1,909	2,375	47,263
Synthetic rubber manufacturing	0	1,833	2,229	33,033
Artificial and synthetic fibers and filaments manufacturing	0	299	340	3,700
Nitrogenous fertilizer manufacturing	0	4,474	6,096	38,036
Phosphatic fertilizer manufacturing	0	245	341	1,916
Fertilizer mixing	0	688	753	3,759

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Pesticide and other agricultural chemical manufacturing	0	4,918	7,636	63,369
Medicinal and botanical manufacturing	1	43,278	51,313	241,351
Pharmaceutical preparation manufacturing	2	185,711	352,756	1,969,624
In-vitro diagnostic substance manufacturing	0	615	692	2,654
Biological product (except diagnostic) manufacturing	0	376	523	1,331
Paint and coating manufacturing	0	16,266	19,319	134,358
Adhesive manufacturing	0	8,159	9,691	53,362
Soap and other detergent manufacturing	1	175,051	345,317	1,502,949
Polish and other sanitation good manufacturing	0	30,313	39,950	233,396
Surface active agent manufacturing	0	14,776	26,780	99,665
Toilet preparation manufacturing	0	34,911	54,451	238,286
Printing ink manufacturing	0	14,890	15,455	74,734
Explosives manufacturing	0	810	850	3,581
Custom compounding of purchased resins	0	2,624	3,154	26,612
Photographic film and chemical manufacturing	0	7,949	10,980	86,929
Other miscellaneous chemical product manufacturing	0	16,998	19,463	106,857
Plastics packaging materials and unlaminated film and sheet manufacturing	1	63,659	110,192	381,847
Unlaminated plastics profile shape manufacturing	0	13,711	32,093	94,822
Plastics pipe and pipe fitting manufacturing	0	18,629	48,936	146,307
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	26,303	51,685	139,445
Polystyrene foam product manufacturing	1	30,520	53,714	209,327
Urethane and other foam product (except polystyrene) manufacturing	0	8,322	13,716	59,997
Plastics bottle manufacturing	0	19,378	33,710	141,349
Other plastics product manufacturing	5	282,232	437,241	1,391,967
Tire manufacturing	0	10,683	15,618	79,837

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Rubber and plastics hoses and belting manufacturing	0	13,622	22,588	71,018
Other rubber product manufacturing	2	178,219	275,028	821,263
Pottery, ceramics, and plumbing fixture manufacturing	0	2,103	2,405	8,419
Brick, tile, and other structural clay product manufacturing	0	10,538	16,950	43,290
Flat glass manufacturing	0	4,538	8,149	27,899
Other pressed and blown glass and glassware manufacturing	0	4,486	6,175	19,106
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	1	32,595	50,800	148,042
Cement manufacturing	0	13,583	28,658	82,920
Ready-mix concrete manufacturing	1	67,929	105,475	365,932
Concrete block and brick manufacturing	0	6,683	11,001	34,975
Concrete pipe manufacturing	0	3,045	4,608	11,444
Other concrete product manufacturing	0	30,686	41,791	109,368
Lime manufacturing	0	6,091	14,378	42,891
Gypsum product manufacturing	0	13,792	32,964	106,161
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	18,959	21,855	50,280
Ground or treated mineral and earth manufacturing	0	21,754	57,813	130,204
Mineral wool manufacturing	0	6,830	14,139	39,177
Miscellaneous nonmetallic mineral products manufacturing	0	9,936	21,402	53,168
Iron and steel mills and ferroalloy manufacturing	0	66,956	116,523	417,572
Iron, steel pipe and tube manufacturing from purchased steel	0	7,306	11,439	50,482
Rolled steel shape manufacturing	0	2,384	5,888	22,637
Steel wire drawing	0	1,083	1,485	5,578
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0

## APPENDIX

Other aluminum rolling, drawing and extruding	0	21,781	31,179	136,827
Nonferrous metal (exc aluminum) smelting and refining	0	11,757	61,861	144,005
Copper rolling, drawing, extruding and alloying	0	80	131	1,432
Nonferrous metal, except copper and aluminum, shaping	0	28,476	37,641	128,365
Secondary processing of other nonferrous metals	0	222	674	3,137
Ferrous metal foundries	1	33,767	62,698	146,159
Nonferrous metal foundries	0	17,922	28,430	67,320
Custom roll forming	0	2,448	3,690	21,450
Crown and closure manufacturing and metal stamping	0	8,938	12,688	39,646
Iron and steel forging	0	10,727	14,453	56,355
Nonferrous forging	0	96	103	573
Cutlery, utensil, pot, and pan manufacturing	0	5,094	15,575	37,298
Handtool manufacturing	0	3,920	6,100	15,114
Prefabricated metal buildings and components manufacturing	0	14,956	21,170	52,487
Fabricated structural metal manufacturing	1	103,670	152,869	444,597
Plate work manufacturing	1	38,009	39,465	112,577
Metal window and door manufacturing	0	24,749	37,503	93,698
Sheet metal work manufacturing	1	68,239	87,387	211,874
Ornamental and architectural metal work manufacturing	1	41,531	54,348	132,300
Power boiler and heat exchanger manufacturing	0	541	767	2,636
Metal tank (heavy gauge) manufacturing	0	6,903	8,411	24,060
Metal cans manufacturing	0	0	0	0
Metal barrels, drums and pails manufacturing	0	7,622	9,553	44,105
Hardware manufacturing	0	3,422	5,489	20,207
Spring and wire product manufacturing	0	10,655	14,208	43,262
Machine shops	4	242,700	279,311	548,591
Turned product and screw, nut, and bolt manufacturing	0	17,214	23,499	62,626
Metal heat treating	0	5,375	8,227	24,273

## APPENDIX

Metal coating and nonprecious engraving	1	26,222	44,629	114,779
Electroplating, anodizing, and coloring metal	1	44,703	49,962	120,436
Valve and fittings, other than plumbing, manufacturing	0	28,804	45,735	120,519
Plumbing fixture fitting and trim manufacturing	0	20,739	64,608	176,308
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	30,885	67,683	147,473
Ammunition, except for small arms, manufacturing	0	94	112	270
Small arms, ordnance, and accessories manufacturing	0	16,801	39,225	98,692
Fabricated pipe and pipe fitting manufacturing	0	8,534	9,915	27,195
Other fabricated metal manufacturing	1	74,115	97,172	265,499
Farm machinery and equipment manufacturing	0	2,152	3,357	12,483
Lawn and garden equipment manufacturing	0	1,790	3,107	15,395
Construction machinery manufacturing	0	1,257	2,641	10,945
Mining machinery and equipment manufacturing	0	2,392	2,938	8,927
Oil and gas field machinery and equipment manufacturing	0	1,452	1,721	5,153
Semiconductor machinery manufacturing	0	275	310	1,038
Food product machinery manufacturing	0	109	131	383
Sawmill, woodworking, and paper machinery	0	683	774	3,049
Printing machinery and equipment manufacturing	0	61	76	711
All other industrial machinery manufacturing	0	769	982	3,130
Optical instrument and lens manufacturing	0	38	58	176
Photographic and photocopying equipment manufacturing	0	18	35	1,135

## APPENDIX

Other commercial service industry machinery manufacturing	0	6,785	13,307	36,075
Air purification and ventilation equipment manufacturing	0	4,817	7,137	19,651
Heating equipment (except warm air furnaces) manufacturing	0	10,008	15,229	43,250
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4,397	8,205	20,512
Industrial mold manufacturing	0	4,632	5,327	12,434
Special tool, die, jig, and fixture manufacturing	0	1,400	1,763	3,565
Cutting tool and machine tool accessory manufacturing	0	2,854	3,101	6,959
Machine tool manufacturing	0	170	195	979
Rolling mill and other metalworking machinery manufacturing	0	102	125	392
Turbine and turbine generator set units manufacturing	0	128	180	639
Speed changer, industrial high-speed drive, and gear manufacturing	0	240	360	1,333
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	3,591	6,595	37,321
Pump and pumping equipment manufacturing	0	1,000	1,838	4,737
Air and gas compressor manufacturing	0	61	99	297
Elevator and moving stairway manufacturing	0	71	113	363
Conveyor and conveying equipment manufacturing	0	516	541	1,526
Overhead cranes, hoists, and monorail systems manufacturing	0	113	220	659
Industrial truck, trailer, and stacker manufacturing	0	3,941	6,092	17,599
Power-driven handtool manufacturing	0	141	383	3,019
Welding and soldering equipment manufacturing	0	212	291	1,464
Packaging machinery manufacturing	0	2,449	3,679	11,054

## APPENDIX

Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	16,992	23,493	55,450
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1,404	1,822	5,005
Electronic computer manufacturing	0	1,123	2,541	10,055
Computer storage device manufacturing	0	97	354	2,133
Computer terminals and other computer peripheral equipment manufacturing	0	1,717	3,236	9,881
Telephone apparatus manufacturing	0	177	391	1,610
Broadcast and wireless communications equipment manufacturing	0	628	926	2,765
Other communications equipment manufacturing	0	(1,119)	(917)	2,850
Audio and video equipment manufacturing	0	3,015	5,457	17,758
Printed circuit assembly (electronic assembly) manufacturing	0	1,366	2,336	11,909
Bare printed circuit board manufacturing	0	3,802	5,007	18,603
Semiconductor and related device manufacturing	0	26,251	45,172	152,281
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	718	1,072	3,173
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	4,454	5,169	18,137
Electromedical and electrotherapeutic apparatus manufacturing	0	1,181	2,707	7,832
Search, detection, and navigation instruments manufacturing	0	271	436	1,108
Automatic environmental control manufacturing	0	6,324	8,482	17,492

## APPENDIX

Industrial process variable instruments manufacturing	0	2,773	4,201	11,517
Totalizing fluid meter and counting device manufacturing	0	293	655	1,608
Electricity and signal testing instruments manufacturing	0	1,972	2,787	7,356
Analytical laboratory instrument manufacturing	0	269	477	1,316
Irradiation apparatus manufacturing	0	1,818	3,413	8,596
Watch, clock, and other measuring and controlling device manufacturing	0	1,723	2,933	7,425
Blank magnetic and optical recording media manufacturing	0	3,359	19,758	103,569
Software and other prerecorded and record reproducing	0	4,232	6,841	15,065
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	2,512	4,372	17,834
Small electrical appliance manufacturing	0	4,588	11,380	26,137
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	54	97	612
Motor and generator manufacturing	0	4,125	7,214	14,406
Switchgear and switchboard apparatus manufacturing	0	1,164	2,271	6,549
Relay and industrial control manufacturing	0	2,684	4,018	9,322
Storage battery manufacturing	0	951	1,708	7,712
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	949	1,978	8,337
Wiring device manufacturing	0	1,797	4,462	11,505



## APPENDIX

Carbon and graphite product manufacturing	1	81,025	131,800	335,899
All other miscellaneous electrical equipment and component manufacturing	0	485	585	1,800
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	337	1,389	3,853
Motor vehicle body manufacturing	0	504	890	3,335
Truck trailer manufacturing	0	621	1,013	3,506
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	1	52,934	62,930	277,265
Motor vehicle gasoline engine and engine parts manufacturing	0	2,987	6,015	31,037
Motor vehicle electrical and electronic equipment manufacturing	0	11,465	21,125	69,522
Motor vehicle transmission and power train parts manufacturing	0	8,033	18,284	68,944
Motor vehicle seating and interior trim manufacturing	0	279	587	3,558
Motor vehicle metal stamping	0	3,117	5,510	14,236
Other motor vehicle parts manufacturing	4	327,221	702,088	2,456,406
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	19,236	48,760	139,661
Aircraft manufacturing	0	307	671	2,177
Aircraft engine and engine parts manufacturing	0	5,076	11,716	33,976
Other aircraft parts and auxiliary equipment manufacturing	0	6,052	9,481	23,064
Guided missile and space vehicle manufacturing	0	8,115	10,732	26,239
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	7,845	10,758	24,319
Railroad rolling stock manufacturing	0	289	466	2,804
Ship building and repairing	0	319	411	1,075
Boat building	0	6,075	8,405	32,470
Motorcycle, bicycle, and parts manufacturing	0	12,027	37,860	105,535

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	7,241	14,531	69,770
Wood kitchen cabinet and countertop manufacturing	2	78,081	171,000	314,653
Upholstered household furniture manufacturing	1	20,766	42,602	115,991
Nonupholstered wood household furniture manufacturing	0	18,517	27,065	64,923
Other household nonupholstered furniture manufacturing	0	2,879	7,279	19,708
Institutional furniture manufacturing	0	912	1,139	2,982
Wood office furniture manufacturing	0	52	118	354
Custom architectural woodwork and millwork	0	2,439	2,429	6,350
Office furniture, except wood, manufacturing	0	851	2,638	5,499
Showcase, partition, shelving, and locker manufacturing	0	3,745	8,095	17,157
Mattress manufacturing	0	16,986	71,887	144,999
Blind and shade manufacturing	0	7,720	8,619	33,494
Surgical and medical instrument manufacturing	1	89,647	177,375	418,957
Surgical appliance and supplies manufacturing	0	28,903	60,536	147,693
Dental equipment and supplies manufacturing	0	10,000	17,150	40,538
Ophthalmic goods manufacturing	0	6,143	13,338	29,291
Dental laboratories	1	26,906	25,745	46,887
Jewelry and silverware manufacturing	1	45,149	63,637	163,659
Sporting and athletic goods manufacturing	2	100,935	139,372	388,368
Doll, toy, and game manufacturing	0	(2,018)	2,237	54,148
Office supplies (except paper) manufacturing	0	6,146	8,778	29,858
Sign manufacturing	1	33,618	27,756	77,758
Gasket, packing, and sealing device manufacturing	0	24,124	30,613	78,035
Musical instrument manufacturing	0	189	377	12,934
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0

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Broom, brush, and mop manufacturing	0	4,584	8,822	23,653
Burial casket manufacturing	0	844	1,096	3,634
All other miscellaneous manufacturing	1	26,451	34,156	130,196
Wholesale - Motor vehicle and motor vehicle parts and supplies	3	224,043	505,607	1,090,841
Wholesale - Professional and commercial equipment and supplies	8	906,552	1,550,973	2,611,873
Wholesale - Household appliances and electrical and electronic goods	3	358,469	775,734	1,618,756
Wholesale - Machinery, equipment, and supplies	6	526,347	901,390	1,562,671
Wholesale - Other durable goods merchant wholesalers	11	882,120	1,372,551	2,664,483
Wholesale - Drugs and druggists' sundries	4	532,167	1,414,700	3,170,410
Wholesale - Grocery and related product wholesalers	9	644,775	860,715	1,699,016
Wholesale - Petroleum and petroleum products	1	78,692	1,183,437	1,334,029
Wholesale - Other nondurable goods merchant wholesalers	12	895,055	1,880,278	3,579,304
Wholesale - Wholesale electronic markets and agents and brokers	6	654,639	333,649	385,639
Retail - Motor vehicle and parts dealers	13	829,194	1,174,815	1,696,337
Retail - Furniture and home furnishings stores	9	427,684	563,516	887,902
Retail - Electronics and appliance stores	9	536,405	504,210	828,077
Retail - Building material and garden equipment and supplies stores	10	452,335	733,762	1,095,157
Retail - Food and beverage stores	35	1,138,621	1,484,132	2,498,721
Retail - Health and personal care stores	15	1,072,490	1,177,064	1,594,209
Retail - Gasoline stores	11	406,322	647,917	1,211,384
Retail - Clothing and clothing accessories stores	21	625,488	901,030	1,838,271
Retail - Sporting goods, hobby, musical instrument and book stores	13	331,657	440,647	715,338

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Retail - General merchandise stores	40	1,268,993	1,757,653	2,833,217
Retail - Miscellaneous store retailers	24	660,550	741,601	1,179,119
Retail - Nonstore retailers	26	1,432,041	3,167,775	4,960,423
Air transportation	9	1,025,599	2,453,418	3,546,996
Rail transportation	2	235,125	484,386	954,636
Water transportation	0	7,475	16,613	201,258
Truck transportation	25	1,629,895	2,025,935	4,209,590
Transit and ground passenger transportation	17	293,343	586,051	825,353
Pipeline transportation	0	112,583	304,430	369,173
Scenic and sightseeing transportation and support activities for transportation	22	2,458,433	2,622,736	4,432,010
Couriers and messengers	13	622,352	746,174	1,370,262
Warehousing and storage	17	931,065	1,045,096	2,069,491
Newspaper publishers	2	145,666	203,388	271,934
Periodical publishers	1	90,975	119,244	196,076
Book publishers	1	81,295	186,124	424,169
Directory, mailing list, and other publishers	1	50,972	128,109	229,575
Greeting card publishing	0	13,327	41,839	63,875
Software publishers	13	2,380,716	4,957,581	5,821,107
Motion picture and video industries	11	691,185	1,392,376	2,829,607
Sound recording industries	1	36,696	142,274	222,674
Radio and television broadcasting	5	980,208	886,447	2,166,272
Cable and other subscription programming	0	90,303	210,279	609,729
Wired telecommunications carriers	5	543,207	1,525,108	2,847,323
Wireless telecommunications carriers (except satellite)	1	131,997	742,484	1,843,489
Satellite, telecommunications resellers, and all other telecommunications	3	485,704	599,983	1,133,557
Data processing, hosting, and related services	12	1,143,589	2,195,712	5,115,041
News syndicates, libraries, archives and all other information services	3	208,003	349,644	530,575
Internet publishing and broadcasting and web search portals	15	2,240,385	5,772,396	15,100,196

## APPENDIX

Nondepository credit intermediation and related activities	20	1,733,556	3,403,576	4,915,855
Securities and commodity contracts intermediation and brokerage	11	1,304,203	1,288,695	2,800,976
Monetary authorities and depository credit intermediation	34	2,689,853	16,161,556	20,428,645
Other financial investment activities	55	1,310,275	1,513,428	6,398,557
Direct life insurance carriers	2	207,667	404,623	613,640
Insurance carriers, except direct life	11	1,046,975	3,293,248	7,624,307
Insurance agencies, brokerages, and related activities	28	1,850,586	2,754,518	6,547,869
Funds, trusts, and other financial vehicles	9	415,653	703,921	3,204,348
Other real estate	309	9,670,059	23,686,346	59,592,553
Tenant-occupied housing	11	375,871	5,326,999	5,780,280
Owner-occupied dwellings	0	0	16,385,464	20,702,841
Automotive equipment rental and leasing	3	257,554	627,917	866,829
General and consumer goods rental except video tapes and discs	5	442,467	504,920	722,377
Video tape and disc rental	1	71,474	106,543	173,964
Commercial and industrial machinery and equipment rental and leasing	5	647,983	1,119,920	1,646,401
Lessors of nonfinancial intangible assets	1	52,821	1,661,037	2,026,147
Legal services	66	5,806,156	8,067,050	12,642,925
Accounting, tax preparation, bookkeeping, and payroll services	33	1,918,513	3,260,283	4,533,232
Architectural, engineering, and related services	40	3,231,261	4,389,370	7,623,142
Specialized design services	7	325,430	348,870	466,297
Custom computer programming services	12	1,301,672	1,438,330	2,074,283
Computer systems design services	8	864,303	906,657	1,210,266
Other computer related services, including facilities management	9	790,100	1,188,687	2,282,478
Management consulting services	114	8,348,565	8,420,347	13,803,230
Environmental and other technical consulting services	13	893,953	884,847	1,320,081

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Scientific research and development services	1,280	114,421,035	167,262,761	332,266,043
Advertising, public relations, and related services	19	1,243,878	2,174,401	3,628,245
Photographic services	7	213,090	197,586	326,616
Veterinary services	4	154,983	282,849	417,557
Marketing research and all other miscellaneous professional, scientific, and technical services	116	6,217,329	6,006,435	9,019,076
Management of companies and enterprises	116	8,791,781	10,221,446	17,821,859
Office administrative services	27	1,939,803	796,842	1,798,482
Facilities support services	2	69,149	92,206	248,926
Employment services	125	5,490,859	9,127,166	13,655,416
Business support services	30	1,434,630	1,255,274	2,127,158
Travel arrangement and reservation services	9	467,343	666,000	1,665,675
Investigation and security services	13	591,838	606,342	843,405
Services to buildings	47	1,253,049	1,309,993	2,163,399
Landscape and horticultural services	23	851,401	903,007	1,458,670
Other support services	8	378,763	499,132	952,920
Waste management and remediation services	7	452,204	871,012	1,487,567
Elementary and secondary schools	19	780,069	665,426	836,455
Junior colleges, colleges, universities, and professional schools	26	1,187,852	1,573,293	2,330,524
Other educational services	18	582,549	514,289	944,724
Offices of physicians	37	3,555,241	4,201,992	6,376,995
Offices of dentists	15	718,480	907,072	1,568,757
Offices of other health practitioners	20	883,446	821,358	1,264,015
Outpatient care centers	7	411,075	430,077	836,577
Medical and diagnostic laboratories	4	272,980	429,008	684,762
Home health care services	18	770,523	516,365	742,038
Other ambulatory health care services	5	252,324	277,488	477,774
Hospitals	66	5,147,708	6,147,424	11,581,960
Nursing and community care facilities	23	822,310	984,138	1,760,875
Residential mental retardation, mental health, substance abuse and other facilities	12	486,052	525,358	792,428

## APPENDIX

Individual and family services	39	1,046,275	989,016	1,495,587
Child day care services	19	425,680	522,373	736,526
Community food, housing, and other relief services, including rehabilitation services	8	290,758	331,971	716,220
Performing arts companies	7	182,994	280,668	595,836
Commercial Sports Except Racing	7	484,898	509,601	797,118
Racing and Track Operation	1	28,382	45,611	86,620
Independent artists, writers, and performers	26	472,819	555,783	720,519
Promoters of performing arts and sports and agents for public figures	7	202,140	418,504	1,044,604
Museums, historical sites, zoos, and parks	2	79,518	92,979	179,272
Amusement parks and arcades	2	57,216	225,009	275,102
Gambling industries (except casino hotels)	6	213,247	334,652	663,075
Other amusement and recreation industries	13	354,486	448,256	756,282
Fitness and recreational sports centers	11	142,724	284,375	464,858
Bowling centers	2	32,290	52,993	101,028
Hotels and motels, including casino hotels	8	284,528	488,694	825,083
Other accommodations	3	92,829	123,106	175,671
Full-service restaurants	70	1,636,855	2,422,307	4,351,850
Limited-service restaurants	70	1,413,093	2,240,459	5,011,954
All other food and drinking places	53	1,434,625	1,952,232	3,055,467
Automotive repair and maintenance, except car washes	28	1,500,219	1,890,851	2,745,720
Car washes	15	814,584	1,165,689	1,759,315
Electronic and precision equipment repair and maintenance	7	474,541	686,008	1,097,014
Commercial and industrial machinery and equipment repair and maintenance	7	564,703	673,260	1,016,072
Personal and household goods repair and maintenance	9	456,030	497,557	617,451
Personal care services	24	540,168	524,689	697,355
Death care services	1	57,245	112,437	153,727
Dry-cleaning and laundry services	5	164,849	205,274	293,593
Other personal services	26	622,616	615,504	849,709
Religious organizations	19	1,597,665	1,242,555	2,624,407
Grantmaking, giving, and social advocacy organizations	2	148,405	1,383,460	1,592,524

## APPENDIX

Business and professional associations	2	242,723	795,157	965,813
Labor and civic organizations	4	127,808	897,084	1,137,195
Private households	14	150,558	150,558	150,558
Postal service	9	757,317	757,956	843,101
Federal electric utilities	0	0	0	0
Other federal government enterprises	1	46,628	47,573	186,698
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	2	96,981	96,497	407,632
Local government passenger transit	8	646,085	(187,602)	491,954
Local government electric utilities	1	85,586	233,327	439,105
Other local government enterprises	8	817,756	1,671,719	2,983,543
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	5	849,698	1,033,307	2,160,610

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.



## APPENDIX

### 47. Vermont

**Table 461: Detailed NASA Impacts by Types of Impact, Vermont.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	29	1,942,242	2,864,050	5,082,706
Oilseed farming	0	50	84	118
Grain farming	0	275	651	1,238
Vegetable and melon farming	0	756	1,220	1,865
Fruit farming	0	209	376	478
Tree nut farming	0	1	1	1
Greenhouse, nursery, and floriculture production	0	733	1,009	1,400
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	805	1,057	1,457
Beef cattle ranching and farming, including feedlots and dual- purpose ranching and farming	0	400	1,158	2,606
Dairy cattle and milk production	0	900	1,861	7,370
Poultry and egg production	0	100	143	1,143
Animal production, except cattle and poultry and eggs	0	660	1,154	1,752
Forestry, forest products, and timber tract production	0	58	61	92
Commercial logging	0	454	447	1,111
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	34	41	129
Support activities for agriculture and forestry	0	1,753	1,202	1,690
Oil and gas extraction	0	27	28	3,132
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	138	763	1,135
Sand and gravel mining	0	136	357	546

## APPENDIX

Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	70	178	205
Drilling oil and gas wells	0	0	0	1
Support activities for oil and gas operations	0	0	0	2
Metal mining services	0	0	0	30
Other nonmetallic minerals services	0	1	1	6
Electric power generation - Hydroelectric	0	223	657	2,292
Electric power generation - Fossil fuel	0	0	0	0
Electric power generation - Nuclear	0	1,908	4,172	10,170
Electric power generation - Solar	0	173	314	831
Electric power generation - Wind	0	401	1,721	8,448
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	55	173	319
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	6,327	20,933	51,537
Natural gas distribution	0	1,074	2,769	6,065
Water, sewage and other systems	0	131	269	625
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

## APPENDIX

Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	6,579	5,842	19,886
Maintenance and repair construction of residential structures	0	2,940	2,741	9,539
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	17	5	23
Dog and cat food manufacturing	0	9	21	372
Other animal food manufacturing	0	528	660	6,205
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	4	5	181
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	3	8	334
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	90	139	1,433
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	12	13	157
Chocolate and confectionery manufacturing from cacao beans	0	56	80	663
Confectionery manufacturing from purchased chocolate	0	87	94	664
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	30	34	321
Canned fruits and vegetables manufacturing	0	80	100	770
Canned specialties	0	56	82	844
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	232	275	4,223

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	472	666	6,306
Fluid milk manufacturing	0	662	775	6,730
Creamery butter manufacturing	0	54	113	1,251
Ice cream and frozen dessert manufacturing	0	152	179	984
Frozen cakes and other pastries manufacturing	0	161	209	391
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	161	189	2,367
Meat processed from carcasses	0	284	302	2,693
Rendering and meat byproduct processing	0	6	8	35
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	776	886	2,591
Cookie and cracker manufacturing	0	192	212	1,208
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	34	36	199
Roasted nuts and peanut butter manufacturing	0	74	76	573
Other snack food manufacturing	0	38	42	288
Coffee and tea manufacturing	0	234	290	1,835
Flavoring syrup and concentrate manufacturing	0	52	120	1,566
Mayonnaise, dressing, and sauce manufacturing	0	31	39	266
Spice and extract manufacturing	0	10	12	61
All other food manufacturing	0	76	83	644
Bottled and canned soft drinks & water	0	67	89	759
Manufactured ice	0	8	1	22
Breweries	0	556	984	4,171
Wineries	0	10	14	73
Distilleries	0	87	425	1,375
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	207	448	1,816
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	23	58	133
Knit fabric mills	0	0	0	0

## APPENDIX

Textile and fabric finishing mills	0	2	3	17
Fabric coating mills	0	6	10	50
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	1	3	14
Textile bag and canvas mills	0	6	9	26
Rope, cordage, twine, tire cord and tire fabric mills	0	9	20	56
Other textile product mills	0	2	3	13
Hosiery and sock mills	0	26	30	61
Other apparel knitting mills	0	4	5	11
Cut and sew apparel contractors	0	0	1	1
Mens and boys cut and sew apparel manufacturing	0	3	4	17
Womens and girls cut and sew apparel manufacturing	0	1	2	8
Other cut and sew apparel manufacturing	0	1	2	8
Apparel accessories and other apparel manufacturing	0	4	6	13
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	2	2	5
Sawmills	0	377	672	2,489
Wood preservation	0	22	97	284
Veneer and plywood manufacturing	0	232	415	972
Engineered wood member and truss manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	522	859	2,260
Cut stock, resawing lumber, and planing	0	36	83	265
Other millwork, including flooring	0	139	244	629
Wood container and pallet manufacturing	0	21	29	124
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	53	67	186
All other miscellaneous wood product manufacturing	0	147	218	668

## APPENDIX

Pulp mills	0	0	0	0
Paper mills	0	128	196	1,146
Paperboard mills	0	122	201	1,220
Paperboard container manufacturing	0	67	83	478
Paper bag and coated and treated paper manufacturing	0	28	38	192
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	2,751	3,611	8,101
Support activities for printing	0	270	348	560
Petroleum refineries	0	0	44	1,669
Asphalt paving mixture and block manufacturing	0	56	174	491
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	4	4	41
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	18	21	411
Plastics material and resin manufacturing	0	108	116	1,512
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	1	1	5
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	2	2	13
Pesticide and other agricultural chemical manufacturing	0	8	9	158
Medicinal and botanical manufacturing	0	0	0	1

## APPENDIX

Pharmaceutical preparation manufacturing	0	82	80	649
In-vitro diagnostic substance manufacturing	0	7	7	21
Biological product (except diagnostic) manufacturing	0	0	0	1
Paint and coating manufacturing	0	30	28	268
Adhesive manufacturing	0	1	1	7
Soap and other detergent manufacturing	0	425	377	4,209
Polish and other sanitation good manufacturing	0	27	23	131
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	159	115	968
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	66	69	611
Photographic film and chemical manufacturing	0	14	14	103
Other miscellaneous chemical product manufacturing	0	2	2	11
Plastics packaging materials and unlaminated film and sheet manufacturing	0	4	5	22
Unlaminated plastics profile shape manufacturing	0	10	20	65
Plastics pipe and pipe fitting manufacturing	0	3	6	19
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	4	6	25
Plastics bottle manufacturing	0	4	6	25
Other plastics product manufacturing	0	494	693	2,097
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	2	3	10
Other rubber product manufacturing	0	117	167	573

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	56	71	173
Brick, tile, and other structural clay product manufacturing	0	35	56	159
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	91	128	523
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	9	14	80
Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	271	419	1,433
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	187	256	642
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	20	51	126
Cut stone and stone product manufacturing	0	169	194	392
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	14	30	78
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	18	36	100
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0



## APPENDIX

Copper rolling, drawing, extruding and alloying	0	88	155	715
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	26	34	101
Iron and steel forging	0	33	42	136
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	7	14	41
Handtool manufacturing	0	26	36	88
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	74	99	328
Plate work manufacturing	0	9	11	37
Metal window and door manufacturing	0	1	1	4
Sheet metal work manufacturing	0	265	320	807
Ornamental and architectural metal work manufacturing	0	18	22	71
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	6	13	110
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	1	2	7
Machine shops	0	793	902	1,882
Turned product and screw, nut, and bolt manufacturing	0	67	84	198
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	49	71	180
Electroplating, anodizing, and coloring metal	0	27	30	69

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	10	14	36
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	61	111	256
Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	86	111	358
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	20	40	117
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	14	16	51
Food product machinery manufacturing	0	0	0	1
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	1	1	4
All other industrial machinery manufacturing	0	10	14	33
Optical instrument and lens manufacturing	0	1	1	3
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	18	37	98
Air purification and ventilation equipment manufacturing	0	0	1	2

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	50	81	210
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4	8	33
Industrial mold manufacturing	0	43	52	98
Special tool, die, jig, and fixture manufacturing	0	15	21	36
Cutting tool and machine tool accessory manufacturing	0	31	35	85
Machine tool manufacturing	0	2	2	5
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	1	2
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	3	5	14
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	1	1	2
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	2	6	14
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0

## APPENDIX

Fluid power pump and motor manufacturing	0	7	11	29
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	11	16	41
Electronic computer manufacturing	0	2	3	18
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	2	3	13
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	2	3	8
Audio and video equipment manufacturing	0	1	1	4
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	1
Semiconductor and related device manufacturing	0	231	298	1,170
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	9	10	33
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	1	1	5
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	2
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	2	3	9
Totalizing fluid meter and counting device manufacturing	0	7	10	29

## APPENDIX

Electricity and signal testing instruments manufacturing	0	33	39	120
Analytical laboratory instrument manufacturing	0	38,434	48,770	119,033
Irradiation apparatus manufacturing	0	0	0	1
Watch, clock, and other measuring and controlling device manufacturing	0	13	17	46
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	3	4	10
Electric lamp bulb and part manufacturing	0	35	55	127
Lighting fixture manufacturing	0	29	42	125
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	3	4	14
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	105	209	752
Fiber optic cable manufacturing	0	4	6	29
Other communication and energy wire manufacturing	0	17	28	107
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	21	30	97
All other miscellaneous electrical equipment and component manufacturing	0	4	5	15

## APPENDIX

Automobile manufacturing	0	29	45	654
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	1
Motor vehicle body manufacturing	0	0	1	5
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	1	1	17
Motor vehicle electrical and electronic equipment manufacturing	0	2	4	14
Motor vehicle transmission and power train parts manufacturing	0	89	104	561
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	240	271	1,495
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	15	15	67
Other aircraft parts and auxiliary equipment manufacturing	0	1	1	2
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	(6)	1	626
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	2	2	24
All other transportation equipment manufacturing	0	3	5	134

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	34	32	106
Upholstered household furniture manufacturing	0	8	8	49
Nonupholstered wood household furniture manufacturing	0	130	127	374
Other household nonupholstered furniture manufacturing	0	15	15	85
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	1
Custom architectural woodwork and millwork	0	1	1	5
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	13	12	40
Mattress manufacturing	0	7	5	39
Blind and shade manufacturing	0	0	0	3
Surgical and medical instrument manufacturing	0	51	101	257
Surgical appliance and supplies manufacturing	0	21	42	124
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	7	15	29
Dental laboratories	0	23	22	35
Jewelry and silverware manufacturing	0	31	44	151
Sporting and athletic goods manufacturing	0	140	197	557
Doll, toy, and game manufacturing	0	115	194	884
Office supplies (except paper) manufacturing	0	0	0	12
Sign manufacturing	0	25	22	173
Gasket, packing, and sealing device manufacturing	0	137	174	390
Musical instrument manufacturing	0	9	10	83
Fasteners, buttons, needles, and pins manufacturing	0	27	34	70
Broom, brush, and mop manufacturing	0	77	118	367
Burial casket manufacturing	0	7	11	98

## APPENDIX

All other miscellaneous manufacturing	0	931	1,494	19,257
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,251	3,024	6,801
Wholesale - Professional and commercial equipment and supplies	0	3,355	5,835	10,536
Wholesale - Household appliances and electrical and electronic goods	0	1,958	4,340	10,594
Wholesale - Machinery, equipment, and supplies	0	1,788	3,147	5,905
Wholesale - Other durable goods merchant wholesalers	0	4,618	7,437	15,270
Wholesale - Drugs and druggists' sundries	0	3,365	9,593	23,025
Wholesale - Grocery and related product wholesalers	0	3,399	4,663	9,442
Wholesale - Petroleum and petroleum products	0	807	11,609	13,404
Wholesale - Other nondurable goods merchant wholesalers	0	8,880	17,500	32,496
Wholesale - Wholesale electronic markets and agents and brokers	0	1,897	875	1,075
Retail - Motor vehicle and parts dealers	0	6,327	9,117	13,493
Retail - Furniture and home furnishings stores	0	2,836	3,797	6,210
Retail - Electronics and appliance stores	0	2,542	2,652	4,558
Retail - Building material and garden equipment and supplies stores	0	3,995	6,342	9,391
Retail - Food and beverage stores	0	10,838	14,263	24,291
Retail - Health and personal care stores	0	5,820	6,648	10,107
Retail - Gasoline stores	0	2,887	5,046	10,177
Retail - Clothing and clothing accessories stores	0	4,214	5,664	10,885
Retail - Sporting goods, hobby, musical instrument and book stores	0	2,684	3,500	5,734
Retail - General merchandise stores	0	4,884	6,806	11,167
Retail - Miscellaneous store retailers	0	5,365	6,041	9,969



## APPENDIX

Retail - Nonstore retailers	0	9,347	20,999	35,458
Air transportation	0	521	2,069	3,143
Rail transportation	0	518	532	1,852
Water transportation	0	344	1,249	4,371
Truck transportation	0	6,748	7,903	16,440
Transit and ground passenger transportation	0	3,615	4,235	5,600
Pipeline transportation	0	483	454	984
Scenic and sightseeing transportation and support activities for transportation	0	3,861	4,553	10,656
Couriers and messengers	0	3,354	4,343	7,649
Warehousing and storage	0	3,193	3,531	8,221
Newspaper publishers	0	2,389	3,505	5,065
Periodical publishers	0	1,787	2,479	4,656
Book publishers	0	1,084	2,946	6,159
Directory, mailing list, and other publishers	0	154	349	823
Greeting card publishing	0	140	472	655
Software publishers	0	59,054	130,418	165,281
Motion picture and video industries	0	942	1,691	6,127
Sound recording industries	0	86	417	1,086
Radio and television broadcasting	0	6,878	5,583	19,308
Cable and other subscription programming	0	363	1,732	6,642
Wired telecommunications carriers	0	4,107	10,647	20,004
Wireless telecommunications carriers (except satellite)	0	301	2,007	7,147
Satellite, telecommunications resellers, and all other telecommunications	0	557	712	1,605
Data processing, hosting, and related services	0	3,175	8,332	18,048
News syndicates, libraries, archives and all other information services	0	592	1,256	2,530
Internet publishing and broadcasting and web search portals	0	2,472	9,798	28,185
Nondepository credit intermediation and related activities	0	3,097	4,124	8,084
Securities and commodity contracts intermediation and brokerage	0	9,216	8,806	18,672

## APPENDIX

Monetary authorities and depository credit intermediation	0	22,883	46,401	92,128
Other financial investment activities	0	7,440	8,254	23,893
Direct life insurance carriers	0	4,292	9,877	12,795
Insurance carriers, except direct life	0	8,222	34,292	61,288
Insurance agencies, brokerages, and related activities	0	8,747	15,282	32,831
Funds, trusts, and other financial vehicles	0	2,007	2,518	14,181
Other real estate	1	23,266	98,687	250,993
Tenant-occupied housing	0	1,428	38,356	41,494
Owner-occupied dwellings	0	0	129,242	163,295
Automotive equipment rental and leasing	0	838	4,130	6,000
General and consumer goods rental except video tapes and discs	0	1,407	2,126	3,762
Video tape and disc rental	0	451	768	1,328
Commercial and industrial machinery and equipment rental and leasing	0	949	3,136	5,467
Lessors of nonfinancial intangible assets	0	(140)	2,673	3,924
Legal services	0	27,757	43,086	67,829
Accounting, tax preparation, bookkeeping, and payroll services	0	11,181	15,340	22,212
Architectural, engineering, and related services	0	13,333	16,120	30,362
Specialized design services	0	2,444	2,593	3,408
Custom computer programming services	0	9,709	10,940	16,226
Computer systems design services	0	4,816	5,024	6,737
Other computer related services, including facilities management	0	2,500	5,310	9,041
Management consulting services	0	32,077	32,004	54,512
Environmental and other technical consulting services	0	8,215	7,183	10,356
Scientific research and development services	5	365,919	476,463	1,113,334
Advertising, public relations, and related services	0	6,690	9,648	18,553
Photographic services	0	1,314	979	1,613
Veterinary services	0	1,575	2,359	3,627

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	0	20,926	20,064	32,217
Management of companies and enterprises	0	22,788	26,354	41,115
Office administrative services	0	10,205	7,425	11,739
Facilities support services	0	830	1,293	3,188
Employment services	0	14,669	27,613	40,433
Business support services	0	4,239	4,106	6,990
Travel arrangement and reservation services	0	2,229	3,513	7,363
Investigation and security services	0	2,491	2,559	3,477
Services to buildings	0	7,411	7,785	12,960
Landscape and horticultural services	0	5,684	6,081	10,152
Other support services	0	1,901	2,598	5,209
Waste management and remediation services	0	3,058	6,660	11,892
Elementary and secondary schools	0	7,400	7,091	8,514
Junior colleges, colleges, universities, and professional schools	0	14,206	22,030	30,507
Other educational services	1	37,868	38,807	71,516
Offices of physicians	0	33,895	40,153	58,008
Offices of dentists	0	8,218	10,416	15,159
Offices of other health practitioners	0	10,663	10,110	14,331
Outpatient care centers	0	9,403	9,955	21,054
Medical and diagnostic laboratories	0	742	1,125	1,844
Home health care services	0	8,596	5,989	8,300
Other ambulatory health care services	0	1,987	2,193	3,869
Hospitals	1	66,870	76,164	144,314
Nursing and community care facilities	0	11,386	12,412	20,344
Residential mental retardation, mental health, substance abuse and other facilities	0	3,587	3,748	5,350
Individual and family services	1	17,152	15,367	23,526
Child day care services	0	5,513	6,328	8,418
Community food, housing, and other relief services, including rehabilitation services	0	3,393	3,708	7,609
Performing arts companies	0	1,277	2,117	4,181

## APPENDIX

Commercial Sports Except Racing	0	1,251	1,464	2,934
Racing and Track Operation	0	288	453	997
Independent artists, writers, and performers	0	5,034	5,829	7,317
Promoters of performing arts and sports and agents for public figures	0	1,126	2,658	6,300
Museums, historical sites, zoos, and parks	0	1,104	1,333	2,322
Amusement parks and arcades	0	110	784	906
Gambling industries (except casino hotels)	0	2,739	5,692	10,468
Other amusement and recreation industries	0	1,646	2,970	4,941
Fitness and recreational sports centers	0	1,035	2,960	4,140
Bowling centers	0	312	586	873
Hotels and motels, including casino hotels	0	755	1,580	2,466
Other accommodations	0	231	356	493
Full-service restaurants	1	17,195	24,848	42,852
Limited-service restaurants	0	9,013	13,927	28,535
All other food and drinking places	0	11,260	17,542	24,799
Automotive repair and maintenance, except car washes	0	10,174	10,428	16,540
Car washes	0	5,002	7,315	10,931
Electronic and precision equipment repair and maintenance	0	1,962	2,493	4,401
Commercial and industrial machinery and equipment repair and maintenance	0	2,238	2,466	4,153
Personal and household goods repair and maintenance	0	3,483	3,086	4,019
Personal care services	0	5,112	2,798	3,952
Death care services	0	494	564	952
Dry-cleaning and laundry services	0	587	631	948
Other personal services	0	5,424	4,716	6,211
Religious organizations	0	6,510	718	11,288
Grantmaking, giving, and social advocacy organizations	0	5,543	10,194	18,806
Business and professional associations	0	2,865	3,461	6,810
Labor and civic organizations	0	2,672	4,378	10,235
Private households	0	2,137	2,137	2,137
Postal service	0	5,870	5,875	6,550
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	0	64	108	259
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	3,945	3,677	8,089
Local government passenger transit	0	1,153	(1,165)	177
Local government electric utilities	0	772	1,650	3,454
Other local government enterprises	0	2,001	2,597	6,270
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	4	617,609	798,596	1,068,137

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 462: Detailed M2M Program Impacts by Types of Impact, Vermont.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	3	207,075	329,628	576,366
Oilseed farming	0	5	12	20
Grain farming	0	26	68	119
Vegetable and melon farming	0	75	126	182
Fruit farming	0	27	50	60
Tree nut farming	0	0	0	0

## APPENDIX

Greenhouse, nursery, and floriculture production	0	27	38	51
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	64	87	117
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	41	116	240
Dairy cattle and milk production	0	105	224	776
Poultry and egg production	0	8	12	93
Animal production, except cattle and poultry and eggs	0	53	105	164
Forestry, forest products, and timber tract production	0	4	4	6
Commercial logging	0	29	28	65
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	3	4	11
Support activities for agriculture and forestry	0	205	139	196
Oil and gas extraction	0	2	3	276
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	29	80	123
Sand and gravel mining	0	41	53	69
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	18	24	26
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	0
Metal mining services	0	0	0	1

## APPENDIX

Other nonmetallic minerals services	0	0	0	1
Electric power generation - Hydroelectric	0	38	99	321
Electric power generation - Fossil fuel	0	0	0	0
Electric power generation - Nuclear	0	219	496	1,180
Electric power generation - Solar	0	17	30	78
Electric power generation - Wind	0	40	164	758
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	12	30	54
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	666	2,229	5,329
Natural gas distribution	0	135	361	693
Water, sewage and other systems	0	17	30	62
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	783	698	2,311

## APPENDIX

Maintenance and repair construction of residential structures	0	283	265	893
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	2	0	2
Dog and cat food manufacturing	0	1	2	31
Other animal food manufacturing	0	59	77	688
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	1	14
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	1	48
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	7	11	109
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1	1	16
Chocolate and confectionery manufacturing from cacao beans	0	11	15	119
Confectionery manufacturing from purchased chocolate	0	9	10	67
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	4	4	35
Canned fruits and vegetables manufacturing	0	11	14	104
Canned specialties	0	6	8	86
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	26	31	488
Dry, condensed, and evaporated dairy product manufacturing	0	61	89	751
Fluid milk manufacturing	0	67	80	666
Creamery butter manufacturing	0	7	14	144
Ice cream and frozen dessert manufacturing	0	17	21	101
Frozen cakes and other pastries manufacturing	0	17	21	39
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	13	16	190
Meat processed from carcasses	0	28	31	265



## APPENDIX

Rendering and meat byproduct processing	0	1	1	4
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	77	89	254
Cookie and cracker manufacturing	0	21	24	125
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	3	3	18
Roasted nuts and peanut butter manufacturing	0	9	10	67
Other snack food manufacturing	0	4	4	29
Coffee and tea manufacturing	0	26	33	195
Flavoring syrup and concentrate manufacturing	0	9	19	259
Mayonnaise, dressing, and sauce manufacturing	0	4	4	29
Spice and extract manufacturing	0	2	2	9
All other food manufacturing	0	9	10	76
Bottled and canned soft drinks & water	0	6	9	69
Manufactured ice	0	1	0	2
Breweries	0	54	98	400
Wineries	0	2	3	15
Distilleries	0	9	48	140
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	3	7	25
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	3	9	18
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	0	1	3
Fabric coating mills	0	1	2	7
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	1
Textile bag and canvas mills	0	1	1	3
Rope, cordage, twine, tire cord and tire fabric mills	0	1	2	5
Other textile product mills	0	0	0	2
Hosiery and sock mills	0	3	3	6
Other apparel knitting mills	0	1	1	2
Cut and sew apparel contractors	0	0	0	0

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	1	1	2
Womens and girls cut and sew apparel manufacturing	0	0	0	1
Other cut and sew apparel manufacturing	0	0	0	1
Apparel accessories and other apparel manufacturing	0	1	1	2
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	1
Sawmills	0	31	57	200
Wood preservation	0	2	10	27
Veneer and plywood manufacturing	0	15	27	64
Engineered wood member and truss manufacturing	0	0	0	0
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	60	103	263
Cut stock, resawing lumber, and planing	0	4	10	30
Other millwork, including flooring	0	17	31	74
Wood container and pallet manufacturing	0	2	3	12
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	6	8	22
All other miscellaneous wood product manufacturing	0	13	20	57
Pulp mills	0	0	0	0
Paper mills	0	12	15	99
Paperboard mills	0	15	23	148
Paperboard container manufacturing	0	5	6	35
Paper bag and coated and treated paper manufacturing	0	3	4	19
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0

## APPENDIX

All other converted paper product manufacturing	0	0	0	0
Printing	0	425	555	1,194
Support activities for printing	0	43	55	87
Petroleum refineries	0	0	4	164
Asphalt paving mixture and block manufacturing	0	6	18	47
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	0	1	5
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	0	0	0
Other basic organic chemical manufacturing	0	2	2	42
Plastics material and resin manufacturing	0	10	11	152
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	1
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	0	0	2
Pesticide and other agricultural chemical manufacturing	0	1	1	14
Medicinal and botanical manufacturing	0	0	0	0
Pharmaceutical preparation manufacturing	0	13	14	99
In-vitro diagnostic substance manufacturing	0	2	2	5
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	2	2	16
Adhesive manufacturing	0	0	0	1
Soap and other detergent manufacturing	0	43	48	438

## APPENDIX

Polish and other sanitation good manufacturing	0	4	4	17
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	20	17	126
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	4	4	40
Photographic film and chemical manufacturing	0	2	2	16
Other miscellaneous chemical product manufacturing	0	0	0	1
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	2
Unlaminated plastics profile shape manufacturing	0	1	2	6
Plastics pipe and pipe fitting manufacturing	0	0	1	3
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	1	3
Plastics bottle manufacturing	0	1	1	4
Other plastics product manufacturing	0	63	87	251
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	0	0	1
Other rubber product manufacturing	0	17	24	86
Pottery, ceramics, and plumbing fixture manufacturing	0	6	7	18
Brick, tile, and other structural clay product manufacturing	0	4	6	17
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	13	17	71
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	1	2	8

## APPENDIX

Cement manufacturing	0	0	0	0
Ready-mix concrete manufacturing	0	31	46	159
Concrete block and brick manufacturing	0	0	0	0
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	22	29	73
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	0	0	0
Abrasive product manufacturing	0	1	3	7
Cut stone and stone product manufacturing	0	16	18	37
Ground or treated mineral and earth manufacturing	0	0	0	0
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	2	4	11
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	1	2	5
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	4	7	33
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	0
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	3	3	10

## APPENDIX

Iron and steel forging	0	3	4	13
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	1	2	5
Handtool manufacturing	0	3	5	12
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	9	13	41
Plate work manufacturing	0	1	1	3
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	10	12	29
Ornamental and architectural metal work manufacturing	0	2	3	8
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	0	0
Metal cans manufacturing	0	1	1	10
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	0	0	1
Machine shops	0	37	43	87
Turned product and screw, nut, and bolt manufacturing	0	3	4	8
Metal heat treating	0	0	0	0
Metal coating and nonprecious engraving	0	8	11	28
Electroplating, anodizing, and coloring metal	0	5	6	13
Valve and fittings, other than plumbing, manufacturing	0	1	2	5
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	0	0	0
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	7	12	25

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	7	9	26
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	4	7	20
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	5	6	16
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	1
All other industrial machinery manufacturing	0	1	1	3
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	1	3	8
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	8	13	30
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	1	3
Industrial mold manufacturing	0	3	4	7
Special tool, die, jig, and fixture manufacturing	0	1	2	3
Cutting tool and machine tool accessory manufacturing	0	2	3	6
Machine tool manufacturing	0	0	0	0

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	1	1
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	1	2	3
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	1	2	4
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1	1	3
Electronic computer manufacturing	0	0	0	3
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	2



## APPENDIX

Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	1
Audio and video equipment manufacturing	0	0	0	1
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	39	49	186
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	3	4	12
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0
Industrial process variable instruments manufacturing	0	0	0	1
Totalizing fluid meter and counting device manufacturing	0	0	1	2
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	1	1
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	3	4	10
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	1	1	2
Electric lamp bulb and part manufacturing	0	5	8	17
Lighting fixture manufacturing	0	5	7	19
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	13	20	82
Fiber optic cable manufacturing	0	1	1	5
Other communication and energy wire manufacturing	0	1	2	7
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	3	4	13
All other miscellaneous electrical equipment and component manufacturing	0	1	1	2
Automobile manufacturing	0	3	4	63
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	0	0	0
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	2

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	0	0	1
Motor vehicle transmission and power train parts manufacturing	0	14	17	77
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	0
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	29	36	185
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	8	7	36
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	(0)	0	47
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	3
All other transportation equipment manufacturing	0	0	1	14
Wood kitchen cabinet and countertop manufacturing	0	4	3	11
Upholstered household furniture manufacturing	0	1	1	7
Nonupholstered wood household furniture manufacturing	0	13	13	36
Other household nonupholstered furniture manufacturing	0	2	2	9
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0

## APPENDIX

Custom architectural woodwork and millwork	0	0	0	1
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	1	1	4
Mattress manufacturing	0	1	0	4
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	6	12	30
Surgical appliance and supplies manufacturing	0	3	6	16
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	1	2	3
Dental laboratories	0	3	3	4
Jewelry and silverware manufacturing	0	3	5	15
Sporting and athletic goods manufacturing	0	14	19	51
Doll, toy, and game manufacturing	0	19	29	118
Office supplies (except paper) manufacturing	0	0	0	2
Sign manufacturing	0	3	3	21
Gasket, packing, and sealing device manufacturing	0	7	8	18
Musical instrument manufacturing	0	2	2	14
Fasteners, buttons, needles, and pins manufacturing	0	3	4	8
Broom, brush, and mop manufacturing	0	11	19	48
Burial casket manufacturing	0	0	1	6
All other miscellaneous manufacturing	0	1	2	23
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	128	311	698
Wholesale - Professional and commercial equipment and supplies	0	458	797	1,406
Wholesale - Household appliances and electrical and electronic goods	0	145	321	774
Wholesale - Machinery, equipment, and supplies	0	164	290	541
Wholesale - Other durable goods merchant wholesalers	0	378	610	1,243

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	326	916	2,146
Wholesale - Grocery and related product wholesalers	0	317	431	873
Wholesale - Petroleum and petroleum products	0	74	1,188	1,351
Wholesale - Other nondurable goods merchant wholesalers	0	811	1,651	3,005
Wholesale - Wholesale electronic markets and agents and brokers	0	190	83	102
Retail - Motor vehicle and parts dealers	0	573	830	1,218
Retail - Furniture and home furnishings stores	0	263	352	566
Retail - Electronics and appliance stores	0	233	244	411
Retail - Building material and garden equipment and supplies stores	0	392	623	912
Retail - Food and beverage stores	0	1,055	1,374	2,284
Retail - Health and personal care stores	0	515	592	897
Retail - Gasoline stores	0	293	476	908
Retail - Clothing and clothing accessories stores	0	401	535	997
Retail - Sporting goods, hobby, musical instrument and book stores	0	243	318	511
Retail - General merchandise stores	0	421	592	964
Retail - Miscellaneous store retailers	0	510	569	907
Retail - Nonstore retailers	0	922	2,096	3,373
Air transportation	0	59	238	356
Rail transportation	0	58	53	197
Water transportation	0	55	194	661
Truck transportation	0	736	845	1,712
Transit and ground passenger transportation	0	562	666	822
Pipeline transportation	0	37	37	82
Scenic and sightseeing transportation and support activities for transportation	0	531	634	1,485
Couriers and messengers	0	386	516	889
Warehousing and storage	0	318	351	809

## APPENDIX

Newspaper publishers	0	322	456	649
Periodical publishers	0	288	391	676
Book publishers	0	108	279	582
Directory, mailing list, and other publishers	0	18	41	96
Greeting card publishing	0	10	34	46
Software publishers	0	43,371	81,774	101,212
Motion picture and video industries	0	140	254	757
Sound recording industries	0	11	50	119
Radio and television broadcasting	0	1,497	1,335	3,065
Cable and other subscription programming	0	76	287	907
Wired telecommunications carriers	0	467	1,124	2,047
Wireless telecommunications carriers (except satellite)	0	47	258	888
Satellite, telecommunications resellers, and all other telecommunications	0	88	100	199
Data processing, hosting, and related services	0	443	1,090	2,247
News syndicates, libraries, archives and all other information services	0	92	194	367
Internet publishing and broadcasting and web search portals	0	549	2,069	5,110
Nondepository credit intermediation and related activities	0	337	455	839
Securities and commodity contracts intermediation and brokerage	0	974	914	1,814
Monetary authorities and depository credit intermediation	0	2,401	5,027	9,692
Other financial investment activities	0	986	1,063	2,453
Direct life insurance carriers	0	341	811	1,026
Insurance carriers, except direct life	0	799	3,434	5,896
Insurance agencies, brokerages, and related activities	0	827	1,450	3,025
Funds, trusts, and other financial vehicles	0	223	274	1,306
Other real estate	0	3,645	15,391	33,975
Tenant-occupied housing	0	153	3,888	4,146

## APPENDIX

Owner-occupied dwellings	0	0	13,015	16,445
Automotive equipment rental and leasing	0	113	455	633
General and consumer goods rental except video tapes and discs	0	159	225	370
Video tape and disc rental	0	43	71	119
Commercial and industrial machinery and equipment rental and leasing	0	130	368	622
Lessors of nonfinancial intangible assets	0	(18)	334	487
Legal services	0	3,822	6,182	9,485
Accounting, tax preparation, bookkeeping, and payroll services	0	1,423	1,962	2,767
Architectural, engineering, and related services	0	1,992	2,419	4,488
Specialized design services	0	295	314	403
Custom computer programming services	0	668	748	1,084
Computer systems design services	0	631	656	864
Other computer related services, including facilities management	0	380	778	1,261
Management consulting services	0	4,679	4,676	7,733
Environmental and other technical consulting services	0	1,312	1,157	1,640
Scientific research and development services	1	66,803	88,160	190,398
Advertising, public relations, and related services	0	1,028	1,477	2,704
Photographic services	0	146	115	178
Veterinary services	0	151	230	343
Marketing research and all other miscellaneous professional, scientific, and technical services	0	3,181	3,042	4,802
Management of companies and enterprises	0	2,877	3,360	5,077
Office administrative services	0	2,101	1,561	2,222
Facilities support services	0	139	214	497
Employment services	0	2,410	4,661	6,564
Business support services	0	488	482	794
Travel arrangement and reservation services	0	282	448	900
Investigation and security services	0	353	363	477
Services to buildings	0	1,009	1,063	1,683

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Landscape and horticultural services	0	687	736	1,185
Other support services	0	261	357	711
Waste management and remediation services	0	349	764	1,345
Elementary and secondary schools	0	892	851	1,005
Junior colleges, colleges, universities, and professional schools	0	1,883	2,893	3,806
Other educational services	0	555	568	1,016
Offices of physicians	0	3,063	3,657	5,241
Offices of dentists	0	778	997	1,430
Offices of other health practitioners	0	965	922	1,304
Outpatient care centers	0	939	998	2,080
Medical and diagnostic laboratories	0	69	107	171
Home health care services	0	772	544	759
Other ambulatory health care services	0	187	208	361
Hospitals	0	6,764	7,673	14,187
Nursing and community care facilities	0	1,080	1,179	1,883
Residential mental retardation, mental health, substance abuse and other facilities	0	384	402	562
Individual and family services	0	1,805	1,646	2,504
Child day care services	0	546	636	825
Community food, housing, and other relief services, including rehabilitation services	0	381	422	836
Performing arts companies	0	154	247	442
Commercial Sports Except Racing	0	147	172	336
Racing and Track Operation	0	30	45	95
Independent artists, writers, and performers	0	739	833	998
Promoters of performing arts and sports and agents for public figures	0	139	301	665
Museums, historical sites, zoos, and parks	0	115	138	232
Amusement parks and arcades	0	12	72	84
Gambling industries (except casino hotels)	0	276	540	981
Other amusement and recreation industries	0	154	266	441



## APPENDIX

Fitness and recreational sports centers	0	111	296	409
Bowling centers	0	29	53	77
Hotels and motels, including casino hotels	0	108	216	332
Other accommodations	0	34	51	69
Full-service restaurants	0	1,765	2,565	4,327
Limited-service restaurants	0	899	1,380	2,728
All other food and drinking places	0	1,317	2,017	2,769
Automotive repair and maintenance, except car washes	0	1,112	1,097	1,730
Car washes	0	509	741	1,099
Electronic and precision equipment repair and maintenance	0	267	341	574
Commercial and industrial machinery and equipment repair and maintenance	0	261	283	473
Personal and household goods repair and maintenance	0	417	328	427
Personal care services	0	526	263	376
Death care services	0	53	57	96
Dry-cleaning and laundry services	0	64	68	101
Other personal services	0	603	458	621
Religious organizations	0	731	63	1,162
Grantmaking, giving, and social advocacy organizations	0	716	1,130	2,085
Business and professional associations	0	319	348	659
Labor and civic organizations	0	300	434	1,036
Private households	0	229	229	229
Postal service	0	627	627	698
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	7	14	30
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	241	219	451
Local government passenger transit	0	149	(193)	15
Local government electric utilities	0	92	180	367
Other local government enterprises	0	233	279	667

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 48. Virginia

**Table 463: Detailed NASA Impacts by Types of Impact, Virginia.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	27,097	2,031,278,551	3,022,610,268	5,504,589,625
Oilseed farming	5	(3,949)	681,497	1,495,401
Grain farming	16	55,886	623,582	2,261,032
Vegetable and melon farming	9	52,386	190,792	608,686
Fruit farming	7	14,699	112,989	302,864
Tree nut farming	0	1,249	1,388	2,878
Greenhouse, nursery, and floriculture production	12	184,340	328,510	825,729
Tobacco farming	5	94,485	145,002	317,033
Cotton farming	1	10,084	20,126	48,440
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	53	116,543	218,164	564,688
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	24	(22,806)	276,948	1,175,569

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Dairy cattle and milk production	5	10,912	146,682	1,127,678
Poultry and egg production	12	130,683	266,960	3,565,573
Animal production, except cattle and poultry and eggs	29	37,484	949,251	1,731,427
Forestry, forest products, and timber tract production	1	65,100	70,215	92,093
Commercial logging	7	385,174	390,220	629,737
Commercial fishing	2	136,302	267,389	608,751
Commercial hunting and trapping	1	89,687	110,988	125,186
Support activities for agriculture and forestry	27	857,676	735,940	943,627
Oil and gas extraction	34	413,799	663,817	9,194,733
Coal mining	3	256,185	649,078	1,157,698
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	2,922	12,008	34,078
Stone mining and quarrying	4	187,597	532,554	952,209
Sand and gravel mining	1	(12,873)	17,700	84,743
Other clay, ceramic, refractory minerals mining	0	11,584	22,343	48,480
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(11,866)	229	23,377
Drilling oil and gas wells	0	55	57	469
Support activities for oil and gas operations	0	1,955	1,943	10,712
Metal mining services	0	4,688	6,508	70,673
Other nonmetallic minerals services	0	668	756	5,333
Electric power generation - Hydroelectric	1	92,716	400,275	617,727
Electric power generation - Fossil fuel	10	1,363,662	6,933,465	15,404,775
Electric power generation - Nuclear	16	2,912,392	8,506,914	16,706,960
Electric power generation - Solar	4	215,116	345,566	808,312
Electric power generation - Wind	1	65,920	265,906	852,922

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	5	269,726	703,663	2,015,889
Electric power generation - All other	0	7,184	5,208	17,658
Electric power transmission and distribution	45	7,114,064	35,076,932	70,659,844
Natural gas distribution	8	1,215,554	4,430,837	7,624,871
Water, sewage and other systems	4	309,445	806,618	1,286,211
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	105	6,636,486	4,056,637	8,846,289
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	97	5,801,819	7,995,813	19,163,123
Maintenance and repair construction of residential structures	46	2,576,658	3,942,581	9,451,814
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	5,256	3,635	8,510
Dog and cat food manufacturing	1	61,606	508,648	1,437,762
Other animal food manufacturing	2	119,925	318,391	2,171,834
Flour milling	1	33,866	118,621	616,056
Rice milling	0	0	0	0
Malt manufacturing	0	26,377	107,268	388,030

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Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	18,784	65,155	441,129
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	3,001	12,724	57,844
Nonchocolate confectionery manufacturing	0	4,344	10,083	101,204
Chocolate and confectionery manufacturing from cacao beans	0	345	1,366	13,644
Confectionery manufacturing from purchased chocolate	2	190,774	380,182	980,592
Frozen fruits, juices and vegetables manufacturing	1	34,055	102,589	322,655
Frozen specialties manufacturing	2	125,406	281,963	888,599
Canned fruits and vegetables manufacturing	1	61,380	185,205	667,734
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	3,660	10,713	45,476
Cheese manufacturing	0	1,764	3,729	35,929
Dry, condensed, and evaporated dairy product manufacturing	2	168,519	769,041	2,901,689
Fluid milk manufacturing	4	253,141	639,990	2,806,670
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	4,587	11,088	43,569
Frozen cakes and other pastries manufacturing	8	232,414	363,537	685,512
Poultry processing	22	1,006,650	1,814,075	7,082,844
Animal, except poultry, slaughtering	9	465,760	912,377	6,169,959
Meat processed from carcasses	7	338,379	424,477	3,583,160
Rendering and meat byproduct processing	0	31,965	35,389	175,722
Seafood product preparation and packaging	4	244,777	398,895	1,731,756
Bread and bakery product, except frozen, manufacturing	19	630,150	1,034,845	2,640,067
Cookie and cracker manufacturing	3	368,214	745,232	1,564,924
Dry pasta, mixes, and dough manufacturing	0	32,507	139,557	333,419
Tortilla manufacturing	0	920	1,375	8,833

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Roasted nuts and peanut butter manufacturing	2	105,069	374,247	939,883
Other snack food manufacturing	4	206,632	792,458	2,183,300
Coffee and tea manufacturing	1	110,663	356,776	1,104,100
Flavoring syrup and concentrate manufacturing	0	38,739	653,724	1,047,762
Mayonnaise, dressing, and sauce manufacturing	0	1,067	3,260	31,385
Spice and extract manufacturing	0	31,542	73,132	242,620
All other food manufacturing	3	154,390	291,437	1,064,603
Bottled and canned soft drinks & water	6	372,666	1,323,351	4,585,249
Manufactured ice	0	21,444	20,723	66,997
Breweries	7	490,518	2,272,699	4,574,486
Wineries	2	57,136	163,310	655,106
Distilleries	1	140,374	1,383,525	2,129,785
Tobacco product manufacturing	2	216,840	9,850,069	12,207,020
Fiber, yarn, and thread mills	1	54,657	91,989	367,825
Broadwoven fabric mills	2	97,504	159,289	501,221
Narrow fabric mills and schiffli machine embroidery	0	12,723	15,025	57,846
Nonwoven fabric mills	2	147,165	304,989	844,506
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	13,764	19,395	77,620
Fabric coating mills	0	4,918	7,068	30,951
Carpet and rug mills	2	75,061	151,421	568,228
Curtain and linen mills	1	45,738	74,549	247,355
Textile bag and canvas mills	1	34,159	45,769	116,776
Rope, cordage, twine, tire cord and tire fabric mills	0	24,736	46,255	123,085
Other textile product mills	1	46,642	61,366	168,189
Hosiery and sock mills	0	2,236	4,012	10,645
Other apparel knitting mills	0	4,423	6,339	16,635
Cut and sew apparel contractors	1	15,506	17,319	36,541
Mens and boys cut and sew apparel manufacturing	1	33,167	32,054	96,374
Womens and girls cut and sew apparel manufacturing	0	8,147	9,941	44,971
Other cut and sew apparel manufacturing	1	22,811	23,149	77,786
Apparel accessories and other apparel manufacturing	1	18,489	19,540	54,525
Leather and hide tanning and finishing	0	0	0	0

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Footwear manufacturing	0	5,592	6,007	28,883
Other leather and allied product manufacturing	0	3,202	3,372	14,278
Sawmills	7	350,746	615,219	2,051,619
Wood preservation	1	44,336	198,145	453,840
Veneer and plywood manufacturing	2	113,054	205,089	572,825
Engineered wood member and truss manufacturing	1	41,489	66,845	184,505
Reconstituted wood product manufacturing	1	42,412	149,276	387,250
Wood windows and door manufacturing	7	393,862	652,353	1,690,308
Cut stock, resawing lumber, and planing	2	75,098	167,624	398,975
Other millwork, including flooring	3	128,845	224,089	558,410
Wood container and pallet manufacturing	4	185,602	244,315	620,608
Manufactured home (mobile home) manufacturing	0	53	118	324
Prefabricated wood building manufacturing	1	47,333	59,712	173,480
All other miscellaneous wood product manufacturing	3	122,489	176,261	480,342
Pulp mills	0	0	0	0
Paper mills	6	567,431	1,147,501	4,311,813
Paperboard mills	4	483,533	1,034,081	3,865,969
Paperboard container manufacturing	8	544,430	772,570	3,656,224
Paper bag and coated and treated paper manufacturing	1	95,965	154,817	595,588
Stationery product manufacturing	1	88,759	120,528	492,483
Sanitary paper product manufacturing	0	4,152	10,300	35,099
All other converted paper product manufacturing	2	90,326	126,476	488,583
Printing	42	2,264,052	3,321,001	7,001,909
Support activities for printing	1	79,554	115,525	176,378
Petroleum refineries	1	159,963	1,316,671	8,426,126
Asphalt paving mixture and block manufacturing	0	57,903	97,467	395,651
Asphalt shingle and coating materials manufacturing	0	12,558	36,469	96,184
Petroleum lubricating oil and grease manufacturing	0	0	0	0

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All other petroleum and coal products manufacturing	0	27,940	65,042	235,038
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	1	137,414	330,025	1,137,576
Synthetic dye and pigment manufacturing	0	5,344	11,071	40,387
Other basic inorganic chemical manufacturing	0	11,308	23,507	95,680
Other basic organic chemical manufacturing	2	247,490	492,224	3,319,563
Plastics material and resin manufacturing	1	83,920	140,071	908,773
Synthetic rubber manufacturing	0	5,946	10,558	87,855
Artificial and synthetic fibers and filaments manufacturing	8	978,118	1,458,584	6,466,384
Nitrogenous fertilizer manufacturing	0	1,760	4,036	15,895
Phosphatic fertilizer manufacturing	0	323	785	2,825
Fertilizer mixing	0	10,613	18,511	64,424
Pesticide and other agricultural chemical manufacturing	1	52,811	169,639	868,002
Medicinal and botanical manufacturing	0	1,395	2,397	13,144
Pharmaceutical preparation manufacturing	3	310,262	1,121,577	3,305,721
In-vitro diagnostic substance manufacturing	0	16,385	24,756	70,692
Biological product (except diagnostic) manufacturing	0	8,774	20,185	59,643
Paint and coating manufacturing	1	83,637	157,047	626,755
Adhesive manufacturing	0	13,048	20,504	76,291
Soap and other detergent manufacturing	0	20,685	70,662	468,475
Polish and other sanitation good manufacturing	1	40,597	80,184	429,250
Surface active agent manufacturing	0	37,268	111,851	301,769
Toilet preparation manufacturing	1	96,514	283,914	860,250
Printing ink manufacturing	1	126,809	137,896	472,410
Explosives manufacturing	0	18,569	21,600	69,152
Custom compounding of purchased resins	1	100,989	173,759	668,422
Photographic film and chemical manufacturing	3	277,665	579,251	1,990,881
Other miscellaneous chemical product manufacturing	1	100,724	150,943	560,437



## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	5	404,862	842,661	2,355,528
Unlaminated plastics profile shape manufacturing	0	12,343	37,006	94,463
Plastics pipe and pipe fitting manufacturing	3	180,770	567,797	1,548,643
Laminated plastics plate, sheet (except packaging), and shape manufacturing	1	104,979	250,900	495,167
Polystyrene foam product manufacturing	0	19,218	40,741	134,292
Urethane and other foam product (except polystyrene) manufacturing	0	37,562	74,856	186,548
Plastics bottle manufacturing	1	37,564	78,451	272,570
Other plastics product manufacturing	11	620,841	1,112,019	3,222,362
Tire manufacturing	7	547,839	893,683	3,019,535
Rubber and plastics hoses and belting manufacturing	0	14,184	27,657	61,502
Other rubber product manufacturing	2	123,291	223,786	685,228
Pottery, ceramics, and plumbing fixture manufacturing	0	13,465	15,077	33,311
Brick, tile, and other structural clay product manufacturing	1	68,321	123,039	259,663
Flat glass manufacturing	0	14,245	34,841	99,878
Other pressed and blown glass and glassware manufacturing	0	4,299	5,472	12,760
Glass container manufacturing	1	77,069	155,199	355,079
Glass product manufacturing made of purchased glass	1	64,829	118,835	307,057
Cement manufacturing	0	16,498	49,040	119,657
Ready-mix concrete manufacturing	3	211,493	409,357	1,291,425
Concrete block and brick manufacturing	1	57,312	121,671	287,894
Concrete pipe manufacturing	0	27,952	50,786	125,272
Other concrete product manufacturing	3	221,811	363,577	838,400
Lime manufacturing	0	45,327	137,020	301,015
Gypsum product manufacturing	1	112,700	360,462	848,708
Abrasive product manufacturing	1	47,014	180,277	296,970
Cut stone and stone product manufacturing	2	125,230	151,277	318,946

## APPENDIX

Ground or treated mineral and earth manufacturing	1	51,829	183,903	396,778
Mineral wool manufacturing	0	2,933	7,070	18,834
Miscellaneous nonmetallic mineral products manufacturing	0	22,223	62,760	147,907
Iron and steel mills and ferroalloy manufacturing	1	167,661	323,950	1,388,084
Iron, steel pipe and tube manufacturing from purchased steel	0	1,251	2,380	12,998
Rolled steel shape manufacturing	0	(34)	173	3,260
Steel wire drawing	0	2,698	5,044	22,100
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	31,348	70,478	261,322
Other aluminum rolling, drawing and extruding	0	26,406	41,405	154,960
Nonferrous metal (exc aluminum) smelting and refining	0	1,013	5,482	13,621
Copper rolling, drawing, extruding and alloying	0	10,896	18,899	196,434
Nonferrous metal, except copper and aluminum, shaping	0	7,156	10,473	44,201
Secondary processing of other nonferrous metals	0	367	1,715	7,452
Ferrous metal foundries	1	53,025	109,720	215,315
Nonferrous metal foundries	1	82,336	136,473	257,710
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	1	55,328	104,845	273,867
Iron and steel forging	0	10,768	18,758	55,860
Nonferrous forging	0	32,636	49,609	142,133
Cutlery, utensil, pot, and pan manufacturing	1	90,301	462,474	690,630
Handtool manufacturing	0	34,729	78,026	120,684
Prefabricated metal buildings and components manufacturing	1	35,654	65,604	163,973
Fabricated structural metal manufacturing	3	239,804	472,130	1,188,341
Plate work manufacturing	3	287,748	302,216	651,165
Metal window and door manufacturing	0	12,903	26,605	56,063

## APPENDIX

Sheet metal work manufacturing	2	128,139	201,813	491,137
Ornamental and architectural metal work manufacturing	1	77,212	127,863	270,249
Power boiler and heat exchanger manufacturing	0	18,473	33,163	70,479
Metal tank (heavy gauge) manufacturing	0	2,008	2,873	10,031
Metal cans manufacturing	1	57,552	202,970	651,661
Metal barrels, drums and pails manufacturing	0	8,118	12,140	45,997
Hardware manufacturing	0	30,596	70,014	161,941
Spring and wire product manufacturing	0	18,505	31,980	81,937
Machine shops	7	410,797	537,075	1,041,914
Turned product and screw, nut, and bolt manufacturing	0	12,651	22,303	59,018
Metal heat treating	0	5,316	11,082	25,664
Metal coating and nonprecious engraving	1	48,092	118,799	233,985
Electroplating, anodizing, and coloring metal	1	86,557	106,562	225,176
Valve and fittings, other than plumbing, manufacturing	0	1,689	3,694	8,959
Plumbing fixture fitting and trim manufacturing	0	2,805	13,715	32,199
Ball and roller bearing manufacturing	1	45,890	123,175	230,337
Small arms ammunition manufacturing	0	1,308	2,739	6,567
Ammunition, except for small arms, manufacturing	0	3,317	4,805	8,719
Small arms, ordnance, and accessories manufacturing	0	21,360	80,471	154,891
Fabricated pipe and pipe fitting manufacturing	1	52,933	70,374	166,615
Other fabricated metal manufacturing	1	55,671	91,009	211,177
Farm machinery and equipment manufacturing	0	2,739	4,017	19,490
Lawn and garden equipment manufacturing	0	580	1,184	15,500
Construction machinery manufacturing	1	49,544	95,157	383,649
Mining machinery and equipment manufacturing	0	5,474	6,651	22,002

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	1,552	1,830	5,131
Semiconductor machinery manufacturing	0	234	264	787
Food product machinery manufacturing	0	1,126	1,343	3,642
Sawmill, woodworking, and paper machinery	0	4,373	4,833	12,978
Printing machinery and equipment manufacturing	0	1,336	1,510	4,501
All other industrial machinery manufacturing	0	4,186	5,236	16,203
Optical instrument and lens manufacturing	0	14,732	22,896	63,624
Photographic and photocopying equipment manufacturing	0	1,172	1,735	10,343
Other commercial service industry machinery manufacturing	0	7,310	13,131	45,870
Air purification and ventilation equipment manufacturing	0	8,591	11,871	27,578
Heating equipment (except warm air furnaces) manufacturing	0	20,793	29,862	92,874
Air conditioning, refrigeration, and warm air heating equipment manufacturing	1	90,624	160,366	504,353
Industrial mold manufacturing	0	1,308	1,480	3,325
Special tool, die, jig, and fixture manufacturing	0	4,995	6,168	12,677
Cutting tool and machine tool accessory manufacturing	0	2,297	2,500	5,970
Machine tool manufacturing	0	2,793	3,093	7,715
Rolling mill and other metalworking machinery manufacturing	0	580	699	1,662
Turbine and turbine generator set units manufacturing	0	5	9	235
Speed changer, industrial high-speed drive, and gear manufacturing	1	40,471	57,037	152,932
Mechanical power transmission equipment manufacturing	0	5,393	7,543	17,811
Other engine equipment manufacturing	0	4,866	9,168	46,135
Pump and pumping equipment manufacturing	0	7,539	12,467	34,039

## APPENDIX

Air and gas compressor manufacturing	0	4,571	7,601	29,706
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	8,539	8,974	24,134
Overhead cranes, hoists, and monorail systems manufacturing	0	1,107	1,998	6,489
Industrial truck, trailer, and stacker manufacturing	0	9,097	13,554	39,259
Power-driven handtool manufacturing	1	51,433	122,243	326,401
Welding and soldering equipment manufacturing	0	59	79	425
Packaging machinery manufacturing	0	5,559	7,810	18,985
Industrial process furnace and oven manufacturing	0	80	97	348
Fluid power cylinder and actuator manufacturing	0	13,207	17,581	45,802
Fluid power pump and motor manufacturing	0	595	874	2,579
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1,888	2,391	7,986
Electronic computer manufacturing	2	314,423	658,105	2,378,904
Computer storage device manufacturing	0	3,526	8,892	34,975
Computer terminals and other computer peripheral equipment manufacturing	12	1,333,032	2,327,806	7,460,701
Telephone apparatus manufacturing	0	2,732	5,018	22,364
Broadcast and wireless communications equipment manufacturing	0	29,561	40,985	86,845
Other communications equipment manufacturing	0	9,374	14,953	58,901
Audio and video equipment manufacturing	0	13,073	21,690	53,901
Printed circuit assembly (electronic assembly) manufacturing	6	409,017	594,115	2,053,644
Bare printed circuit board manufacturing	1	59,825	76,005	190,510

## APPENDIX

Semiconductor and related device manufacturing	17	2,071,056	3,383,967	10,160,005
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	21,555	30,523	97,547
Electronic connector manufacturing	9	588,657	866,146	2,730,682
Other electronic component manufacturing	3	133,106	158,217	653,844
Electromedical and electrotherapeutic apparatus manufacturing	0	1,018	2,046	6,765
Search, detection, and navigation instruments manufacturing	0	4,025	6,028	10,775
Automatic environmental control manufacturing	0	14,121	18,622	44,055
Industrial process variable instruments manufacturing	0	6,483	9,266	24,271
Totalizing fluid meter and counting device manufacturing	0	62	160	1,009
Electricity and signal testing instruments manufacturing	0	6,431	9,132	30,173
Analytical laboratory instrument manufacturing	4	372,792	630,973	1,730,194
Irradiation apparatus manufacturing	0	839	1,549	4,440
Watch, clock, and other measuring and controlling device manufacturing	0	11,244	18,540	47,761
Blank magnetic and optical recording media manufacturing	0	306	1,269	18,288
Software and other prerecorded and record reproducing	0	9,680	13,821	34,445
Electric lamp bulb and part manufacturing	0	1,018	4,708	27,314
Lighting fixture manufacturing	1	34,322	55,179	174,506
Small electrical appliance manufacturing	0	122	1,231	8,664
Household cooking appliance manufacturing	0	863	4,406	23,693
Household refrigerator and home freezer manufacturing	0	1,421	6,080	26,275
Household laundry equipment manufacturing	0	2,318	7,700	54,229

## APPENDIX

Other major household appliance manufacturing	0	402	1,922	8,588
Power, distribution, and specialty transformer manufacturing	0	36,730	55,130	157,807
Motor and generator manufacturing	1	123,678	193,351	559,531
Switchgear and switchboard apparatus manufacturing	1	40,382	68,193	199,832
Relay and industrial control manufacturing	1	86,593	115,859	262,596
Storage battery manufacturing	0	(8,887)	(9,000)	6,020
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	1	36,560	59,694	298,904
Other communication and energy wire manufacturing	0	24,227	45,464	186,666
Wiring device manufacturing	0	14,591	33,721	120,248
Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	1	67,834	83,587	300,464
Automobile manufacturing	0	686	3,096	9,006
Light truck and utility vehicle manufacturing	0	1,292	4,707	20,095
Heavy duty truck manufacturing	0	8,672	24,386	97,107
Motor vehicle body manufacturing	0	14,740	21,306	81,168
Truck trailer manufacturing	0	2,222	3,070	13,486
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	1	100,221	112,511	450,551
Motor vehicle gasoline engine and engine parts manufacturing	3	283,070	447,064	1,972,542
Motor vehicle electrical and electronic equipment manufacturing	2	71,902	113,450	804,730
Motor vehicle transmission and power train parts manufacturing	4	322,136	555,723	2,576,923
Motor vehicle seating and interior trim manufacturing	0	10,025	15,656	102,196
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	6	508,526	890,471	3,413,156
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	6	452,911	797,958	3,350,090

## APPENDIX

Aircraft manufacturing	4	671,210	1,443,552	3,525,421
Aircraft engine and engine parts manufacturing	0	4,951	13,958	30,926
Other aircraft parts and auxiliary equipment manufacturing	0	8,164	14,401	35,236
Guided missile and space vehicle manufacturing	1	175,429	239,574	472,281
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	6,357	9,412	18,205
Railroad rolling stock manufacturing	0	13,165	23,558	107,958
Ship building and repairing	1	129,350	174,432	370,939
Boat building	0	22,130	32,426	124,181
Motorcycle, bicycle, and parts manufacturing	0	24,842	101,220	221,384
Military armored vehicle, tank, and tank component manufacturing	1	60,772	157,874	480,583
All other transportation equipment manufacturing	0	10,163	21,627	101,163
Wood kitchen cabinet and countertop manufacturing	4	174,107	348,540	695,173
Upholstered household furniture manufacturing	2	77,931	141,669	397,487
Nonupholstered wood household furniture manufacturing	2	122,815	169,300	363,865
Other household nonupholstered furniture manufacturing	0	8,501	18,537	48,350
Institutional furniture manufacturing	0	9,020	11,088	39,767
Wood office furniture manufacturing	0	882	1,790	5,599
Custom architectural woodwork and millwork	0	5,865	5,960	15,425
Office furniture, except wood, manufacturing	2	138,031	372,907	831,454
Showcase, partition, shelving, and locker manufacturing	1	26,931	53,693	122,538
Mattress manufacturing	1	51,046	191,089	443,900
Blind and shade manufacturing	0	6,797	7,581	26,777
Surgical and medical instrument manufacturing	0	48,740	92,306	188,888
Surgical appliance and supplies manufacturing	1	64,986	123,476	326,847



## APPENDIX

Dental equipment and supplies manufacturing	0	955	1,668	4,163
Ophthalmic goods manufacturing	0	12,360	24,647	58,362
Dental laboratories	1	50,901	48,456	89,839
Jewelry and silverware manufacturing	1	25,400	49,063	155,158
Sporting and athletic goods manufacturing	1	45,371	65,310	226,661
Doll, toy, and game manufacturing	0	(1,018)	1,517	30,628
Office supplies (except paper) manufacturing	0	1,071	2,515	25,591
Sign manufacturing	3	140,340	106,172	329,301
Gasket, packing, and sealing device manufacturing	1	50,069	63,292	166,200
Musical instrument manufacturing	0	440	881	20,978
Fasteners, buttons, needles, and pins manufacturing	0	(409)	(306)	1,703
Broom, brush, and mop manufacturing	1	30,164	45,642	138,382
Burial casket manufacturing	0	(965)	(809)	2,705
All other miscellaneous manufacturing	5	170,730	221,621	774,004
Wholesale - Motor vehicle and motor vehicle parts and supplies	22	1,436,586	4,208,763	8,696,509
Wholesale - Professional and commercial equipment and supplies	45	6,189,744	11,685,223	17,990,549
Wholesale - Household appliances and electrical and electronic goods	40	4,033,462	11,373,246	20,919,955
Wholesale - Machinery, equipment, and supplies	28	2,263,421	4,803,354	7,924,797
Wholesale - Other durable goods merchant wholesalers	55	4,127,364	7,565,505	13,903,329
Wholesale - Drugs and druggists' sundries	13	1,539,706	5,622,620	11,220,209
Wholesale - Grocery and related product wholesalers	46	3,131,076	4,868,756	9,152,585
Wholesale - Petroleum and petroleum products	19	1,517,977	25,578,087	28,865,212
Wholesale - Other nondurable goods merchant wholesalers	65	4,408,523	11,130,135	20,011,202
Wholesale - Wholesale electronic markets and agents and brokers	55	7,527,682	4,661,282	5,099,897
Retail - Motor vehicle and parts dealers	97	5,652,553	8,887,415	12,692,316

## APPENDIX

Retail - Furniture and home furnishings stores	66	2,842,103	3,761,388	6,048,776
Retail - Electronics and appliance stores	57	3,133,068	3,389,940	5,459,300
Retail - Building material and garden equipment and supplies stores	78	2,981,691	5,751,519	8,476,213
Retail - Food and beverage stores	289	8,543,466	12,385,460	20,635,386
Retail - Health and personal care stores	124	4,984,198	6,136,231	9,617,453
Retail - Gasoline stores	247	5,547,635	11,606,315	23,639,067
Retail - Clothing and clothing accessories stores	140	3,170,219	5,421,827	11,668,558
Retail - Sporting goods, hobby, musical instrument and book stores	87	1,978,111	2,743,835	4,638,324
Retail - General merchandise stores	313	9,301,480	13,483,066	21,969,324
Retail - Miscellaneous store retailers	165	3,596,627	4,520,525	7,583,542
Retail - Nonstore retailers	199	4,201,571	15,214,218	29,700,244
Air transportation	34	3,778,090	8,992,224	13,339,721
Rail transportation	31	3,387,485	6,716,131	14,163,075
Water transportation	4	681,162	1,236,899	3,494,714
Truck transportation	2,956	187,385,828	226,852,075	489,279,381
Transit and ground passenger transportation	100	2,356,254	2,701,383	4,160,375
Pipeline transportation	5	1,385,563	2,899,151	3,579,856
Scenic and sightseeing transportation and support activities for transportation	274	18,900,873	21,403,135	43,940,724
Couriers and messengers	214	8,548,697	11,683,918	21,876,487
Warehousing and storage	174	8,700,879	9,903,757	20,104,404
Newspaper publishers	25	1,734,127	2,775,880	3,487,300
Periodical publishers	16	2,062,758	3,075,098	4,241,006
Book publishers	5	401,630	1,265,171	2,178,691
Directory, mailing list, and other publishers	6	352,224	1,096,648	1,728,201
Greeting card publishing	0	14,356	51,828	86,891
Software publishers	220	36,703,497	84,985,862	100,207,622
Motion picture and video industries	29	2,734,838	3,517,192	7,219,470
Sound recording industries	3	566,584	1,054,945	1,425,710
Radio and television broadcasting	43	4,567,496	2,870,456	13,912,967

## APPENDIX

Cable and other subscription programming	3	369,181	2,460,376	6,294,665
Wired telecommunications carriers	53	5,114,435	15,888,357	28,955,408
Wireless telecommunications carriers (except satellite)	15	(2,288,049)	7,124,659	22,351,096
Satellite, telecommunications resellers, and all other telecommunications	16	(758,050)	561,638	4,223,545
Data processing, hosting, and related services	43	5,299,444	11,411,332	21,210,708
News syndicates, libraries, archives and all other information services	11	624,182	1,086,349	1,778,929
Internet publishing and broadcasting and web search portals	24	3,721,638	11,417,103	25,199,876
Nondepository credit intermediation and related activities	140	17,895,743	25,543,125	36,621,362
Securities and commodity contracts intermediation and brokerage	73	8,991,504	8,556,164	18,372,286
Monetary authorities and depository credit intermediation	164	14,095,890	40,670,736	65,398,436
Other financial investment activities	227	11,059,413	12,078,860	30,381,242
Direct life insurance carriers	8	963,310	1,567,985	2,498,319
Insurance carriers, except direct life	132	12,678,283	30,722,269	82,636,354
Insurance agencies, brokerages, and related activities	214	15,646,214	20,639,935	49,186,518
Funds, trusts, and other financial vehicles	54	2,605,957	3,779,794	18,056,792
Other real estate	918	21,336,421	72,511,200	178,199,273
Tenant-occupied housing	111	2,478,668	44,929,647	49,464,578
Owner-occupied dwellings	0	0	141,695,664	179,030,810
Automotive equipment rental and leasing	28	1,446,447	5,056,607	7,463,771
General and consumer goods rental except video tapes and discs	44	2,657,106	3,611,205	5,625,293
Video tape and disc rental	9	372,268	640,858	1,048,043
Commercial and industrial machinery and equipment rental and leasing	36	3,319,137	8,153,408	12,280,713
Lessors of nonfinancial intangible assets	2	44,842	3,628,790	4,559,369

## APPENDIX

Legal services	204	19,745,166	34,146,546	47,773,282
Accounting, tax preparation, bookkeeping, and payroll services	150	14,500,860	21,450,653	27,217,044
Architectural, engineering, and related services	186	19,795,994	24,609,521	39,640,831
Specialized design services	32	2,162,519	2,285,401	2,789,245
Custom computer programming services	24	2,928,067	3,262,012	4,462,242
Computer systems design services	70	9,714,491	9,922,183	12,485,223
Other computer related services, including facilities management	24	2,427,320	5,245,547	8,205,108
Management consulting services	591	71,214,546	70,598,993	97,158,868
Environmental and other technical consulting services	68	7,167,889	6,402,489	8,589,806
Scientific research and development services	1,774	187,880,081	237,054,834	461,266,405
Advertising, public relations, and related services	105	8,744,960	13,156,849	21,040,389
Photographic services	24	1,399,392	1,049,843	1,507,648
Veterinary services	28	1,315,193	2,020,886	3,071,476
Marketing research and all other miscellaneous professional, scientific, and technical services	342	26,903,793	24,409,257	32,910,948
Management of companies and enterprises	417	60,898,650	70,757,622	96,950,473
Office administrative services	83	8,582,871	5,036,193	8,151,730
Facilities support services	203	17,294,509	24,792,801	42,385,275
Employment services	598	30,202,585	51,333,157	73,076,628
Business support services	155	8,336,821	7,602,045	12,022,035
Travel arrangement and reservation services	24	1,558,444	2,157,517	4,720,884
Investigation and security services	102	6,090,459	6,218,746	8,038,418
Services to buildings	341	13,453,779	13,886,239	20,013,477
Landscape and horticultural services	171	8,274,963	8,666,974	12,729,426
Other support services	43	2,261,486	2,857,882	5,208,078
Waste management and remediation services	36	2,365,226	4,422,141	7,802,451
Elementary and secondary schools	111	4,629,116	4,258,914	5,242,908
Junior colleges, colleges, universities, and professional schools	107	5,319,529	7,711,754	10,696,942
Other educational services	164	5,802,881	5,566,836	9,495,920
Offices of physicians	292	32,189,392	38,069,217	55,199,406
Offices of dentists	95	6,910,892	8,701,161	12,747,396

## APPENDIX

Offices of other health practitioners	129	8,116,511	7,569,905	10,397,711
Outpatient care centers	82	5,508,069	5,799,189	10,678,306
Medical and diagnostic laboratories	36	2,710,949	4,221,076	6,761,318
Home health care services	184	8,173,812	6,203,559	8,547,891
Other ambulatory health care services	33	2,030,840	2,231,166	3,625,484
Hospitals	447	34,381,429	41,023,056	77,827,790
Nursing and community care facilities	209	8,615,549	9,486,833	16,361,400
Residential mental retardation, mental health, substance abuse and other facilities	74	3,242,248	3,387,772	5,021,475
Individual and family services	273	7,974,413	7,366,222	10,915,923
Child day care services	156	3,979,007	4,794,063	6,561,706
Community food, housing, and other relief services, including rehabilitation services	55	2,208,477	2,477,122	5,126,839
Performing arts companies	26	841,990	1,259,824	2,488,357
Commercial Sports Except Racing	29	1,661,415	1,767,474	3,037,345
Racing and Track Operation	6	180,908	291,899	590,295
Independent artists, writers, and performers	127	2,676,214	2,994,980	3,740,610
Promoters of performing arts and sports and agents for public figures	23	914,047	1,923,200	4,068,823
Museums, historical sites, zoos, and parks	14	544,580	640,119	1,157,282
Amusement parks and arcades	13	249,145	857,414	1,121,376
Gambling industries (except casino hotels)	35	1,136,328	2,143,449	4,016,698
Other amusement and recreation industries	71	1,522,613	1,808,505	3,432,994
Fitness and recreational sports centers	74	1,137,989	1,907,591	3,183,608
Bowling centers	8	165,296	246,986	462,181
Hotels and motels, including casino hotels	70	2,409,679	4,501,859	7,347,128
Other accommodations	16	700,732	962,461	1,303,203
Full-service restaurants	591	14,344,291	21,185,547	37,388,135
Limited-service restaurants	524	10,297,026	16,476,802	37,187,825
All other food and drinking places	266	8,581,567	11,386,539	16,842,664
Automotive repair and maintenance, except car washes	346	18,395,440	21,661,908	32,411,231
Car washes	95	4,841,168	7,607,476	11,297,947

## APPENDIX

Electronic and precision equipment repair and maintenance	2,654	224,673,881	314,303,708	475,764,628
Commercial and industrial machinery and equipment repair and maintenance	44	3,419,338	4,047,185	6,217,964
Personal and household goods repair and maintenance	74	3,627,028	2,190,386	3,255,509
Personal care services	221	5,788,335	3,369,069	4,963,268
Death care services	17	634,566	789,437	1,317,135
Dry-cleaning and laundry services	52	1,812,006	1,989,434	2,942,284
Other personal services	185	4,564,013	2,919,105	4,577,401
Religious organizations	238	11,870,831	4,475,185	20,483,303
Grantmaking, giving, and social advocacy organizations	43	2,981,532	7,845,976	11,487,160
Business and professional associations	30	3,415,133	4,818,315	7,163,521
Labor and civic organizations	94	2,683,562	5,885,110	10,540,099
Private households	157	2,470,073	2,470,073	2,470,073
Postal service	99	8,973,535	8,977,841	9,899,946
Federal electric utilities	0	0	0	0
Other federal government enterprises	235	9,458,526	11,209,404	55,141,237
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	43	4,300,200	(144,409)	3,581,982
Local government electric utilities	2	220,247	704,943	1,280,598
Other local government enterprises	111	9,362,740	22,869,314	40,507,360
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

## APPENDIX

* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2,452	415,833,081	506,257,031	1,053,782,021

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 464: Detailed M2M Program Impacts by Types of Impact, Virginia.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>1,221</i>	<i>107,502,051</i>	<i>162,499,214</i>	<i>298,635,957</i>
Oilseed farming	0	(192)	48,141	119,481
Grain farming	1	2,712	33,785	111,679
Vegetable and melon farming	0	2,800	10,689	32,184
Fruit farming	0	1,045	8,123	20,569
Tree nut farming	0	136	151	309
Greenhouse, nursery, and floriculture production	1	9,192	16,955	41,645
Tobacco farming	1	7,327	13,279	30,221
Cotton farming	0	463	922	2,201
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	2	5,106	9,952	25,022
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	(1,220)	14,334	54,329
Dairy cattle and milk production	0	713	9,896	66,547
Poultry and egg production	1	5,920	12,337	161,516
Animal production, except cattle and poultry and eggs	1	1,408	39,968	75,037
Forestry, forest products, and timber tract production	0	3,689	3,963	4,974
Commercial logging	0	16,344	16,497	24,615
Commercial fishing	0	10,114	15,013	34,452
Commercial hunting and trapping	0	5,408	6,336	6,296
Support activities for agriculture and forestry	1	47,333	40,334	51,507
Oil and gas extraction	1	8,600	17,909	242,485
Coal mining	0	6,229	13,739	27,212
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	162	518	1,590
Stone mining and quarrying	0	13,010	19,264	35,217
Sand and gravel mining	0	(1,330)	937	3,775
Other clay, ceramic, refractory minerals mining	0	597	903	1,977
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	(1,259)	13	1,255
Drilling oil and gas wells	0	2	2	14
Support activities for oil and gas operations	0	45	46	253
Metal mining services	0	106	184	1,971
Other nonmetallic minerals services	0	21	30	205
Electric power generation - Hydroelectric	0	4,420	17,467	25,084
Electric power generation - Fossil fuel	0	49,288	242,620	513,332
Electric power generation - Nuclear	1	107,997	335,007	637,645
Electric power generation - Solar	0	6,582	10,137	22,965
Electric power generation - Wind	0	1,881	7,263	21,878
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	17,860	36,549	105,489
Electric power generation - All other	0	500	286	840
Electric power transmission and distribution	1	224,276	1,144,439	2,224,238
Natural gas distribution	0	80,803	304,959	460,181
Water, sewage and other systems	0	10,986	25,666	36,642
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0



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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	4	248,749	344,267	801,310
Maintenance and repair construction of residential structures	2	134,252	206,697	479,483
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	261	175	408
Dog and cat food manufacturing	0	2,801	23,993	65,049
Other animal food manufacturing	0	6,679	18,580	120,473
Flour milling	0	2,068	7,330	38,465
Rice milling	0	0	0	0
Malt manufacturing	0	1,791	7,719	24,302
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	1,278	4,577	28,486
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	209	892	4,020
Nonchocolate confectionery manufacturing	0	283	649	5,969
Chocolate and confectionery manufacturing from cacao beans	0	37	148	1,365
Confectionery manufacturing from purchased chocolate	0	11,502	23,159	55,204
Frozen fruits, juices and vegetables manufacturing	0	2,826	8,525	24,785
Frozen specialties manufacturing	0	9,548	21,354	63,496
Canned fruits and vegetables manufacturing	0	6,068	18,405	64,816

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	374	1,087	4,270
Cheese manufacturing	0	137	289	2,815
Dry, condensed, and evaporated dairy product manufacturing	0	13,215	61,831	207,936
Fluid milk manufacturing	0	14,563	37,708	158,474
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	367	919	3,215
Frozen cakes and other pastries manufacturing	0	13,594	21,007	38,687
Poultry processing	1	48,145	91,540	338,645
Animal, except poultry, slaughtering	0	23,790	47,364	313,185
Meat processed from carcasses	0	18,283	23,275	190,206
Rendering and meat byproduct processing	0	2,090	2,282	11,296
Seafood product preparation and packaging	0	13,593	22,991	89,580
Bread and bakery product, except frozen, manufacturing	1	35,480	58,372	145,924
Cookie and cracker manufacturing	0	21,928	47,202	89,990
Dry pasta, mixes, and dough manufacturing	0	2,022	8,492	20,838
Tortilla manufacturing	0	48	71	445
Roasted nuts and peanut butter manufacturing	0	6,914	27,480	60,045
Other snack food manufacturing	0	11,767	45,383	120,329
Coffee and tea manufacturing	0	8,554	27,659	83,669
Flavoring syrup and concentrate manufacturing	0	3,459	55,367	90,663
Mayonnaise, dressing, and sauce manufacturing	0	88	263	2,416
Spice and extract manufacturing	0	3,066	7,267	21,917
All other food manufacturing	0	11,110	21,062	72,576
Bottled and canned soft drinks & water	0	19,302	71,280	236,068
Manufactured ice	0	1,149	1,224	3,286
Breweries	0	29,660	141,425	274,471
Wineries	0	6,541	18,673	73,219
Distilleries	0	8,739	89,877	124,544
Tobacco product manufacturing	0	10,571	634,708	685,795
Fiber, yarn, and thread mills	0	2,542	4,759	16,955
Broadwoven fabric mills	0	4,488	8,091	24,843

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Narrow fabric mills and schiffli machine embroidery	0	930	1,113	3,957
Nonwoven fabric mills	0	9,747	21,533	53,909
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1,645	2,320	8,902
Fabric coating mills	0	456	638	2,552
Carpet and rug mills	0	7,321	15,788	49,768
Curtain and linen mills	0	2,784	4,741	14,692
Textile bag and canvas mills	0	1,855	2,525	6,200
Rope, cordage, twine, tire cord and tire fabric mills	0	962	1,891	4,677
Other textile product mills	0	2,790	3,739	9,656
Hosiery and sock mills	0	120	231	534
Other apparel knitting mills	0	400	550	1,316
Cut and sew apparel contractors	0	2,282	2,524	5,036
Mens and boys cut and sew apparel manufacturing	0	2,661	2,607	6,780
Womens and girls cut and sew apparel manufacturing	0	853	1,032	4,103
Other cut and sew apparel manufacturing	0	1,813	1,815	5,445
Apparel accessories and other apparel manufacturing	0	1,574	1,668	4,059
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	338	371	1,672
Other leather and allied product manufacturing	0	246	260	1,011
Sawmills	0	13,164	24,075	76,326
Wood preservation	0	1,401	6,757	14,926
Veneer and plywood manufacturing	0	3,759	7,005	19,542
Engineered wood member and truss manufacturing	0	1,479	2,462	6,660
Reconstituted wood product manufacturing	0	1,351	4,970	12,745
Wood windows and door manufacturing	0	17,342	29,804	75,125
Cut stock, resawing lumber, and planing	0	3,264	7,819	17,370
Other millwork, including flooring	0	5,952	10,874	25,326
Wood container and pallet manufacturing	0	6,458	8,763	21,735
Manufactured home (mobile home) manufacturing	0	2	4	10

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Prefabricated wood building manufacturing	0	1,479	1,889	5,379
All other miscellaneous wood product manufacturing	0	4,521	6,813	16,821
Pulp mills	0	0	0	0
Paper mills	0	20,931	37,015	152,090
Paperboard mills	0	18,823	37,597	147,553
Paperboard container manufacturing	0	27,293	37,605	176,830
Paper bag and coated and treated paper manufacturing	0	4,576	6,758	26,795
Stationery product manufacturing	0	3,919	4,961	18,301
Sanitary paper product manufacturing	0	177	397	1,426
All other converted paper product manufacturing	0	5,036	6,657	25,931
Printing	2	121,756	177,932	361,314
Support activities for printing	0	5,284	7,511	11,359
Petroleum refineries	0	3,212	23,197	151,585
Asphalt paving mixture and block manufacturing	0	2,512	4,056	15,221
Asphalt shingle and coating materials manufacturing	0	535	1,413	3,821
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	694	1,529	5,563
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	1,447	3,719	12,243
Synthetic dye and pigment manufacturing	0	275	584	2,294
Other basic inorganic chemical manufacturing	0	493	1,094	4,313
Other basic organic chemical manufacturing	0	11,604	23,326	162,914
Plastics material and resin manufacturing	0	3,427	5,834	39,579
Synthetic rubber manufacturing	0	267	476	4,127
Artificial and synthetic fibers and filaments manufacturing	1	72,986	105,625	469,848
Nitrogenous fertilizer manufacturing	0	122	299	1,086
Phosphatic fertilizer manufacturing	0	14	36	131
Fertilizer mixing	0	672	1,234	4,255

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Pesticide and other agricultural chemical manufacturing	0	2,585	8,485	43,106
Medicinal and botanical manufacturing	0	122	229	1,057
Pharmaceutical preparation manufacturing	0	27,020	103,395	274,492
In-vitro diagnostic substance manufacturing	0	2,210	3,364	9,520
Biological product (except diagnostic) manufacturing	0	1,063	2,576	6,990
Paint and coating manufacturing	0	3,896	7,814	30,528
Adhesive manufacturing	0	790	1,343	4,615
Soap and other detergent manufacturing	0	989	4,201	22,916
Polish and other sanitation good manufacturing	0	2,463	5,691	25,095
Surface active agent manufacturing	0	1,417	4,990	12,110
Toilet preparation manufacturing	0	6,514	21,903	60,174
Printing ink manufacturing	0	9,180	10,119	34,074
Explosives manufacturing	0	980	1,153	3,810
Custom compounding of purchased resins	0	6,270	12,057	47,192
Photographic film and chemical manufacturing	0	15,020	34,571	107,599
Other miscellaneous chemical product manufacturing	0	5,217	8,306	31,124
Plastics packaging materials and unlaminated film and sheet manufacturing	0	24,151	49,691	136,141
Unlaminated plastics profile shape manufacturing	0	730	2,153	5,426
Plastics pipe and pipe fitting manufacturing	0	1,256	4,089	10,930
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	5,458	13,020	25,478
Polystyrene foam product manufacturing	0	958	2,002	6,556
Urethane and other foam product (except polystyrene) manufacturing	0	2,062	4,047	10,026
Plastics bottle manufacturing	0	2,498	5,163	17,576
Other plastics product manufacturing	0	29,807	53,211	146,225
Tire manufacturing	0	15,066	24,912	89,571

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Rubber and plastics hoses and belting manufacturing	0	663	1,261	2,751
Other rubber product manufacturing	0	7,692	13,863	43,721
Pottery, ceramics, and plumbing fixture manufacturing	0	647	691	1,604
Brick, tile, and other structural clay product manufacturing	0	2,904	4,992	10,995
Flat glass manufacturing	0	585	1,338	4,028
Other pressed and blown glass and glassware manufacturing	0	314	394	915
Glass container manufacturing	0	4,154	7,829	18,777
Glass product manufacturing made of purchased glass	0	3,531	6,288	16,226
Cement manufacturing	0	638	1,806	4,466
Ready-mix concrete manufacturing	0	8,736	16,311	51,511
Concrete block and brick manufacturing	0	2,537	5,114	12,233
Concrete pipe manufacturing	0	640	1,138	2,896
Other concrete product manufacturing	0	8,048	12,830	29,810
Lime manufacturing	0	1,563	4,829	10,827
Gypsum product manufacturing	0	2,571	7,987	18,999
Abrasive product manufacturing	0	3,326	12,179	20,510
Cut stone and stone product manufacturing	0	5,715	6,846	14,242
Ground or treated mineral and earth manufacturing	0	1,750	6,021	13,387
Mineral wool manufacturing	0	163	368	989
Miscellaneous nonmetallic mineral products manufacturing	0	557	1,507	3,480
Iron and steel mills and ferroalloy manufacturing	0	8,934	15,159	68,258
Iron, steel pipe and tube manufacturing from purchased steel	0	92	155	845
Rolled steel shape manufacturing	0	(2)	8	175
Steel wire drawing	0	167	241	1,181
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	1,652	3,290	13,743

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Other aluminum rolling, drawing and extruding	0	1,867	2,583	10,240
Nonferrous metal (exc aluminum) smelting and refining	0	32	147	398
Copper rolling, drawing, extruding and alloying	0	649	1,062	10,726
Nonferrous metal, except copper and aluminum, shaping	0	622	835	3,837
Secondary processing of other nonferrous metals	0	23	64	363
Ferrous metal foundries	0	1,547	2,707	5,855
Nonferrous metal foundries	0	4,764	7,114	13,898
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	2,700	5,148	13,136
Iron and steel forging	0	1,024	1,791	5,141
Nonferrous forging	0	3,333	5,121	13,788
Cutlery, utensil, pot, and pan manufacturing	0	5,701	31,116	44,033
Handtool manufacturing	0	2,433	5,489	8,477
Prefabricated metal buildings and components manufacturing	0	818	1,514	3,695
Fabricated structural metal manufacturing	0	7,849	15,525	38,509
Plate work manufacturing	0	12,653	13,313	27,681
Metal window and door manufacturing	0	592	1,224	2,524
Sheet metal work manufacturing	0	6,472	10,232	24,045
Ornamental and architectural metal work manufacturing	0	3,588	5,971	12,059
Power boiler and heat exchanger manufacturing	0	1,085	1,989	4,297
Metal tank (heavy gauge) manufacturing	0	74	106	362
Metal cans manufacturing	0	3,214	11,544	36,353
Metal barrels, drums and pails manufacturing	0	443	664	2,323
Hardware manufacturing	0	1,473	3,382	7,610
Spring and wire product manufacturing	0	1,785	3,058	7,662
Machine shops	0	17,552	23,006	43,686
Turned product and screw, nut, and bolt manufacturing	0	700	1,232	3,137
Metal heat treating	0	253	527	1,221

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Metal coating and nonprecious engraving	0	1,810	4,477	8,820
Electroplating, anodizing, and coloring metal	0	4,299	5,302	10,998
Valve and fittings, other than plumbing, manufacturing	0	126	274	656
Plumbing fixture fitting and trim manufacturing	0	164	822	1,841
Ball and roller bearing manufacturing	0	4,803	12,901	23,238
Small arms ammunition manufacturing	0	38	80	194
Ammunition, except for small arms, manufacturing	0	149	216	392
Small arms, ordnance, and accessories manufacturing	0	556	2,097	3,789
Fabricated pipe and pipe fitting manufacturing	0	2,215	2,958	7,009
Other fabricated metal manufacturing	0	2,926	4,793	10,569
Farm machinery and equipment manufacturing	0	195	308	1,308
Lawn and garden equipment manufacturing	0	42	84	1,000
Construction machinery manufacturing	0	71	147	552
Mining machinery and equipment manufacturing	0	169	208	667
Oil and gas field machinery and equipment manufacturing	0	54	64	177
Semiconductor machinery manufacturing	0	31	35	96
Food product machinery manufacturing	0	86	103	274
Sawmill, woodworking, and paper machinery	0	323	362	882
Printing machinery and equipment manufacturing	0	95	108	291
All other industrial machinery manufacturing	0	267	336	1,018
Optical instrument and lens manufacturing	0	112	167	460
Photographic and photocopying equipment manufacturing	0	72	108	617



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Other commercial service industry machinery manufacturing	0	204	386	1,295
Air purification and ventilation equipment manufacturing	0	675	982	2,202
Heating equipment (except warm air furnaces) manufacturing	0	1,372	2,055	5,600
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	4,078	7,395	22,620
Industrial mold manufacturing	0	78	90	193
Special tool, die, jig, and fixture manufacturing	0	344	430	846
Cutting tool and machine tool accessory manufacturing	0	153	167	395
Machine tool manufacturing	0	198	221	524
Rolling mill and other metalworking machinery manufacturing	0	32	38	88
Turbine and turbine generator set units manufacturing	0	0	1	12
Speed changer, industrial high-speed drive, and gear manufacturing	0	2,131	3,093	7,505
Mechanical power transmission equipment manufacturing	0	294	413	968
Other engine equipment manufacturing	0	260	474	2,268
Pump and pumping equipment manufacturing	0	366	629	1,600
Air and gas compressor manufacturing	0	51	78	337
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	348	368	982
Overhead cranes, hoists, and monorail systems manufacturing	0	36	68	219
Industrial truck, trailer, and stacker manufacturing	0	301	460	1,327
Power-driven handtool manufacturing	0	6,636	15,963	37,896
Welding and soldering equipment manufacturing	0	3	4	20
Packaging machinery manufacturing	0	436	624	1,483

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Industrial process furnace and oven manufacturing	0	5	6	23
Fluid power cylinder and actuator manufacturing	0	995	1,379	3,690
Fluid power pump and motor manufacturing	0	126	201	510
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	117	152	471
Electronic computer manufacturing	1	195,995	421,414	1,194,789
Computer storage device manufacturing	0	382	955	3,686
Computer terminals and other computer peripheral equipment manufacturing	1	106,440	185,362	598,339
Telephone apparatus manufacturing	0	127	229	1,023
Broadcast and wireless communications equipment manufacturing	0	2,281	3,105	6,395
Other communications equipment manufacturing	0	396	623	2,591
Audio and video equipment manufacturing	0	1,304	2,118	4,936
Printed circuit assembly (electronic assembly) manufacturing	0	9,025	13,112	44,101
Bare printed circuit board manufacturing	0	2,842	3,596	9,652
Semiconductor and related device manufacturing	0	50,479	81,375	235,360
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	988	1,377	4,249
Electronic connector manufacturing	0	12,068	17,624	56,606
Other electronic component manufacturing	0	2,333	2,767	11,005
Electromedical and electrotherapeutic apparatus manufacturing	0	87	171	547
Search, detection, and navigation instruments manufacturing	0	858	1,283	2,208
Automatic environmental control manufacturing	0	891	1,154	2,533

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Industrial process variable instruments manufacturing	0	345	486	1,262
Totalizing fluid meter and counting device manufacturing	0	3	8	48
Electricity and signal testing instruments manufacturing	0	1,389	1,973	6,124
Analytical laboratory instrument manufacturing	1	80,193	140,238	344,649
Irradiation apparatus manufacturing	0	63	113	317
Watch, clock, and other measuring and controlling device manufacturing	0	623	991	2,351
Blank magnetic and optical recording media manufacturing	0	81	328	3,721
Software and other prerecorded and record reproducing	0	627	896	2,027
Electric lamp bulb and part manufacturing	0	61	285	1,632
Lighting fixture manufacturing	0	2,076	3,200	9,996
Small electrical appliance manufacturing	0	8	83	553
Household cooking appliance manufacturing	0	43	231	1,253
Household refrigerator and home freezer manufacturing	0	74	332	1,498
Household laundry equipment manufacturing	0	123	427	2,997
Other major household appliance manufacturing	0	21	107	479
Power, distribution, and specialty transformer manufacturing	0	1,651	2,492	6,926
Motor and generator manufacturing	0	5,208	7,875	23,685
Switchgear and switchboard apparatus manufacturing	0	1,279	2,113	6,273
Relay and industrial control manufacturing	0	5,985	8,017	17,383
Storage battery manufacturing	0	(614)	(589)	400
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	2,385	3,864	17,294
Other communication and energy wire manufacturing	0	477	862	3,458
Wiring device manufacturing	0	1,314	3,025	9,977

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Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	96	119	438
Automobile manufacturing	0	38	150	472
Light truck and utility vehicle manufacturing	0	39	157	618
Heavy duty truck manufacturing	0	275	785	2,894
Motor vehicle body manufacturing	0	637	926	3,648
Truck trailer manufacturing	0	65	88	385
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	4,864	5,477	22,007
Motor vehicle gasoline engine and engine parts manufacturing	0	8,019	12,779	59,978
Motor vehicle electrical and electronic equipment manufacturing	0	2,821	4,406	28,756
Motor vehicle transmission and power train parts manufacturing	0	17,537	30,951	124,651
Motor vehicle seating and interior trim manufacturing	0	318	537	3,325
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	13,876	22,159	95,960
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	11,849	22,703	89,845
Aircraft manufacturing	4	576,886	1,230,597	3,387,856
Aircraft engine and engine parts manufacturing	0	24,940	67,352	162,381
Other aircraft parts and auxiliary equipment manufacturing	0	2,243	4,216	9,669
Guided missile and space vehicle manufacturing	0	10	13	25
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	507	755	1,377
Railroad rolling stock manufacturing	0	551	1,012	4,263
Ship building and repairing	0	6,334	8,721	17,921
Boat building	0	910	1,343	5,032
Motorcycle, bicycle, and parts manufacturing	0	2,014	7,799	15,587

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Military armored vehicle, tank, and tank component manufacturing	0	4,823	12,882	32,849
All other transportation equipment manufacturing	0	552	1,223	5,633
Wood kitchen cabinet and countertop manufacturing	0	10,848	19,838	40,595
Upholstered household furniture manufacturing	0	6,556	11,838	32,820
Nonupholstered wood household furniture manufacturing	0	8,412	11,187	23,453
Other household nonupholstered furniture manufacturing	0	583	1,253	3,100
Institutional furniture manufacturing	0	99	121	435
Wood office furniture manufacturing	0	183	391	1,208
Custom architectural woodwork and millwork	0	292	294	733
Office furniture, except wood, manufacturing	1	45,014	122,187	283,872
Showcase, partition, shelving, and locker manufacturing	0	2,322	4,248	10,043
Mattress manufacturing	0	2,668	8,841	22,417
Blind and shade manufacturing	0	287	317	1,223
Surgical and medical instrument manufacturing	0	2,936	5,403	10,410
Surgical appliance and supplies manufacturing	0	4,844	9,327	23,101
Dental equipment and supplies manufacturing	0	68	117	278
Ophthalmic goods manufacturing	0	763	1,558	3,696
Dental laboratories	0	3,545	3,376	6,156
Jewelry and silverware manufacturing	0	1,492	2,838	8,628
Sporting and athletic goods manufacturing	0	2,422	3,390	11,431
Doll, toy, and game manufacturing	0	(72)	100	1,806
Office supplies (except paper) manufacturing	0	71	168	1,568
Sign manufacturing	0	5,998	4,648	13,425
Gasket, packing, and sealing device manufacturing	0	2,270	2,819	7,247
Musical instrument manufacturing	0	49	97	1,784
Fasteners, buttons, needles, and pins manufacturing	0	(28)	(21)	103

## APPENDIX

Broom, brush, and mop manufacturing	0	1,895	3,289	8,128
Burial casket manufacturing	0	(34)	(28)	92
All other miscellaneous manufacturing	0	5,110	6,711	24,242
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	53,157	155,511	321,399
Wholesale - Professional and commercial equipment and supplies	3	365,569	691,258	1,040,150
Wholesale - Household appliances and electrical and electronic goods	1	106,269	301,560	547,702
Wholesale - Machinery, equipment, and supplies	1	103,645	220,757	362,598
Wholesale - Other durable goods merchant wholesalers	3	217,182	398,591	726,711
Wholesale - Drugs and druggists' sundries	1	78,853	283,264	552,175
Wholesale - Grocery and related product wholesalers	3	173,331	267,542	502,585
Wholesale - Petroleum and petroleum products	0	24,452	485,227	537,225
Wholesale - Other nondurable goods merchant wholesalers	3	233,287	608,457	1,072,041
Wholesale - Wholesale electronic markets and agents and brokers	3	501,831	295,291	322,830
Retail - Motor vehicle and parts dealers	4	251,097	397,039	562,347
Retail - Furniture and home furnishings stores	3	142,399	188,380	297,901
Retail - Electronics and appliance stores	3	155,319	168,710	266,446
Retail - Building material and garden equipment and supplies stores	3	137,055	264,274	384,993
Retail - Food and beverage stores	14	437,423	627,402	1,020,378
Retail - Health and personal care stores	6	241,614	299,276	467,425
Retail - Gasoline stores	4	118,492	226,264	427,976
Retail - Clothing and clothing accessories stores	7	164,502	279,113	583,063
Retail - Sporting goods, hobby, musical instrument and book stores	4	96,925	134,838	223,720

## APPENDIX

Retail - General merchandise stores	14	411,177	600,393	971,165
Retail - Miscellaneous store retailers	8	185,078	230,424	373,156
Retail - Nonstore retailers	9	203,015	744,750	1,381,770
Air transportation	2	189,381	462,174	675,040
Rail transportation	1	61,804	107,515	242,943
Water transportation	0	48,458	85,430	235,981
Truck transportation	8	526,194	617,364	1,286,650
Transit and ground passenger transportation	6	167,959	194,664	280,474
Pipeline transportation	0	28,135	65,013	82,056
Scenic and sightseeing transportation and support activities for transportation	5	317,438	363,985	747,634
Couriers and messengers	4	162,022	229,240	418,994
Warehousing and storage	5	269,623	306,258	616,375
Newspaper publishers	1	86,506	134,370	166,318
Periodical publishers	1	143,480	209,663	266,425
Book publishers	0	22,734	68,139	117,132
Directory, mailing list, and other publishers	1	48,748	152,817	238,650
Greeting card publishing	0	659	2,496	4,140
Software publishers	14	3,064,340	6,123,341	7,063,123
Motion picture and video industries	1	185,699	241,220	411,186
Sound recording industries	0	48,585	85,227	106,544
Radio and television broadcasting	2	363,137	249,619	818,056
Cable and other subscription programming	0	30,655	162,368	344,147
Wired telecommunications carriers	2	261,401	751,954	1,331,417
Wireless telecommunications carriers (except satellite)	1	(155,703)	396,719	1,208,662
Satellite, telecommunications resellers, and all other telecommunications	1	(47,347)	29,643	197,387
Data processing, hosting, and related services	3	388,214	784,259	1,387,799
News syndicates, libraries, archives and all other information services	1	68,042	117,155	179,512
Internet publishing and broadcasting and web search portals	2	375,964	1,098,564	2,088,728

## APPENDIX

Nondepository credit intermediation and related activities	7	1,055,974	1,525,814	2,058,898
Securities and commodity contracts intermediation and brokerage	3	474,551	443,801	892,212
Monetary authorities and depository credit intermediation	7	647,804	1,945,543	3,028,919
Other financial investment activities	11	760,825	807,825	1,620,297
Direct life insurance carriers	0	42,506	71,400	111,120
Insurance carriers, except direct life	5	520,836	1,294,668	3,358,487
Insurance agencies, brokerages, and related activities	15	1,168,544	1,545,835	3,565,952
Funds, trusts, and other financial vehicles	3	160,408	228,315	922,334
Other real estate	43	1,268,761	4,281,696	9,154,372
Tenant-occupied housing	5	147,192	2,515,640	2,729,556
Owner-occupied dwellings	0	0	7,790,520	9,843,231
Automotive equipment rental and leasing	1	94,033	271,267	384,675
General and consumer goods rental except video tapes and discs	1	91,473	117,216	171,844
Video tape and disc rental	0	19,402	32,219	51,384
Commercial and industrial machinery and equipment rental and leasing	2	186,003	393,204	575,483
Lessors of nonfinancial intangible assets	0	2,212	177,611	221,767
Legal services	11	1,098,512	1,977,379	2,698,648
Accounting, tax preparation, bookkeeping, and payroll services	7	730,547	1,084,940	1,343,098
Architectural, engineering, and related services	13	1,416,114	1,768,358	2,806,024
Specialized design services	2	148,266	157,136	187,539
Custom computer programming services	1	188,892	208,947	278,632
Computer systems design services	4	552,854	562,584	695,816
Other computer related services, including facilities management	2	192,297	400,287	596,332
Management consulting services	25	3,267,638	3,244,872	4,340,797
Environmental and other technical consulting services	3	326,979	294,499	388,769



## APPENDIX

Scientific research and development services	126	15,710,063	20,090,535	36,131,477
Advertising, public relations, and related services	5	445,401	667,252	1,018,827
Photographic services	1	69,729	55,093	74,670
Veterinary services	1	67,073	104,518	154,635
Marketing research and all other miscellaneous professional, scientific, and technical services	17	1,382,191	1,251,488	1,660,946
Management of companies and enterprises	16	2,618,386	3,070,067	4,076,142
Office administrative services	4	490,655	293,170	430,455
Facilities support services	1	58,675	85,533	138,174
Employment services	21	1,166,563	2,033,009	2,788,889
Business support services	11	638,020	593,801	908,388
Travel arrangement and reservation services	1	84,420	117,802	247,655
Investigation and security services	4	278,176	284,691	357,194
Services to buildings	12	549,118	568,277	780,107
Landscape and horticultural services	17	876,687	919,675	1,304,786
Other support services	3	158,464	200,712	363,107
Waste management and remediation services	2	113,193	212,953	370,556
Elementary and secondary schools	6	298,293	273,209	330,780
Junior colleges, colleges, universities, and professional schools	6	376,279	540,617	712,467
Other educational services	8	320,914	308,729	507,645
Offices of physicians	14	1,591,201	1,896,664	2,728,543
Offices of dentists	5	358,783	456,532	659,541
Offices of other health practitioners	6	402,705	378,613	518,843
Outpatient care centers	4	301,067	318,256	577,241
Medical and diagnostic laboratories	1	111,212	176,337	275,674
Home health care services	9	402,700	309,136	428,913
Other ambulatory health care services	2	104,565	115,576	184,769
Hospitals	23	1,895,797	2,252,677	4,170,537
Nursing and community care facilities	10	453,378	499,997	839,853
Residential mental retardation, mental health, substance abuse and other facilities	4	190,579	199,242	289,325

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Individual and family services	16	456,360	428,983	631,949
Child day care services	8	213,378	260,895	348,439
Community food, housing, and other relief services, including rehabilitation services	3	134,919	153,223	306,469
Performing arts companies	1	50,867	73,613	132,125
Commercial Sports Except Racing	1	87,365	92,621	155,896
Racing and Track Operation	0	10,181	15,611	30,369
Independent artists, writers, and performers	6	161,983	176,736	211,063
Promoters of performing arts and sports and agents for public figures	1	53,701	103,537	205,099
Museums, historical sites, zoos, and parks	1	31,022	36,049	63,161
Amusement parks and arcades	1	14,322	43,013	56,849
Gambling industries (except casino hotels)	2	62,919	111,871	207,025
Other amusement and recreation industries	3	75,065	85,457	161,785
Fitness and recreational sports centers	4	64,390	100,855	166,051
Bowling centers	0	8,366	12,054	22,304
Hotels and motels, including casino hotels	5	169,727	303,366	487,752
Other accommodations	1	53,104	71,752	95,135
Full-service restaurants	29	726,454	1,079,258	1,864,283
Limited-service restaurants	26	546,274	868,970	1,892,099
All other food and drinking places	13	470,951	614,616	883,783
Automotive repair and maintenance, except car washes	9	505,729	572,239	852,091
Car washes	5	243,047	380,716	561,300
Electronic and precision equipment repair and maintenance	22	2,212,427	3,098,337	4,417,813
Commercial and industrial machinery and equipment repair and maintenance	1	116,581	135,576	207,602
Personal and household goods repair and maintenance	3	149,222	81,302	120,901
Personal care services	12	325,832	173,560	258,513
Death care services	1	37,361	43,947	72,945
Dry-cleaning and laundry services	2	67,371	72,912	107,677
Other personal services	10	260,003	145,664	235,152
Religious organizations	14	725,945	213,024	1,149,497
Grantmaking, giving, and social advocacy organizations	3	209,747	473,507	693,203

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Business and professional associations	1	206,251	263,087	376,811
Labor and civic organizations	5	163,894	317,864	581,234
Private households	8	143,253	143,253	143,253
Postal service	3	273,180	273,328	300,829
Federal electric utilities	0	0	0	0
Other federal government enterprises	58	3,816,421	5,442,151	16,185,471
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	2	258,800	(11,008)	145,368
Local government electric utilities	0	10,383	30,407	53,814
Other local government enterprises	5	441,716	999,148	1,756,799
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	213	33,355,732	43,960,888	91,889,252

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 49. Washington

**Table 465: Detailed NASA Impacts by Types of Impact, Washington.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>874</i>	<i>78,058,867</i>	<i>132,426,594</i>	<i>217,426,052</i>
Oilseed farming	0	15,540	31,572	44,080
Grain farming	1	95,699	50,306	489,963
Vegetable and melon farming	1	45,079	58,570	120,273
Fruit farming	2	53,396	73,922	133,111
Tree nut farming	0	610	626	658
Greenhouse, nursery, and floriculture production	0	17,689	20,872	35,864
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	620	839	1,623
All other crop farming	1	24,973	28,835	48,339
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	30,850	70,987	230,261
Dairy cattle and milk production	0	11,897	18,462	108,461
Poultry and egg production	0	9,443	13,989	114,084
Animal production, except cattle and poultry and eggs	1	47,042	94,668	143,662
Forestry, forest products, and timber tract production	0	3,034	3,058	3,720
Commercial logging	0	32,366	31,576	43,368
Commercial fishing	0	39,258	23,277	25,659
Commercial hunting and trapping	0	4,412	3,049	3,359
Support activities for agriculture and forestry	4	167,719	135,870	163,322
Oil and gas extraction	1	406	517	134,240
Coal mining	0	3,882	3,869	10,065
Copper, nickel, lead, and zinc mining	0	39,342	47,842	211,410
Iron ore mining	0	0	0	0
Gold ore mining	0	18,872	18,972	34,147
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	1,696	1,692	3,540
Stone mining and quarrying	0	12,037	9,627	26,847
Sand and gravel mining	0	14,421	13,378	23,969

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	2,506	2,098	3,813
Drilling oil and gas wells	0	1	2	23
Support activities for oil and gas operations	0	21	25	204
Metal mining services	0	633	886	8,056
Other nonmetallic minerals services	0	2	4	195
Electric power generation - Hydroelectric	0	6,436	41,775	65,691
Electric power generation - Fossil fuel	0	7,629	57,675	104,839
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	177	750	1,029
Electric power generation - Wind	0	1,648	30,035	48,978
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	18	1,610	5,365
Electric power generation - All other	0	57	81	219
Electric power transmission and distribution	1	76,986	547,938	973,064
Natural gas distribution	0	20,955	113,929	203,246
Water, sewage and other systems	0	3,586	14,570	24,611
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0

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Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	4	327,706	461,556	955,539
Maintenance and repair construction of residential structures	2	117,900	185,161	368,162
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	361	258	521
Dog and cat food manufacturing	0	5,023	19,302	105,285
Other animal food manufacturing	0	14,841	27,785	208,565
Flour milling	0	2,755	5,370	42,498
Rice milling	0	0	0	0
Malt manufacturing	0	2,842	5,831	38,378
Wet corn milling	0	8,328	21,373	163,762
Soybean and other oilseed processing	0	4,111	21,674	265,350
Fats and oils refining and blending	0	442	878	11,534
Breakfast cereal manufacturing	0	21,212	51,625	173,257
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1,578	2,299	15,714
Chocolate and confectionery manufacturing from cacao beans	0	1,044	2,226	13,677
Confectionery manufacturing from purchased chocolate	0	8,425	11,527	63,123
Frozen fruits, juices and vegetables manufacturing	0	20,344	36,034	157,792
Frozen specialties manufacturing	0	26,758	39,396	152,166
Canned fruits and vegetables manufacturing	0	13,033	23,230	109,996
Canned specialties	0	356	809	7,954
Dehydrated food products manufacturing	0	6,799	12,025	43,592
Cheese manufacturing	0	1,870	2,744	45,556

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Dry, condensed, and evaporated dairy product manufacturing	0	4,678	10,963	72,959
Fluid milk manufacturing	0	8,309	13,034	90,644
Creamery butter manufacturing	0	1,625	6,528	43,258
Ice cream and frozen dessert manufacturing	0	1,716	2,616	10,063
Frozen cakes and other pastries manufacturing	1	20,013	30,446	52,331
Poultry processing	0	18,244	23,628	109,701
Animal, except poultry, slaughtering	1	42,624	58,642	481,031
Meat processed from carcasses	0	32,691	35,962	237,818
Rendering and meat byproduct processing	0	2,374	2,698	12,168
Seafood product preparation and packaging	0	35,328	42,213	141,805
Bread and bakery product, except frozen, manufacturing	1	58,626	79,799	199,875
Cookie and cracker manufacturing	0	7,270	10,001	41,679
Dry pasta, mixes, and dough manufacturing	0	5,854	13,284	45,908
Tortilla manufacturing	0	695	836	3,880
Roasted nuts and peanut butter manufacturing	0	7,645	14,803	51,870
Other snack food manufacturing	0	13,659	26,795	97,465
Coffee and tea manufacturing	0	9,526	17,240	99,321
Flavoring syrup and concentrate manufacturing	0	3,065	21,108	97,131
Mayonnaise, dressing, and sauce manufacturing	0	502	901	5,121
Spice and extract manufacturing	0	2,756	4,125	22,958
All other food manufacturing	0	11,116	14,807	74,591
Bottled and canned soft drinks & water	0	32,022	63,410	276,203
Manufactured ice	0	516	226	1,431
Breweries	0	17,080	48,338	184,508
Wineries	0	4,992	8,915	41,311
Distilleries	0	2,838	20,352	53,745
Tobacco product manufacturing	0	494	18,181	38,668
Fiber, yarn, and thread mills	0	1,035	1,451	10,324
Broadwoven fabric mills	0	2,611	3,357	12,369
Narrow fabric mills and schiffli machine embroidery	0	177	192	673
Nonwoven fabric mills	0	2,549	3,613	13,883
Knit fabric mills	0	0	0	0

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Textile and fabric finishing mills	0	32	39	246
Fabric coating mills	0	147	173	937
Carpet and rug mills	0	43	105	2,491
Curtain and linen mills	0	496	645	2,651
Textile bag and canvas mills	0	7,680	8,840	24,550
Rope, cordage, twine, tire cord and tire fabric mills	0	9,659	12,884	38,004
Other textile product mills	0	2,564	2,974	9,155
Hosiery and sock mills	0	385	520	1,341
Other apparel knitting mills	0	152	297	816
Cut and sew apparel contractors	0	2,060	2,281	5,002
Mens and boys cut and sew apparel manufacturing	0	2,541	2,978	9,018
Womens and girls cut and sew apparel manufacturing	0	1,435	1,928	8,131
Other cut and sew apparel manufacturing	0	358	509	2,123
Apparel accessories and other apparel manufacturing	0	456	605	2,164
Leather and hide tanning and finishing	0	3	10	354
Footwear manufacturing	0	551	610	2,084
Other leather and allied product manufacturing	0	63	70	586
Sawmills	0	27,379	38,660	108,695
Wood preservation	0	2,236	6,390	18,053
Veneer and plywood manufacturing	0	5,776	8,356	23,941
Engineered wood member and truss manufacturing	0	3,712	4,934	13,960
Reconstituted wood product manufacturing	0	793	1,813	7,520
Wood windows and door manufacturing	0	25,031	33,594	85,888
Cut stock, resawing lumber, and planing	0	3,637	5,838	14,621
Other millwork, including flooring	0	7,971	10,820	28,155
Wood container and pallet manufacturing	0	7,502	8,667	21,052
Manufactured home (mobile home) manufacturing	0	4	6	19
Prefabricated wood building manufacturing	0	1,021	1,145	3,229
All other miscellaneous wood product manufacturing	0	4,789	5,659	14,794



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Pulp mills	0	1,060	1,501	6,260
Paper mills	1	99,901	189,210	658,544
Paperboard mills	0	15,962	32,210	124,197
Paperboard container manufacturing	0	40,209	54,418	222,038
Paper bag and coated and treated paper manufacturing	0	9,860	15,132	55,523
Stationery product manufacturing	0	2,391	3,100	11,403
Sanitary paper product manufacturing	0	1,206	2,725	13,131
All other converted paper product manufacturing	0	3,504	4,656	14,574
Printing	2	112,617	154,488	332,447
Support activities for printing	0	3,955	5,431	9,279
Petroleum refineries	0	54,299	522,547	2,064,405
Asphalt paving mixture and block manufacturing	0	1,773	3,199	12,164
Asphalt shingle and coating materials manufacturing	0	1,640	5,960	15,843
Petroleum lubricating oil and grease manufacturing	0	1,092	4,757	14,075
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	348	2,891	10,567
Industrial gas manufacturing	0	2,535	6,587	18,995
Synthetic dye and pigment manufacturing	0	3,586	7,874	20,313
Other basic inorganic chemical manufacturing	0	12,275	26,756	78,962
Other basic organic chemical manufacturing	0	4,856	10,244	76,221
Plastics material and resin manufacturing	0	8,389	14,440	99,522
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	3,365	8,213	28,304
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	1,475	2,773	9,810
Pesticide and other agricultural chemical manufacturing	0	2,820	9,628	41,326
Medicinal and botanical manufacturing	0	1,065	1,902	7,995

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Pharmaceutical preparation manufacturing	0	4,943	20,179	70,263
In-vitro diagnostic substance manufacturing	0	1,174	1,859	4,766
Biological product (except diagnostic) manufacturing	0	4,782	11,819	26,227
Paint and coating manufacturing	0	1,932	3,954	20,187
Adhesive manufacturing	0	1,810	3,024	11,169
Soap and other detergent manufacturing	0	4,150	15,074	97,029
Polish and other sanitation good manufacturing	0	2,952	6,190	34,895
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	8,048	26,319	76,391
Printing ink manufacturing	0	956	1,041	4,615
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	3,336	7,580	29,103
Other miscellaneous chemical product manufacturing	0	5,509	8,636	34,942
Plastics packaging materials and unlaminated film and sheet manufacturing	0	16,326	24,426	89,821
Unlaminated plastics profile shape manufacturing	0	18,086	34,575	111,080
Plastics pipe and pipe fitting manufacturing	0	3,346	6,849	26,688
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1,499	2,472	8,271
Polystyrene foam product manufacturing	0	5,215	7,976	27,160
Urethane and other foam product (except polystyrene) manufacturing	0	9,467	13,906	48,678
Plastics bottle manufacturing	0	5,026	7,644	32,484
Other plastics product manufacturing	1	48,488	66,804	235,631
Tire manufacturing	0	1,925	2,542	12,740
Rubber and plastics hoses and belting manufacturing	0	355	540	2,075
Other rubber product manufacturing	0	5,678	7,886	30,381

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	1,996	2,574	5,984
Brick, tile, and other structural clay product manufacturing	0	1,317	2,337	7,172
Flat glass manufacturing	0	2,522	5,300	12,685
Other pressed and blown glass and glassware manufacturing	0	6,311	9,196	36,347
Glass container manufacturing	0	4,826	8,642	21,099
Glass product manufacturing made of purchased glass	0	18,084	31,107	75,516
Cement manufacturing	0	1,870	4,656	12,338
Ready-mix concrete manufacturing	0	16,541	28,553	83,551
Concrete block and brick manufacturing	0	1,210	2,300	5,797
Concrete pipe manufacturing	0	348	591	1,656
Other concrete product manufacturing	0	7,693	11,465	27,775
Lime manufacturing	0	893	2,264	5,522
Gypsum product manufacturing	0	4,160	11,370	28,545
Abrasive product manufacturing	0	3,116	10,064	15,105
Cut stone and stone product manufacturing	0	5,606	6,648	13,945
Ground or treated mineral and earth manufacturing	0	4,873	14,859	25,496
Mineral wool manufacturing	0	426	1,043	2,825
Miscellaneous nonmetallic mineral products manufacturing	0	187	464	1,197
Iron and steel mills and ferroalloy manufacturing	0	604	1,577	15,956
Iron, steel pipe and tube manufacturing from purchased steel	0	161	274	1,487
Rolled steel shape manufacturing	0	9,391	20,218	53,078
Steel wire drawing	0	5,467	8,398	23,304
Alumina refining and primary aluminum production	0	9,938	21,665	110,839
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	38,250	74,880	241,180
Other aluminum rolling, drawing and extruding	0	790	1,187	5,559
Nonferrous metal (exc aluminum) smelting and refining	0	874	4,060	10,769

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	2,150	2,913	10,366
Secondary processing of other nonferrous metals	0	10	42	198
Ferrous metal foundries	0	4,184	8,052	17,974
Nonferrous metal foundries	0	4,281	6,850	16,939
Custom roll forming	0	565	948	3,725
Crown and closure manufacturing and metal stamping	0	3,636	5,624	13,871
Iron and steel forging	0	1,524	2,211	6,870
Nonferrous forging	0	1,682	2,196	6,006
Cutlery, utensil, pot, and pan manufacturing	0	801	2,708	7,219
Handtool manufacturing	0	924	1,615	3,034
Prefabricated metal buildings and components manufacturing	0	1,651	2,494	6,549
Fabricated structural metal manufacturing	0	10,607	16,977	47,966
Plate work manufacturing	0	5,523	5,772	17,192
Metal window and door manufacturing	0	4,997	8,307	19,797
Sheet metal work manufacturing	0	35,705	48,465	109,224
Ornamental and architectural metal work manufacturing	0	8,258	11,523	28,938
Power boiler and heat exchanger manufacturing	0	213	318	827
Metal tank (heavy gauge) manufacturing	0	1,706	2,178	5,889
Metal cans manufacturing	0	4,496	11,506	42,572
Metal barrels, drums and pails manufacturing	0	1,345	1,747	6,520
Hardware manufacturing	0	1,795	3,227	8,410
Spring and wire product manufacturing	0	1,149	1,660	5,274
Machine shops	1	57,550	68,503	133,509
Turned product and screw, nut, and bolt manufacturing	0	2,617	3,882	10,564
Metal heat treating	0	2,395	4,055	9,779
Metal coating and nonprecious engraving	0	11,259	21,880	50,004
Electroplating, anodizing, and coloring metal	0	9,659	11,074	23,683

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	2,528	4,456	11,425
Plumbing fixture fitting and trim manufacturing	0	125	418	1,336
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	741	1,764	4,533
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	1,112	3,024	7,202
Fabricated pipe and pipe fitting manufacturing	0	1,976	2,374	5,511
Other fabricated metal manufacturing	0	7,154	9,986	27,012
Farm machinery and equipment manufacturing	0	1,318	1,675	6,502
Lawn and garden equipment manufacturing	0	163	237	1,272
Construction machinery manufacturing	0	281	438	1,643
Mining machinery and equipment manufacturing	0	142	157	513
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	356	392	1,093
Sawmill, woodworking, and paper machinery	0	2,713	2,891	7,447
Printing machinery and equipment manufacturing	0	18	19	48
All other industrial machinery manufacturing	0	339	385	1,200
Optical instrument and lens manufacturing	0	38	48	131
Photographic and photocopying equipment manufacturing	0	148	184	884
Other commercial service industry machinery manufacturing	0	1,127	1,645	5,666
Air purification and ventilation equipment manufacturing	0	115	142	431

## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	5,223	6,523	20,538
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	3,037	4,457	16,673
Industrial mold manufacturing	0	1,550	1,651	3,071
Special tool, die, jig, and fixture manufacturing	0	2,024	2,260	4,054
Cutting tool and machine tool accessory manufacturing	0	426	446	1,038
Machine tool manufacturing	0	932	980	2,000
Rolling mill and other metalworking machinery manufacturing	0	311	343	763
Turbine and turbine generator set units manufacturing	0	33	40	173
Speed changer, industrial high-speed drive, and gear manufacturing	0	481	600	1,939
Mechanical power transmission equipment manufacturing	0	418	501	1,288
Other engine equipment manufacturing	0	70	103	706
Pump and pumping equipment manufacturing	0	276	382	1,163
Air and gas compressor manufacturing	0	10	13	69
Elevator and moving stairway manufacturing	0	11	14	59
Conveyor and conveying equipment manufacturing	0	132	137	377
Overhead cranes, hoists, and monorail systems manufacturing	0	597	869	2,842
Industrial truck, trailer, and stacker manufacturing	0	97	126	501
Power-driven handtool manufacturing	0	33	61	299
Welding and soldering equipment manufacturing	0	88	103	387
Packaging machinery manufacturing	0	742	908	2,477
Industrial process furnace and oven manufacturing	0	2	2	12
Fluid power cylinder and actuator manufacturing	0	1,509	1,800	4,785

## APPENDIX

Fluid power pump and motor manufacturing	0	21	27	180
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	585	671	2,107
Electronic computer manufacturing	0	564	1,228	3,814
Computer storage device manufacturing	0	157	444	1,637
Computer terminals and other computer peripheral equipment manufacturing	1	119,549	216,688	479,770
Telephone apparatus manufacturing	0	552	1,028	3,450
Broadcast and wireless communications equipment manufacturing	0	368	538	1,167
Other communications equipment manufacturing	0	179	302	1,101
Audio and video equipment manufacturing	0	329	617	2,328
Printed circuit assembly (electronic assembly) manufacturing	0	1,935	3,026	12,865
Bare printed circuit board manufacturing	0	413	551	1,564
Semiconductor and related device manufacturing	0	4,854	8,681	30,221
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	123	186	585
Electronic connector manufacturing	0	4,412	6,809	20,737
Other electronic component manufacturing	0	6,167	7,091	20,958
Electromedical and electrotherapeutic apparatus manufacturing	0	2,069	4,306	8,749
Search, detection, and navigation instruments manufacturing	0	14,279	22,840	48,609
Automatic environmental control manufacturing	0	1,233	1,702	3,909
Industrial process variable instruments manufacturing	0	753	1,127	2,685
Totalizing fluid meter and counting device manufacturing	0	54	123	360

## APPENDIX

Electricity and signal testing instruments manufacturing	0	14,871	21,654	60,651
Analytical laboratory instrument manufacturing	2	170,421	304,334	693,944
Irradiation apparatus manufacturing	0	1	3	13
Watch, clock, and other measuring and controlling device manufacturing	0	430	760	1,856
Blank magnetic and optical recording media manufacturing	0	29	99	541
Software and other prerecorded and record reproducing	0	7	25	211
Electric lamp bulb and part manufacturing	0	21	39	305
Lighting fixture manufacturing	3	236,500	309,038	879,106
Small electrical appliance manufacturing	0	3,430	5,212	10,392
Household cooking appliance manufacturing	0	451	783	2,054
Household refrigerator and home freezer manufacturing	0	454	899	2,364
Household laundry equipment manufacturing	0	682	1,156	4,986
Other major household appliance manufacturing	0	156	300	832
Power, distribution, and specialty transformer manufacturing	0	1,301	1,688	4,808
Motor and generator manufacturing	0	297	416	1,941
Switchgear and switchboard apparatus manufacturing	0	464	663	2,200
Relay and industrial control manufacturing	0	7,839	9,409	25,235
Storage battery manufacturing	0	448	638	3,305
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	478	776	3,638
Carbon and graphite product manufacturing	0	6,469	8,153	25,694
All other miscellaneous electrical equipment and component manufacturing	0	18,965	20,461	57,780



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Automobile manufacturing	0	33	128	581
Light truck and utility vehicle manufacturing	0	973	3,065	29,233
Heavy duty truck manufacturing	0	386	940	3,266
Motor vehicle body manufacturing	0	239	318	1,127
Truck trailer manufacturing	0	12	15	55
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	6,861	7,514	32,510
Motor vehicle gasoline engine and engine parts manufacturing	0	2,673	3,904	22,605
Motor vehicle electrical and electronic equipment manufacturing	0	9,362	13,055	62,387
Motor vehicle transmission and power train parts manufacturing	0	140	222	1,436
Motor vehicle seating and interior trim manufacturing	0	414	566	3,405
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	22,743	35,424	176,480
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	805	1,249	4,953
Aircraft manufacturing	0	2,963	7,626	16,427
Aircraft engine and engine parts manufacturing	0	201	475	1,134
Other aircraft parts and auxiliary equipment manufacturing	0	40,436	75,110	163,515
Guided missile and space vehicle manufacturing	0	27,275	41,015	80,106
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	1,272	1,938	3,565
Railroad rolling stock manufacturing	0	138	243	1,062
Ship building and repairing	0	6,213	8,424	17,489
Boat building	1	38,479	54,921	156,961
Motorcycle, bicycle, and parts manufacturing	0	1,699	5,986	12,924
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	2,919	5,905	16,878

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	20,886	26,167	62,836
Upholstered household furniture manufacturing	0	236	293	1,377
Nonupholstered wood household furniture manufacturing	0	3,683	4,024	12,589
Other household nonupholstered furniture manufacturing	0	234	317	1,755
Institutional furniture manufacturing	0	57	61	228
Wood office furniture manufacturing	0	883	1,110	2,966
Custom architectural woodwork and millwork	0	183	174	547
Office furniture, except wood, manufacturing	0	3,567	5,007	14,764
Showcase, partition, shelving, and locker manufacturing	0	1,440	1,793	5,482
Mattress manufacturing	0	3,848	6,360	23,878
Blind and shade manufacturing	0	164	170	635
Surgical and medical instrument manufacturing	0	1,371	1,899	5,196
Surgical appliance and supplies manufacturing	0	5,971	8,257	26,778
Dental equipment and supplies manufacturing	0	8,728	11,826	29,375
Ophthalmic goods manufacturing	0	6,361	8,795	26,612
Dental laboratories	0	4,842	4,482	8,486
Jewelry and silverware manufacturing	0	5,955	9,496	25,020
Sporting and athletic goods manufacturing	0	17,059	19,754	63,483
Doll, toy, and game manufacturing	0	14,747	16,424	34,140
Office supplies (except paper) manufacturing	0	731	839	3,791
Sign manufacturing	0	5,932	4,411	12,433
Gasket, packing, and sealing device manufacturing	0	2,820	3,112	10,232
Musical instrument manufacturing	0	1,405	1,432	3,733
Fasteners, buttons, needles, and pins manufacturing	0	1,129	1,227	2,622
Broom, brush, and mop manufacturing	0	1,637	1,747	3,848
Burial casket manufacturing	0	0	0	0

## APPENDIX

All other miscellaneous manufacturing	0	10,070	11,371	32,613
Wholesale - Motor vehicle and motor vehicle parts and supplies	1	39,508	116,603	227,962
Wholesale - Professional and commercial equipment and supplies	1	234,142	501,716	708,043
Wholesale - Household appliances and electrical and electronic goods	1	85,555	237,169	396,568
Wholesale - Machinery, equipment, and supplies	1	110,456	235,276	369,743
Wholesale - Other durable goods merchant wholesalers	2	193,758	358,418	630,460
Wholesale - Drugs and druggists' sundries	1	73,747	257,521	495,569
Wholesale - Grocery and related product wholesalers	2	174,399	264,399	488,136
Wholesale - Petroleum and petroleum products	0	19,262	453,756	494,445
Wholesale - Other nondurable goods merchant wholesalers	3	273,375	707,567	1,164,283
Wholesale - Wholesale electronic markets and agents and brokers	2	222,966	130,351	144,822
Retail - Motor vehicle and parts dealers	3	181,899	313,674	426,643
Retail - Furniture and home furnishings stores	2	99,708	150,701	219,419
Retail - Electronics and appliance stores	2	139,203	142,519	215,451
Retail - Building material and garden equipment and supplies stores	2	122,016	227,584	313,284
Retail - Food and beverage stores	9	320,615	465,919	720,600
Retail - Health and personal care stores	4	176,665	218,381	316,752
Retail - Gasoline stores	2	88,449	159,029	251,240
Retail - Clothing and clothing accessories stores	4	111,577	210,966	387,394
Retail - Sporting goods, hobby, musical instrument and book stores	3	79,577	122,020	181,871
Retail - General merchandise stores	8	327,449	530,194	756,680
Retail - Miscellaneous store retailers	5	185,720	223,344	313,787

## APPENDIX

Retail - Nonstore retailers	3	589,277	971,864	1,143,084
Air transportation	2	239,609	585,828	845,333
Rail transportation	0	58,733	128,104	246,357
Water transportation	0	52,388	92,969	339,762
Truck transportation	4	312,425	361,011	725,575
Transit and ground passenger transportation	5	148,766	173,748	247,335
Pipeline transportation	0	11,082	30,005	37,301
Scenic and sightseeing transportation and support activities for transportation	4	482,403	523,437	873,307
Couriers and messengers	2	103,480	132,366	247,107
Warehousing and storage	3	151,047	171,372	323,375
Newspaper publishers	1	31,241	48,544	65,565
Periodical publishers	0	27,449	39,977	62,120
Book publishers	0	8,227	23,713	49,982
Directory, mailing list, and other publishers	0	3,174	9,234	16,349
Greeting card publishing	0	3,922	13,587	20,472
Software publishers	3	943,111	2,232,442	2,385,808
Motion picture and video industries	1	57,493	91,608	247,451
Sound recording industries	0	18,540	58,126	81,689
Radio and television broadcasting	1	248,978	205,722	372,459
Cable and other subscription programming	0	7,801	11,857	30,328
Wired telecommunications carriers	1	113,480	211,683	546,084
Wireless telecommunications carriers (except satellite)	1	204,006	489,116	1,109,359
Satellite, telecommunications resellers, and all other telecommunications	0	16,337	19,288	48,570
Data processing, hosting, and related services	2	288,770	578,306	1,013,653
News syndicates, libraries, archives and all other information services	0	17,831	28,537	41,466
Internet publishing and broadcasting and web search portals	4	1,070,097	2,649,429	4,878,639
Nondepository credit intermediation and related activities	2	230,077	322,981	508,943
Securities and commodity contracts intermediation and brokerage	2	303,093	299,753	567,917

## APPENDIX

Monetary authorities and depository credit intermediation	8	754,777	2,049,039	3,205,751
Other financial investment activities	8	326,312	377,264	1,013,323
Direct life insurance carriers	1	105,231	203,143	282,019
Insurance carriers, except direct life	3	324,599	1,050,282	2,230,760
Insurance agencies, brokerages, and related activities	6	483,778	729,586	1,567,924
Funds, trusts, and other financial vehicles	2	83,870	86,024	559,513
Other real estate	52	1,752,337	4,853,854	10,890,804
Tenant-occupied housing	5	145,843	1,657,729	1,857,755
Owner-occupied dwellings	0	0	4,590,790	5,800,410
Automotive equipment rental and leasing	1	36,241	178,288	250,714
General and consumer goods rental except video tapes and discs	1	42,395	81,140	124,883
Video tape and disc rental	0	16,687	30,179	45,164
Commercial and industrial machinery and equipment rental and leasing	1	74,403	245,461	370,101
Lessors of nonfinancial intangible assets	0	10,345	205,335	258,252
Legal services	13	1,246,701	3,186,200	4,057,066
Accounting, tax preparation, bookkeeping, and payroll services	6	466,786	682,865	930,619
Architectural, engineering, and related services	8	779,705	986,259	1,651,700
Specialized design services	2	100,989	108,576	133,719
Custom computer programming services	2	263,870	330,709	423,178
Computer systems design services	3	298,813	316,084	413,329
Other computer related services, including facilities management	1	114,450	219,478	342,736
Management consulting services	19	1,957,142	1,960,773	2,838,148
Environmental and other technical consulting services	4	283,005	266,147	388,998
Scientific research and development services	251	35,229,643	59,421,845	91,405,932
Advertising, public relations, and related services	3	232,443	361,303	561,271
Photographic services	1	57,851	47,465	68,330
Veterinary services	1	57,245	91,766	136,495

## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	20	1,217,957	1,178,992	1,675,467
Management of companies and enterprises	19	2,467,982	2,815,509	4,000,492
Office administrative services	4	283,867	100,452	237,918
Facilities support services	1	30,761	41,338	91,104
Employment services	20	1,152,685	1,780,855	2,515,725
Business support services	5	279,885	247,193	389,635
Travel arrangement and reservation services	1	161,580	220,124	355,627
Investigation and security services	3	155,767	164,257	224,584
Services to buildings	10	346,143	375,986	556,589
Landscape and horticultural services	7	264,372	292,966	448,169
Other support services	2	101,209	130,982	230,094
Waste management and remediation services	2	150,294	314,953	461,010
Elementary and secondary schools	2	103,948	90,803	110,465
Junior colleges, colleges, universities, and professional schools	3	112,356	153,731	236,572
Other educational services	5	151,917	141,053	270,960
Offices of physicians	9	1,118,011	1,306,320	1,848,210
Offices of dentists	4	262,856	323,101	500,290
Offices of other health practitioners	4	367,089	354,259	448,338
Outpatient care centers	4	324,931	340,296	577,379
Medical and diagnostic laboratories	1	79,015	118,871	185,223
Home health care services	3	219,740	177,679	216,277
Other ambulatory health care services	1	81,165	87,785	132,108
Hospitals	16	1,605,892	1,843,072	3,149,983
Nursing and community care facilities	7	329,351	347,124	583,133
Residential mental retardation, mental health, substance abuse and other facilities	2	78,957	81,393	121,312
Individual and family services	14	428,292	397,373	573,049
Child day care services	4	138,407	169,478	219,311
Community food, housing, and other relief services, including rehabilitation services	2	102,541	115,702	236,933
Performing arts companies	1	39,007	67,580	119,140

## APPENDIX

Commercial Sports Except Racing	1	101,327	107,337	161,631
Racing and Track Operation	0	6,488	12,377	24,863
Independent artists, writers, and performers	7	128,355	145,193	185,966
Promoters of performing arts and sports and agents for public figures	1	30,024	75,680	172,498
Museums, historical sites, zoos, and parks	0	29,280	34,861	52,879
Amusement parks and arcades	0	3,900	9,150	12,837
Gambling industries (except casino hotels)	1	69,556	179,045	256,382
Other amusement and recreation industries	3	62,931	85,281	144,206
Fitness and recreational sports centers	3	52,514	80,428	123,845
Bowling centers	0	10,725	15,960	25,435
Hotels and motels, including casino hotels	3	124,101	278,143	388,167
Other accommodations	1	42,048	54,451	70,685
Full-service restaurants	18	573,852	939,111	1,445,454
Limited-service restaurants	15	390,801	692,141	1,283,904
All other food and drinking places	13	418,042	598,188	856,616
Automotive repair and maintenance, except car washes	6	374,548	501,830	697,812
Car washes	3	189,116	323,082	447,984
Electronic and precision equipment repair and maintenance	2	164,669	275,596	375,496
Commercial and industrial machinery and equipment repair and maintenance	1	123,734	161,992	230,235
Personal and household goods repair and maintenance	2	133,521	128,322	153,750
Personal care services	6	219,690	172,746	217,787
Death care services	0	11,914	16,557	24,699
Dry-cleaning and laundry services	1	38,802	45,510	61,170
Other personal services	5	201,495	166,286	211,610
Religious organizations	8	440,053	251,956	803,501
Grantmaking, giving, and social advocacy organizations	2	126,794	417,814	558,895
Business and professional associations	1	72,143	119,405	191,824
Labor and civic organizations	3	89,327	243,177	391,938
Private households	4	65,946	65,946	65,946
Postal service	2	163,783	163,955	181,368
Federal electric utilities	1	115,862	233,246	757,707

## APPENDIX

Other federal government enterprises	4	175,314	92,944	772,906
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	1	84,653	102,127	179,210
Local government passenger transit	2	168,359	(61,247)	106,687
Local government electric utilities	1	153,810	436,875	741,822
Other local government enterprises	5	430,346	925,472	1,769,246
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	15	2,374,751	3,098,473	4,607,153

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 466: Detailed M2M Program Impacts by Types of Impact, Washington.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	74	7,470,316	12,517,139	20,090,342
Oilseed farming	0	1,253	3,735	5,950
Grain farming	0	7,146	4,171	37,074
Vegetable and melon farming	0	4,164	5,671	10,990
Fruit farming	0	6,382	8,931	15,182
Tree nut farming	0	114	117	121



## APPENDIX

Greenhouse, nursery, and floriculture production	0	1,360	1,659	2,785
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	38	53	96
All other crop farming	0	1,814	2,178	3,548
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	2,621	5,814	16,698
Dairy cattle and milk production	0	1,243	1,990	10,228
Poultry and egg production	0	707	1,068	8,538
Animal production, except cattle and poultry and eggs	0	2,655	5,948	9,273
Forestry, forest products, and timber tract production	0	284	285	332
Commercial logging	0	2,816	2,738	3,484
Commercial fishing	0	4,508	2,012	2,239
Commercial hunting and trapping	0	396	257	251
Support activities for agriculture and forestry	0	13,663	10,977	13,150
Oil and gas extraction	0	23	38	9,560
Coal mining	0	209	183	526
Copper, nickel, lead, and zinc mining	0	2,037	1,733	8,030
Iron ore mining	0	0	0	0
Gold ore mining	0	986	829	1,618
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	127	99	224
Stone mining and quarrying	0	1,630	660	1,886
Sand and gravel mining	0	2,543	1,175	1,762
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	362	164	276
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	1	1	10
Metal mining services	0	48	87	771

## APPENDIX

Other nonmetallic minerals services	0	0	0	12
Electric power generation - Hydroelectric	0	791	4,649	6,817
Electric power generation - Fossil fuel	0	695	5,023	8,731
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	13	55	73
Electric power generation - Wind	0	120	2,107	3,231
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	3	208	694
Electric power generation - All other	0	10	11	26
Electric power transmission and distribution	0	6,119	44,584	76,602
Natural gas distribution	0	2,017	11,340	17,799
Water, sewage and other systems	0	397	1,413	2,144
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	24,653	34,873	70,123

## APPENDIX

Maintenance and repair construction of residential structures	0	10,613	16,777	32,269
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	31	21	43
Dog and cat food manufacturing	0	392	1,563	8,180
Other animal food manufacturing	0	1,282	2,512	17,916
Flour milling	0	204	402	3,227
Rice milling	0	0	0	0
Malt manufacturing	0	227	519	2,605
Wet corn milling	0	851	2,371	18,292
Soybean and other oilseed processing	0	492	2,635	31,678
Fats and oils refining and blending	0	50	103	1,243
Breakfast cereal manufacturing	0	1,561	3,718	12,392
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	171	245	1,536
Chocolate and confectionery manufacturing from cacao beans	0	187	402	2,288
Confectionery manufacturing from purchased chocolate	0	852	1,178	5,962
Frozen fruits, juices and vegetables manufacturing	0	2,177	3,887	15,910
Frozen specialties manufacturing	0	2,805	4,098	14,898
Canned fruits and vegetables manufacturing	0	1,561	2,789	13,006
Canned specialties	0	32	72	711
Dehydrated food products manufacturing	0	855	1,496	5,008
Cheese manufacturing	0	186	272	4,612
Dry, condensed, and evaporated dairy product manufacturing	0	556	1,338	7,937
Fluid milk manufacturing	0	777	1,248	8,308
Creamery butter manufacturing	0	189	724	4,625
Ice cream and frozen dessert manufacturing	0	161	253	863
Frozen cakes and other pastries manufacturing	0	1,929	2,900	4,868
Poultry processing	0	1,362	1,863	8,188
Animal, except poultry, slaughtering	0	3,074	4,300	34,508
Meat processed from carcasses	0	2,981	3,327	21,294

## APPENDIX

Rendering and meat byproduct processing	0	257	288	1,295
Seafood product preparation and packaging	0	2,739	3,398	10,176
Bread and bakery product, except frozen, manufacturing	0	5,475	7,466	18,325
Cookie and cracker manufacturing	0	731	1,069	4,047
Dry pasta, mixes, and dough manufacturing	0	613	1,360	4,826
Tortilla manufacturing	0	61	73	331
Roasted nuts and peanut butter manufacturing	0	841	1,815	5,539
Other snack food manufacturing	0	1,300	2,563	8,977
Coffee and tea manufacturing	0	936	1,727	9,416
Flavoring syrup and concentrate manufacturing	0	400	2,603	12,282
Mayonnaise, dressing, and sauce manufacturing	0	52	91	492
Spice and extract manufacturing	0	365	558	2,823
All other food manufacturing	0	1,277	1,708	8,109
Bottled and canned soft drinks & water	0	2,692	5,540	23,074
Manufactured ice	0	45	22	115
Breweries	0	1,508	4,410	16,215
Wineries	0	979	1,746	7,905
Distilleries	0	279	2,089	4,965
Tobacco product manufacturing	0	41	2,012	3,732
Fiber, yarn, and thread mills	0	84	131	833
Broadwoven fabric mills	0	204	289	1,040
Narrow fabric mills and schiffli machine embroidery	0	20	23	72
Nonwoven fabric mills	0	280	422	1,467
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	7	8	50
Fabric coating mills	0	20	23	111
Carpet and rug mills	0	5	13	271
Curtain and linen mills	0	54	73	280
Textile bag and canvas mills	0	698	816	2,180
Rope, cordage, twine, tire cord and tire fabric mills	0	571	799	2,195
Other textile product mills	0	263	310	900
Hosiery and sock mills	0	35	51	115
Other apparel knitting mills	0	20	37	93
Cut and sew apparel contractors	0	280	308	641

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	352	418	1,092
Womens and girls cut and sew apparel manufacturing	0	260	346	1,282
Other cut and sew apparel manufacturing	0	53	74	276
Apparel accessories and other apparel manufacturing	0	67	89	279
Leather and hide tanning and finishing	0	0	1	30
Footwear manufacturing	0	57	65	208
Other leather and allied product manufacturing	0	8	9	72
Sawmills	0	2,155	3,186	8,470
Wood preservation	0	155	484	1,298
Veneer and plywood manufacturing	0	408	607	1,737
Engineered wood member and truss manufacturing	0	276	381	1,053
Reconstituted wood product manufacturing	0	55	132	554
Wood windows and door manufacturing	0	1,724	2,396	5,957
Cut stock, resawing lumber, and planing	0	315	544	1,265
Other millwork, including flooring	0	603	859	2,089
Wood container and pallet manufacturing	0	628	745	1,768
Manufactured home (mobile home) manufacturing	0	0	0	1
Prefabricated wood building manufacturing	0	85	97	265
All other miscellaneous wood product manufacturing	0	444	548	1,288
Pulp mills	0	69	94	403
Paper mills	0	7,799	12,888	49,097
Paperboard mills	0	1,242	2,317	9,455
Paperboard container manufacturing	0	5,060	6,610	26,814
Paper bag and coated and treated paper manufacturing	0	851	1,191	4,517
Stationery product manufacturing	0	256	308	1,022
Sanitary paper product manufacturing	0	96	194	988

## APPENDIX

All other converted paper product manufacturing	0	336	421	1,329
Printing	0	6,717	9,208	18,925
Support activities for printing	0	377	507	858
Petroleum refineries	0	5,167	44,694	179,877
Asphalt paving mixture and block manufacturing	0	144	248	876
Asphalt shingle and coating materials manufacturing	0	124	410	1,118
Petroleum lubricating oil and grease manufacturing	0	118	483	1,415
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	24	198	725
Industrial gas manufacturing	0	212	583	1,616
Synthetic dye and pigment manufacturing	0	332	749	2,081
Other basic inorganic chemical manufacturing	0	943	2,199	6,287
Other basic organic chemical manufacturing	0	370	789	6,076
Plastics material and resin manufacturing	0	809	1,421	10,216
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	342	892	2,843
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	125	247	865
Pesticide and other agricultural chemical manufacturing	0	215	750	3,195
Medicinal and botanical manufacturing	0	157	306	1,082
Pharmaceutical preparation manufacturing	0	737	3,188	9,994
In-vitro diagnostic substance manufacturing	0	277	442	1,123
Biological product (except diagnostic) manufacturing	0	936	2,441	4,972
Paint and coating manufacturing	0	284	623	3,080
Adhesive manufacturing	0	198	360	1,227
Soap and other detergent manufacturing	0	338	1,550	8,151

## APPENDIX

Polish and other sanitation good manufacturing	0	296	732	3,381
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	922	3,454	9,080
Printing ink manufacturing	0	101	112	485
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	0	0	0
Photographic film and chemical manufacturing	0	255	638	2,220
Other miscellaneous chemical product manufacturing	0	593	992	4,040
Plastics packaging materials and unlaminated film and sheet manufacturing	0	2,679	3,966	14,292
Unlaminated plastics profile shape manufacturing	0	1,725	3,249	10,318
Plastics pipe and pipe fitting manufacturing	0	341	712	2,725
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	161	265	879
Polystyrene foam product manufacturing	0	449	678	2,291
Urethane and other foam product (except polystyrene) manufacturing	0	918	1,329	4,623
Plastics bottle manufacturing	0	590	887	3,694
Other plastics product manufacturing	0	4,904	6,733	22,507
Tire manufacturing	0	106	142	758
Rubber and plastics hoses and belting manufacturing	0	28	42	158
Other rubber product manufacturing	0	460	635	2,519
Pottery, ceramics, and plumbing fixture manufacturing	0	166	204	498
Brick, tile, and other structural clay product manufacturing	0	99	167	534
Flat glass manufacturing	0	317	620	1,548
Other pressed and blown glass and glassware manufacturing	0	739	1,064	4,189
Glass container manufacturing	0	445	745	1,907
Glass product manufacturing made of purchased glass	0	1,742	2,913	7,059

## APPENDIX

Cement manufacturing	0	135	318	853
Ready-mix concrete manufacturing	0	1,198	1,992	5,858
Concrete block and brick manufacturing	0	90	163	415
Concrete pipe manufacturing	0	25	41	118
Other concrete product manufacturing	0	592	854	2,087
Lime manufacturing	0	55	142	353
Gypsum product manufacturing	0	384	1,006	2,579
Abrasive product manufacturing	0	534	1,639	2,518
Cut stone and stone product manufacturing	0	414	488	1,014
Ground or treated mineral and earth manufacturing	0	396	1,168	2,068
Mineral wool manufacturing	0	39	89	243
Miscellaneous nonmetallic mineral products manufacturing	0	17	40	100
Iron and steel mills and ferroalloy manufacturing	0	80	180	1,901
Iron, steel pipe and tube manufacturing from purchased steel	0	25	38	206
Rolled steel shape manufacturing	0	1,089	2,148	6,255
Steel wire drawing	0	2,888	2,678	9,487
Alumina refining and primary aluminum production	0	2,685	5,294	25,648
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	9,757	16,393	60,402
Other aluminum rolling, drawing and extruding	0	227	291	1,476
Nonferrous metal (exc aluminum) smelting and refining	0	38	149	430
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	337	417	1,621
Secondary processing of other nonferrous metals	0	1	2	15
Ferrous metal foundries	0	606	933	2,341
Nonferrous metal foundries	0	1,474	2,089	5,353
Custom roll forming	0	114	189	677
Crown and closure manufacturing and metal stamping	0	493	768	1,849



## APPENDIX

Iron and steel forging	0	281	409	1,223
Nonferrous forging	0	328	433	1,113
Cutlery, utensil, pot, and pan manufacturing	0	108	392	989
Handtool manufacturing	0	142	249	468
Prefabricated metal buildings and components manufacturing	0	134	204	513
Fabricated structural metal manufacturing	0	832	1,339	3,721
Plate work manufacturing	0	489	512	1,471
Metal window and door manufacturing	0	404	674	1,571
Sheet metal work manufacturing	0	5,469	7,460	16,212
Ornamental and architectural metal work manufacturing	0	651	913	2,189
Power boiler and heat exchanger manufacturing	0	31	48	127
Metal tank (heavy gauge) manufacturing	0	210	270	712
Metal cans manufacturing	0	428	1,116	4,050
Metal barrels, drums and pails manufacturing	0	192	250	857
Hardware manufacturing	0	171	309	784
Spring and wire product manufacturing	0	212	304	945
Machine shops	0	9,019	10,788	20,526
Turned product and screw, nut, and bolt manufacturing	0	1,114	1,652	4,297
Metal heat treating	0	508	859	2,073
Metal coating and nonprecious engraving	0	2,134	4,152	9,503
Electroplating, anodizing, and coloring metal	0	2,013	2,312	4,844
Valve and fittings, other than plumbing, manufacturing	0	327	574	1,456
Plumbing fixture fitting and trim manufacturing	0	12	41	123
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	38	91	236
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	109	289	643

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	464	561	1,296
Other fabricated metal manufacturing	0	750	1,047	2,697
Farm machinery and equipment manufacturing	0	128	177	592
Lawn and garden equipment manufacturing	0	24	34	165
Construction machinery manufacturing	0	68	113	398
Mining machinery and equipment manufacturing	0	9	10	32
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	51	57	157
Sawmill, woodworking, and paper machinery	0	299	324	754
Printing machinery and equipment manufacturing	0	2	2	4
All other industrial machinery manufacturing	0	41	48	143
Optical instrument and lens manufacturing	0	6	7	19
Photographic and photocopying equipment manufacturing	0	30	38	176
Other commercial service industry machinery manufacturing	0	95	152	499
Air purification and ventilation equipment manufacturing	0	12	15	45
Heating equipment (except warm air furnaces) manufacturing	0	588	767	2,112
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	263	401	1,451
Industrial mold manufacturing	0	182	197	351
Special tool, die, jig, and fixture manufacturing	0	427	485	830
Cutting tool and machine tool accessory manufacturing	0	74	78	180
Machine tool manufacturing	0	192	204	392

## APPENDIX

Rolling mill and other metalworking machinery manufacturing	0	34	38	82
Turbine and turbine generator set units manufacturing	0	3	4	13
Speed changer, industrial high-speed drive, and gear manufacturing	0	65	84	243
Mechanical power transmission equipment manufacturing	0	36	44	112
Other engine equipment manufacturing	0	7	11	69
Pump and pumping equipment manufacturing	0	32	48	132
Air and gas compressor manufacturing	0	1	1	7
Elevator and moving stairway manufacturing	0	1	2	7
Conveyor and conveying equipment manufacturing	0	13	13	37
Overhead cranes, hoists, and monorail systems manufacturing	0	43	66	209
Industrial truck, trailer, and stacker manufacturing	0	8	11	43
Power-driven handtool manufacturing	0	8	14	61
Welding and soldering equipment manufacturing	0	15	18	54
Packaging machinery manufacturing	0	134	172	450
Industrial process furnace and oven manufacturing	0	0	0	2
Fluid power cylinder and actuator manufacturing	0	106	131	359
Fluid power pump and motor manufacturing	0	3	4	27
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	91	108	312
Electronic computer manufacturing	0	91	194	555
Computer storage device manufacturing	0	25	69	251
Computer terminals and other computer peripheral equipment manufacturing	0	11,612	20,990	46,807

## APPENDIX

Telephone apparatus manufacturing	0	48	89	298
Broadcast and wireless communications equipment manufacturing	0	84	120	254
Other communications equipment manufacturing	0	15	25	98
Audio and video equipment manufacturing	0	61	111	394
Printed circuit assembly (electronic assembly) manufacturing	0	637	992	4,086
Bare printed circuit board manufacturing	0	59	78	238
Semiconductor and related device manufacturing	0	1,053	1,830	6,086
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	16	24	74
Electronic connector manufacturing	0	501	767	2,379
Other electronic component manufacturing	0	1,174	1,346	3,828
Electromedical and electrotherapeutic apparatus manufacturing	0	308	624	1,225
Search, detection, and navigation instruments manufacturing	0	45	74	156
Automatic environmental control manufacturing	0	208	282	598
Industrial process variable instruments manufacturing	0	143	211	497
Totalizing fluid meter and counting device manufacturing	0	5	12	35
Electricity and signal testing instruments manufacturing	0	9,343	13,612	35,825
Analytical laboratory instrument manufacturing	1	93,863	173,186	353,928
Irradiation apparatus manufacturing	0	0	0	2
Watch, clock, and other measuring and controlling device manufacturing	0	133	229	522
Blank magnetic and optical recording media manufacturing	0	13	42	180

## APPENDIX

Software and other prerecorded and record reproducing	0	1	2	19
Electric lamp bulb and part manufacturing	0	8	15	115
Lighting fixture manufacturing	3	260,754	339,794	924,951
Small electrical appliance manufacturing	0	433	643	1,205
Household cooking appliance manufacturing	0	41	74	195
Household refrigerator and home freezer manufacturing	0	42	87	238
Household laundry equipment manufacturing	0	64	113	483
Other major household appliance manufacturing	0	15	30	82
Power, distribution, and specialty transformer manufacturing	0	952	1,246	3,404
Motor and generator manufacturing	0	45	60	292
Switchgear and switchboard apparatus manufacturing	0	46	65	219
Relay and industrial control manufacturing	0	2,627	3,151	8,060
Storage battery manufacturing	0	52	70	367
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	0
Wiring device manufacturing	0	166	268	1,155
Carbon and graphite product manufacturing	0	411	512	1,690
All other miscellaneous electrical equipment and component manufacturing	0	56	61	178
Automobile manufacturing	0	3	11	53
Light truck and utility vehicle manufacturing	0	50	177	1,558
Heavy duty truck manufacturing	0	26	62	208
Motor vehicle body manufacturing	0	21	28	103
Truck trailer manufacturing	0	1	1	4
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	515	565	2,450
Motor vehicle gasoline engine and engine parts manufacturing	0	241	352	2,153

## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	737	1,018	4,464
Motor vehicle transmission and power train parts manufacturing	0	17	27	150
Motor vehicle seating and interior trim manufacturing	0	27	40	227
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	1,943	2,761	15,516
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	76	128	474
Aircraft manufacturing	0	210	570	1,186
Aircraft engine and engine parts manufacturing	0	49	113	285
Other aircraft parts and auxiliary equipment manufacturing	0	248	447	1,001
Guided missile and space vehicle manufacturing	0	33	49	90
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	34	52	90
Railroad rolling stock manufacturing	0	14	25	99
Ship building and repairing	0	699	969	1,945
Boat building	0	2,749	3,950	11,043
Motorcycle, bicycle, and parts manufacturing	0	241	806	1,589
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	274	578	1,627
Wood kitchen cabinet and countertop manufacturing	0	1,789	2,051	5,054
Upholstered household furniture manufacturing	0	34	42	193
Nonupholstered wood household furniture manufacturing	0	359	379	1,146
Other household nonupholstered furniture manufacturing	0	26	34	178
Institutional furniture manufacturing	0	5	5	18
Wood office furniture manufacturing	0	14	17	46

## APPENDIX

Custom architectural woodwork and millwork	0	16	15	45
Office furniture, except wood, manufacturing	0	18	23	72
Showcase, partition, shelving, and locker manufacturing	0	123	141	447
Mattress manufacturing	0	346	507	2,076
Blind and shade manufacturing	0	12	12	50
Surgical and medical instrument manufacturing	0	141	190	490
Surgical appliance and supplies manufacturing	0	755	1,057	3,207
Dental equipment and supplies manufacturing	0	23	28	104
Ophthalmic goods manufacturing	0	678	959	2,909
Dental laboratories	0	578	535	997
Jewelry and silverware manufacturing	0	606	952	2,411
Sporting and athletic goods manufacturing	0	1,585	1,784	5,570
Doll, toy, and game manufacturing	0	1,762	1,830	3,403
Office supplies (except paper) manufacturing	0	91	106	438
Sign manufacturing	0	407	310	816
Gasket, packing, and sealing device manufacturing	0	225	244	784
Musical instrument manufacturing	0	288	292	586
Fasteners, buttons, needles, and pins manufacturing	0	136	147	282
Broom, brush, and mop manufacturing	0	186	228	409
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	916	1,027	2,844
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	3,638	10,738	20,993
Wholesale - Professional and commercial equipment and supplies	0	22,577	48,454	66,849
Wholesale - Household appliances and electrical and electronic goods	0	11,853	32,655	53,771
Wholesale - Machinery, equipment, and supplies	0	9,494	20,304	31,757
Wholesale - Other durable goods merchant wholesalers	0	17,911	33,171	57,881

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	6,480	22,268	41,854
Wholesale - Grocery and related product wholesalers	0	14,654	22,029	40,668
Wholesale - Petroleum and petroleum products	0	1,534	40,651	43,606
Wholesale - Other nondurable goods merchant wholesalers	0	23,792	63,594	102,548
Wholesale - Wholesale electronic markets and agents and brokers	0	26,826	14,918	16,565
Retail - Motor vehicle and parts dealers	0	15,085	26,162	35,292
Retail - Furniture and home furnishings stores	0	8,645	13,061	18,700
Retail - Electronics and appliance stores	0	11,936	12,268	18,188
Retail - Building material and garden equipment and supplies stores	0	10,550	19,682	26,771
Retail - Food and beverage stores	1	29,460	42,353	63,957
Retail - Health and personal care stores	0	14,775	18,375	26,559
Retail - Gasoline stores	0	8,429	14,104	21,044
Retail - Clothing and clothing accessories stores	0	9,964	18,689	33,310
Retail - Sporting goods, hobby, musical instrument and book stores	0	6,747	10,376	15,179
Retail - General merchandise stores	1	26,592	43,384	61,480
Retail - Miscellaneous store retailers	0	16,534	19,696	26,713
Retail - Nonstore retailers	0	54,415	90,788	101,731
Air transportation	0	20,988	52,617	74,749
Rail transportation	0	5,268	10,197	20,819
Water transportation	0	5,576	9,651	34,453
Truck transportation	0	30,685	34,729	67,946
Transit and ground passenger transportation	1	17,232	20,334	27,104
Pipeline transportation	0	670	1,957	2,485
Scenic and sightseeing transportation and support activities for transportation	0	40,560	44,574	74,401
Couriers and messengers	0	9,702	12,804	23,368
Warehousing and storage	0	16,022	18,142	33,936



## APPENDIX

Newspaper publishers	0	2,463	3,715	4,944
Periodical publishers	0	2,759	3,942	5,646
Book publishers	0	704	1,943	4,075
Directory, mailing list, and other publishers	0	166	490	864
Greeting card publishing	0	245	897	1,337
Software publishers	0	115,829	253,443	263,502
Motion picture and video industries	0	6,701	10,782	24,203
Sound recording industries	0	2,112	6,256	8,097
Radio and television broadcasting	0	29,815	26,949	32,997
Cable and other subscription programming	0	964	1,169	2,483
Wired telecommunications carriers	0	10,101	17,453	43,739
Wireless telecommunications carriers (except satellite)	0	24,208	47,520	104,591
Satellite, telecommunications resellers, and all other telecommunications	0	1,810	1,811	4,035
Data processing, hosting, and related services	0	25,365	47,722	79,825
News syndicates, libraries, archives and all other information services	0	1,825	2,909	3,977
Internet publishing and broadcasting and web search portals	0	145,218	342,773	545,111
Nondepository credit intermediation and related activities	0	21,771	30,991	45,977
Securities and commodity contracts intermediation and brokerage	0	27,704	26,926	47,745
Monetary authorities and depository credit intermediation	1	57,161	160,513	243,751
Other financial investment activities	1	38,507	43,281	92,710
Direct life insurance carriers	0	7,818	15,588	21,120
Insurance carriers, except direct life	0	25,934	86,266	176,380
Insurance agencies, brokerages, and related activities	0	34,863	52,918	110,119
Funds, trusts, and other financial vehicles	0	8,709	8,774	48,230
Other real estate	4	160,357	441,121	858,311
Tenant-occupied housing	0	14,887	159,548	176,217

## APPENDIX

Owner-occupied dwellings	0	0	436,227	551,168
Automotive equipment rental and leasing	0	3,966	15,973	21,500
General and consumer goods rental except video tapes and discs	0	4,049	7,257	10,422
Video tape and disc rental	0	1,501	2,619	3,822
Commercial and industrial machinery and equipment rental and leasing	0	19,538	55,065	80,611
Lessors of nonfinancial intangible assets	0	893	17,458	21,816
Legal services	1	97,077	258,220	320,623
Accounting, tax preparation, bookkeeping, and payroll services	1	40,003	58,743	78,100
Architectural, engineering, and related services	1	57,851	73,521	121,257
Specialized design services	0	8,910	9,597	11,582
Custom computer programming services	0	30,202	37,588	46,924
Computer systems design services	0	26,622	28,059	36,073
Other computer related services, including facilities management	0	10,592	19,551	29,148
Management consulting services	1	150,895	151,428	213,064
Environmental and other technical consulting services	0	25,703	24,389	35,111
Scientific research and development services	19	3,070,180	5,248,679	7,462,341
Advertising, public relations, and related services	0	19,032	29,423	43,604
Photographic services	0	4,703	4,059	5,521
Veterinary services	0	4,975	8,088	11,711
Marketing research and all other miscellaneous professional, scientific, and technical services	1	84,080	81,182	113,679
Management of companies and enterprises	2	222,251	255,960	352,310
Office administrative services	0	28,941	10,431	22,363
Facilities support services	0	2,674	3,599	7,493
Employment services	1	93,076	147,562	200,678
Business support services	0	19,208	17,300	26,409
Travel arrangement and reservation services	0	14,188	19,484	30,234
Investigation and security services	0	13,521	14,293	18,949
Services to buildings	1	30,467	33,188	46,764

## APPENDIX

Landscape and horticultural services	0	18,435	20,469	30,182
Other support services	0	7,562	9,808	17,096
Waste management and remediation services	0	12,515	26,399	38,098
Elementary and secondary schools	0	11,683	10,160	12,156
Junior colleges, colleges, universities, and professional schools	0	13,948	18,911	27,647
Other educational services	0	10,200	9,482	17,602
Offices of physicians	1	95,433	112,385	157,757
Offices of dentists	0	23,538	29,241	44,648
Offices of other health practitioners	0	31,412	30,559	38,584
Outpatient care centers	0	30,664	32,244	53,888
Medical and diagnostic laboratories	0	6,951	10,736	16,191
Home health care services	0	18,666	15,266	18,711
Other ambulatory health care services	0	7,209	7,844	11,614
Hospitals	1	153,192	175,092	292,024
Nursing and community care facilities	1	29,725	31,378	51,338
Residential mental retardation, mental health, substance abuse and other facilities	0	8,005	8,256	12,056
Individual and family services	1	42,443	40,072	57,447
Child day care services	0	12,875	15,999	20,202
Community food, housing, and other relief services, including rehabilitation services	0	10,847	12,392	24,524
Performing arts companies	0	4,076	6,831	10,942
Commercial Sports Except Racing	0	8,664	9,148	13,506
Racing and Track Operation	0	633	1,147	2,216
Independent artists, writers, and performers	1	13,130	14,485	17,736
Promoters of performing arts and sports and agents for public figures	0	3,076	7,104	15,157
Museums, historical sites, zoos, and parks	0	2,884	3,394	4,990
Amusement parks and arcades	0	387	793	1,124
Gambling industries (except casino hotels)	0	6,634	16,097	22,762
Other amusement and recreation industries	0	5,365	6,969	11,752

## APPENDIX

Fitness and recreational sports centers	0	5,121	7,329	11,133
Bowling centers	0	940	1,349	2,126
Hotels and motels, including casino hotels	0	13,824	29,656	40,773
Other accommodations	0	5,492	6,997	8,893
Full-service restaurants	1	48,827	80,380	121,094
Limited-service restaurants	1	35,368	62,272	111,441
All other food and drinking places	1	38,148	53,704	74,749
Automotive repair and maintenance, except car washes	1	34,898	45,105	62,341
Car washes	0	16,964	28,885	39,754
Electronic and precision equipment repair and maintenance	0	19,968	33,522	43,229
Commercial and industrial machinery and equipment repair and maintenance	0	13,560	17,441	24,630
Personal and household goods repair and maintenance	0	11,826	10,176	12,193
Personal care services	1	21,349	15,363	19,583
Death care services	0	1,207	1,586	2,354
Dry-cleaning and laundry services	0	3,441	3,973	5,329
Other personal services	0	19,222	13,922	18,215
Religious organizations	1	46,560	20,750	78,015
Grantmaking, giving, and social advocacy organizations	0	15,437	43,640	58,371
Business and professional associations	0	6,586	9,876	15,289
Labor and civic organizations	0	9,438	22,723	37,392
Private households	0	6,641	6,641	6,641
Postal service	0	14,435	14,451	15,954
Federal electric utilities	0	4,432	9,164	29,198
Other federal government enterprises	0	1,408	952	5,410
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	3,900	4,585	7,550
Local government passenger transit	0	16,506	(7,559)	7,103
Local government electric utilities	0	13,486	35,013	57,901
Other local government enterprises	0	37,947	75,559	143,191

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	390,739	403,014	842,689

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

### 50. West Virginia

**Table 467: Detailed NASA Impacts by Types of Impact, West Virginia.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	728	48,144,343	69,872,376	137,496,061
Oilseed farming	0	(146)	4,804	7,078
Grain farming	0	(202)	4,649	13,349
Vegetable and melon farming	0	(2,556)	749	8,625
Fruit farming	1	(9,306)	1,143	18,749
Tree nut farming	0	(57)	(26)	381
Greenhouse, nursery, and floriculture production	0	254	2,379	7,334
Tobacco farming	0	(1)	3	9
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	4	(1,812)	3,227	23,015
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	2	(6,073)	10,623	46,399

## APPENDIX

Dairy cattle and milk production	0	(308)	267	3,307
Poultry and egg production	1	(469)	5,513	94,609
Animal production, except cattle and poultry and eggs	2	(4,866)	38,329	58,267
Forestry, forest products, and timber tract production	0	1,060	1,159	1,501
Commercial logging	0	9,800	9,000	13,675
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	82	(3,191)	1,284
Support activities for agriculture and forestry	1	34,035	11,017	19,471
Oil and gas extraction	1	17,891	219,494	411,578
Coal mining	0	59,805	129,524	215,746
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	470	1,710	1,288
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	188	430	837
Stone mining and quarrying	0	2,194	8,714	18,130
Sand and gravel mining	0	2,328	3,469	5,238
Other clay, ceramic, refractory minerals mining	0	132	223	421
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	706	968	1,529
Drilling oil and gas wells	0	15	32	93
Support activities for oil and gas operations	0	1,196	1,962	5,415
Metal mining services	0	219	3,077	6,331
Other nonmetallic minerals services	0	217	970	2,247
Electric power generation - Hydroelectric	0	1,732	4,807	7,445
Electric power generation - Fossil fuel	0	58,164	189,497	545,609
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	807	4,833	26,894

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	1	70,955	222,673	686,295
Natural gas distribution	0	36,327	92,174	237,428
Water, sewage and other systems	0	12,885	25,974	47,827
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	2	146,521	226,471	473,133
Maintenance and repair construction of residential structures	1	58,080	101,210	211,903
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	273	204	426
Dog and cat food manufacturing	0	85	127	1,443
Other animal food manufacturing	0	351	780	5,719
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	3	4	236
Nonchocolate confectionery manufacturing	0	1	1	43
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	58	60	712
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	22	23	382
Canned fruits and vegetables manufacturing	0	83	95	1,315
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	1,923	2,032	20,985
Creamery butter manufacturing	0	386	600	10,707
Ice cream and frozen dessert manufacturing	0	576	625	4,311
Frozen cakes and other pastries manufacturing	0	1,177	1,756	3,516
Poultry processing	0	19,463	20,088	123,213
Animal, except poultry, slaughtering	0	540	609	13,422
Meat processed from carcasses	0	1,215	1,260	15,698
Rendering and meat byproduct processing	0	130	107	676
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	4,956	6,103	19,568
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	291	358	2,551
Tortilla manufacturing	0	0	0	0



## APPENDIX

Roasted nuts and peanut butter manufacturing	0	512	600	3,837
Other snack food manufacturing	0	420	523	4,392
Coffee and tea manufacturing	0	22	24	630
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	37	42	654
Spice and extract manufacturing	0	27	28	433
All other food manufacturing	0	0	0	0
Bottled and canned soft drinks & water	0	757	879	10,000
Manufactured ice	0	926	(30)	2,128
Breweries	0	262	327	4,089
Wineries	0	10	12	181
Distilleries	0	424	642	4,230
Tobacco product manufacturing	0	3,933	16,483	86,656
Fiber, yarn, and thread mills	0	49	74	435
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	185	338	1,469
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	8	10	46
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	42	63	251
Textile bag and canvas mills	0	72	92	354
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	39	50	270
Hosiery and sock mills	0	8	15	41
Other apparel knitting mills	0	9	17	47
Cut and sew apparel contractors	0	123	152	373
Mens and boys cut and sew apparel manufacturing	0	43	137	327
Womens and girls cut and sew apparel manufacturing	0	5	10	54
Other cut and sew apparel manufacturing	0	13	38	133
Apparel accessories and other apparel manufacturing	0	6	12	39
Leather and hide tanning and finishing	0	0	0	0

## APPENDIX

Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	1	1	76
Sawmills	0	7,833	10,406	44,238
Wood preservation	0	607	1,537	5,767
Veneer and plywood manufacturing	0	1,075	1,479	4,576
Engineered wood member and truss manufacturing	0	991	1,255	3,356
Reconstituted wood product manufacturing	0	1,391	3,037	9,648
Wood windows and door manufacturing	0	5,114	6,591	18,343
Cut stock, resawing lumber, and planing	0	589	877	2,656
Other millwork, including flooring	0	5,905	7,806	22,262
Wood container and pallet manufacturing	0	720	810	2,664
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	457	500	1,723
All other miscellaneous wood product manufacturing	0	2,409	2,815	9,076
Pulp mills	0	129	146	996
Paper mills	0	0	0	0
Paperboard mills	0	432	546	2,769
Paperboard container manufacturing	0	789	895	5,317
Paper bag and coated and treated paper manufacturing	0	692	810	3,641
Stationery product manufacturing	0	256	286	1,412
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	1	29,184	35,541	99,774
Support activities for printing	0	0	0	0
Petroleum refineries	0	9,038	99,570	533,294
Asphalt paving mixture and block manufacturing	0	863	1,461	7,090
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	1,996	10,160	22,279

## APPENDIX

All other petroleum and coal products manufacturing	0	1,394	5,342	13,764
Petrochemical manufacturing	0	3,933	23,108	135,167
Industrial gas manufacturing	0	2,248	4,098	13,447
Synthetic dye and pigment manufacturing	0	69	124	457
Other basic inorganic chemical manufacturing	0	4,095	7,375	25,717
Other basic organic chemical manufacturing	0	11,652	19,354	138,007
Plastics material and resin manufacturing	0	14,837	21,261	131,175
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	245	361	1,198
Pesticide and other agricultural chemical manufacturing	0	3,924	10,121	54,099
Medicinal and botanical manufacturing	0	33	46	139
Pharmaceutical preparation manufacturing	0	13,770	41,243	140,114
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	650	1,000	4,536
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	3,228	5,047	15,370
Polish and other sanitation good manufacturing	0	1,619	2,154	7,256
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	1,029	772	1,773
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	446	629	2,821
Photographic film and chemical manufacturing	0	3,734	5,341	17,731
Other miscellaneous chemical product manufacturing	0	629	752	2,569

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	763	1,339	5,039
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	151	392	1,298
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	29	54	163
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	1,070	1,814	5,639
Plastics bottle manufacturing	0	127	225	828
Other plastics product manufacturing	0	7,714	12,021	42,859
Tire manufacturing	0	80	100	469
Rubber and plastics hoses and belting manufacturing	0	425	710	1,654
Other rubber product manufacturing	0	4,522	6,990	19,932
Pottery, ceramics, and plumbing fixture manufacturing	0	1,195	1,654	3,570
Brick, tile, and other structural clay product manufacturing	0	539	1,079	2,448
Flat glass manufacturing	0	204	467	1,098
Other pressed and blown glass and glassware manufacturing	0	844	1,239	3,819
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	148	256	627
Cement manufacturing	0	301	835	2,068
Ready-mix concrete manufacturing	0	7,183	13,309	47,311
Concrete block and brick manufacturing	0	1,580	3,288	7,465
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	2,642	4,183	10,973
Lime manufacturing	0	450	1,259	3,172
Gypsum product manufacturing	0	866	2,599	6,768
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	752	894	2,212

## APPENDIX

Ground or treated mineral and earth manufacturing	0	268	841	2,057
Mineral wool manufacturing	0	1,262	3,493	7,931
Miscellaneous nonmetallic mineral products manufacturing	0	18	23	89
Iron and steel mills and ferroalloy manufacturing	0	4,865	8,648	41,275
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	93	206	1,039
Secondary smelting and alloying of aluminum	0	80	135	942
Aluminum sheet, plate, and foil manufacturing	0	1,336	2,702	9,432
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	340	488	3,181
Nonferrous metal, except copper and aluminum, shaping	0	1,591	2,133	6,815
Secondary processing of other nonferrous metals	0	15	59	239
Ferrous metal foundries	0	55	107	266
Nonferrous metal foundries	0	156	248	486
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	291	410	1,146
Iron and steel forging	0	18	24	81
Nonferrous forging	0	194	239	700
Cutlery, utensil, pot, and pan manufacturing	0	183	528	1,342
Handtool manufacturing	0	65	103	255
Prefabricated metal buildings and components manufacturing	0	404	563	1,633
Fabricated structural metal manufacturing	0	1,463	2,131	8,129
Plate work manufacturing	0	238	245	724
Metal window and door manufacturing	0	196	294	829

## APPENDIX

Sheet metal work manufacturing	0	623	790	2,137
Ornamental and architectural metal work manufacturing	0	10	13	78
Power boiler and heat exchanger manufacturing	0	1	2	6
Metal tank (heavy gauge) manufacturing	0	14	17	59
Metal cans manufacturing	0	165	359	1,731
Metal barrels, drums and pails manufacturing	0	162	200	855
Hardware manufacturing	0	61	98	322
Spring and wire product manufacturing	0	3	4	21
Machine shops	0	5,991	6,857	13,345
Turned product and screw, nut, and bolt manufacturing	0	264	361	973
Metal heat treating	0	83	127	294
Metal coating and nonprecious engraving	0	822	1,405	2,601
Electroplating, anodizing, and coloring metal	0	279	310	669
Valve and fittings, other than plumbing, manufacturing	0	37	58	171
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	164	360	796
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	41	95	335
Fabricated pipe and pipe fitting manufacturing	0	477	549	1,381
Other fabricated metal manufacturing	0	7	8	52
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	5	6	55
Mining machinery and equipment manufacturing	0	282	279	948

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	208	215	829
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	3
Optical instrument and lens manufacturing	0	2	2	8
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	93	103	629
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	1	1	20
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	25	28	148
Industrial mold manufacturing	0	6	6	16
Special tool, die, jig, and fixture manufacturing	0	11	11	27
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	60	62	218
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	47	50	204

## APPENDIX

Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	109	111	332
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	2	2	8
Fluid power cylinder and actuator manufacturing	0	41	42	141
Fluid power pump and motor manufacturing	0	20	21	133
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	14	14	56
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	13	17	64
Audio and video equipment manufacturing	0	8	12	55
Printed circuit assembly (electronic assembly) manufacturing	0	9	12	92
Bare printed circuit board manufacturing	0	0	0	0



## APPENDIX

Semiconductor and related device manufacturing	0	14	20	115
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	21	23	122
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	24	31	167
Industrial process variable instruments manufacturing	0	182	229	701
Totalizing fluid meter and counting device manufacturing	0	10	17	81
Electricity and signal testing instruments manufacturing	0	2	2	10
Analytical laboratory instrument manufacturing	0	2,503	3,517	10,721
Irradiation apparatus manufacturing	0	2	3	11
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	12	15	43
Electric lamp bulb and part manufacturing	0	173	217	493
Lighting fixture manufacturing	0	3	3	9
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0

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Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	17	21	69
Motor and generator manufacturing	0	171	212	797
Switchgear and switchboard apparatus manufacturing	0	36	47	152
Relay and industrial control manufacturing	0	28	32	108
Storage battery manufacturing	0	400	503	1,664
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	4	5	24
Wiring device manufacturing	0	27	36	126
Carbon and graphite product manufacturing	0	406	482	1,455
All other miscellaneous electrical equipment and component manufacturing	0	1	1	3
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	21	99	338
Motor vehicle body manufacturing	0	180	332	909
Truck trailer manufacturing	0	3	4	14
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	8,419	18,312	56,501
Motor vehicle electrical and electronic equipment manufacturing	0	7,326	14,587	45,666
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	2,812	5,292	13,396
Other motor vehicle parts manufacturing	0	1,736	4,545	18,824
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	3,377	8,716	21,587

## APPENDIX

Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	201	438	1,080
Other aircraft parts and auxiliary equipment manufacturing	0	67	99	254
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	235	306	685
Railroad rolling stock manufacturing	0	13	19	198
Ship building and repairing	0	0	0	0
Boat building	0	206	270	2,690
Motorcycle, bicycle, and parts manufacturing	0	66	193	678
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	2,499	1,843	6,325
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	291	266	911
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	9	9	33
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	47	43	130
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	2	2	20
Mattress manufacturing	0	41	11	478
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	27	62	140
Surgical appliance and supplies manufacturing	0	1,738	4,048	8,969

## APPENDIX

Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	1	3	12
Dental laboratories	0	157	154	297
Jewelry and silverware manufacturing	0	137	235	652
Sporting and athletic goods manufacturing	0	28	44	271
Doll, toy, and game manufacturing	0	81	153	4,455
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	1,461	1,363	6,673
Gasket, packing, and sealing device manufacturing	0	92	126	635
Musical instrument manufacturing	0	29	32	356
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	35	48	796
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	18,007	46,958	112,744
Wholesale - Professional and commercial equipment and supplies	1	61,524	111,842	213,575
Wholesale - Household appliances and electrical and electronic goods	0	19,749	50,080	118,624
Wholesale - Machinery, equipment, and supplies	1	63,397	118,904	212,268
Wholesale - Other durable goods merchant wholesalers	1	59,724	102,403	221,033
Wholesale - Drugs and druggists' sundries	1	74,449	229,232	450,194
Wholesale - Grocery and related product wholesalers	1	73,288	103,321	211,539
Wholesale - Petroleum and petroleum products	0	16,096	255,559	294,910
Wholesale - Other nondurable goods merchant wholesalers	1	96,678	215,033	419,082
Wholesale - Wholesale electronic markets and agents and brokers	2	128,841	59,080	72,458
Retail - Motor vehicle and parts dealers	3	130,585	218,958	328,682

## APPENDIX

Retail - Furniture and home furnishings stores	1	46,942	61,818	106,335
Retail - Electronics and appliance stores	1	64,655	66,217	116,110
Retail - Building material and garden equipment and supplies stores	2	68,849	134,109	199,348
Retail - Food and beverage stores	7	177,233	261,187	448,147
Retail - Health and personal care stores	4	179,543	218,326	326,212
Retail - Gasoline stores	3	65,985	134,056	268,933
Retail - Clothing and clothing accessories stores	3	60,766	104,293	230,364
Retail - Sporting goods, hobby, musical instrument and book stores	2	48,333	65,667	119,633
Retail - General merchandise stores	9	248,828	371,402	602,349
Retail - Miscellaneous store retailers	5	80,497	103,720	196,677
Retail - Nonstore retailers	4	64,766	233,074	558,039
Air transportation	0	7,558	15,438	30,313
Rail transportation	0	30,302	61,898	128,621
Water transportation	0	17,036	29,594	120,677
Truck transportation	3	245,349	295,026	599,435
Transit and ground passenger transportation	1	13,837	17,628	28,882
Pipeline transportation	0	43,219	82,298	112,110
Scenic and sightseeing transportation and support activities for transportation	3	189,647	220,144	466,058
Couriers and messengers	2	71,781	93,095	170,933
Warehousing and storage	2	70,596	77,723	193,758
Newspaper publishers	1	57,290	83,937	126,391
Periodical publishers	0	8,003	10,801	24,909
Book publishers	0	17,121	46,985	86,463
Directory, mailing list, and other publishers	1	40,587	111,430	185,428
Greeting card publishing	0	0	0	0
Software publishers	0	14,686	29,195	43,914
Motion picture and video industries	0	14,080	27,602	96,177
Sound recording industries	0	804	3,357	9,251
Radio and television broadcasting	2	160,951	123,422	503,964

## APPENDIX

Cable and other subscription programming	0	7,999	53,255	153,511
Wired telecommunications carriers	1	136,724	341,914	678,280
Wireless telecommunications carriers (except satellite)	0	5,968	36,080	124,143
Satellite, telecommunications resellers, and all other telecommunications	2	188,414	262,843	750,706
Data processing, hosting, and related services	1	64,162	152,860	360,220
News syndicates, libraries, archives and all other information services	0	3,260	4,904	10,334
Internet publishing and broadcasting and web search portals	0	8,866	21,211	97,506
Nondepository credit intermediation and related activities	1	48,877	66,806	138,089
Securities and commodity contracts intermediation and brokerage	1	115,409	125,755	317,957
Monetary authorities and depository credit intermediation	8	524,318	1,127,474	2,439,400
Other financial investment activities	2	47,144	63,337	224,972
Direct life insurance carriers	0	14,749	38,610	55,944
Insurance carriers, except direct life	2	137,763	636,524	1,272,611
Insurance agencies, brokerages, and related activities	4	197,886	333,123	837,641
Funds, trusts, and other financial vehicles	1	43,927	62,254	378,414
Other real estate	27	527,144	1,867,535	4,928,362
Tenant-occupied housing	3	49,329	766,803	882,353
Owner-occupied dwellings	0	0	2,723,187	3,440,714
Automotive equipment rental and leasing	1	27,734	96,605	142,499
General and consumer goods rental except video tapes and discs	1	46,465	58,783	95,166
Video tape and disc rental	0	10,199	16,961	27,634
Commercial and industrial machinery and equipment rental and leasing	0	42,351	140,126	193,038
Lessors of nonfinancial intangible assets	0	3,391	69,841	94,014

## APPENDIX

Legal services	12	1,003,070	2,066,425	2,878,783
Accounting, tax preparation, bookkeeping, and payroll services	4	308,193	269,879	441,675
Architectural, engineering, and related services	4	342,292	315,632	636,284
Specialized design services	0	39,392	40,931	47,423
Custom computer programming services	1	49,153	55,195	85,836
Computer systems design services	1	126,801	132,965	180,298
Other computer related services, including facilities management	0	12,715	13,709	34,328
Management consulting services	52	5,240,367	5,068,082	7,429,491
Environmental and other technical consulting services	2	228,200	164,289	238,240
Scientific research and development services	203	13,841,174	20,648,241	46,193,279
Advertising, public relations, and related services	2	115,165	109,780	254,394
Photographic services	1	48,058	29,956	40,583
Veterinary services	1	36,575	30,215	60,571
Marketing research and all other miscellaneous professional, scientific, and technical services	9	963,745	741,505	964,475
Management of companies and enterprises	11	1,025,358	1,157,050	1,856,188
Office administrative services	4	314,411	118,211	279,421
Facilities support services	0	17,186	23,687	48,527
Employment services	18	870,464	1,419,783	2,089,407
Business support services	6	212,211	186,945	350,306
Travel arrangement and reservation services	1	31,525	44,955	124,456
Investigation and security services	3	90,185	93,820	142,781
Services to buildings	6	143,764	153,674	254,527
Landscape and horticultural services	4	127,729	138,104	221,498
Other support services	1	44,154	58,599	127,820
Waste management and remediation services	1	79,576	155,305	278,174
Elementary and secondary schools	1	43,896	39,612	52,853
Junior colleges, colleges, universities, and professional schools	3	78,416	108,870	179,742
Other educational services	2	55,336	53,101	110,867
Offices of physicians	10	1,035,897	1,207,929	1,810,261
Offices of dentists	3	158,401	194,494	307,553

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Offices of other health practitioners	4	263,052	243,900	339,744
Outpatient care centers	4	192,822	202,831	433,474
Medical and diagnostic laboratories	1	41,253	59,983	102,763
Home health care services	6	287,448	204,697	281,347
Other ambulatory health care services	1	73,999	81,234	143,668
Hospitals	24	1,830,593	2,023,920	4,030,668
Nursing and community care facilities	6	275,453	282,315	482,430
Residential mental retardation, mental health, substance abuse and other facilities	3	110,304	112,591	178,731
Individual and family services	10	254,385	229,353	357,639
Child day care services	4	86,688	102,585	146,398
Community food, housing, and other relief services, including rehabilitation services	2	61,065	67,736	166,622
Performing arts companies	1	9,774	18,405	42,361
Commercial Sports Except Racing	1	18,267	24,197	67,936
Racing and Track Operation	0	1,598	2,729	6,743
Independent artists, writers, and performers	2	23,211	30,883	46,201
Promoters of performing arts and sports and agents for public figures	0	6,108	18,163	52,087
Museums, historical sites, zoos, and parks	0	5,627	7,274	13,643
Amusement parks and arcades	0	1,777	3,420	5,981
Gambling industries (except casino hotels)	1	33,756	78,150	156,930
Other amusement and recreation industries	1	29,769	35,804	67,509
Fitness and recreational sports centers	1	17,012	24,764	45,337
Bowling centers	0	4,181	6,178	12,293
Hotels and motels, including casino hotels	0	15,322	29,316	49,286
Other accommodations	0	2,563	3,547	5,322
Full-service restaurants	17	343,011	506,973	966,076
Limited-service restaurants	15	286,850	455,179	1,053,166
All other food and drinking places	9	231,991	335,102	518,600
Automotive repair and maintenance, except car washes	4	158,121	205,648	314,213
Car washes	2	78,646	127,735	195,404



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Electronic and precision equipment repair and maintenance	1	34,356	46,757	89,728
Commercial and industrial machinery and equipment repair and maintenance	1	103,004	104,600	175,571
Personal and household goods repair and maintenance	1	68,888	66,771	85,392
Personal care services	4	93,306	70,919	99,492
Death care services	0	10,756	13,648	23,286
Dry-cleaning and laundry services	1	22,108	24,418	35,485
Other personal services	3	80,478	75,691	105,811
Religious organizations	8	277,931	112,297	632,303
Grantmaking, giving, and social advocacy organizations	2	58,529	158,526	295,867
Business and professional associations	1	42,914	62,241	120,760
Labor and civic organizations	3	62,786	137,404	300,349
Private households	2	26,974	26,974	26,974
Postal service	2	152,310	152,406	170,233
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	14,413	6,601	34,526
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	39,723	55,870	112,158
Local government passenger transit	1	70,084	42,344	159,566
Local government electric utilities	0	0	0	0
Other local government enterprises	2	157,543	463,642	840,649
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	61	9,538,543	12,348,220	24,213,864

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 468: Detailed M2M Program Impacts by Types of Impact, West Virginia.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>28</i>	<i>1,803,073</i>	<i>2,785,522</i>	<i>5,370,176</i>
Oilseed farming	0	(6)	316	560
Grain farming	0	(8)	205	546
Vegetable and melon farming	0	(97)	30	325
Fruit farming	0	(465)	58	895
Tree nut farming	0	(4)	(2)	29
Greenhouse, nursery, and floriculture production	0	9	83	249
Tobacco farming	0	(0)	0	1
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	(59)	109	754
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	(263)	454	1,912
Dairy cattle and milk production	0	(14)	13	137
Poultry and egg production	0	(15)	178	2,995
Animal production, except cattle and poultry and eggs	0	(155)	1,366	2,139
Forestry, forest products, and timber tract production	0	62	67	84
Commercial logging	0	435	398	564
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	3	(119)	42
Support activities for agriculture and forestry	0	1,583	507	896
Oil and gas extraction	0	451	7,281	13,243
Coal mining	0	1,704	3,246	5,969
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	158	204	119
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	9	16	33
Stone mining and quarrying	0	182	356	761
Sand and gravel mining	0	275	201	253
Other clay, ceramic, refractory minerals mining	0	6	8	16
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	76	55	79
Drilling oil and gas wells	0	1	1	3
Support activities for oil and gas operations	0	34	58	157
Metal mining services	0	6	107	216
Other nonmetallic minerals services	0	7	40	89
Electric power generation - Hydroelectric	0	111	276	396
Electric power generation - Fossil fuel	0	2,637	8,111	22,468
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	31	176	917
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	2,823	8,954	26,823
Natural gas distribution	0	1,737	4,566	10,293
Water, sewage and other systems	0	627	1,082	1,788
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	6,380	9,903	20,105
Maintenance and repair construction of residential structures	0	2,150	3,772	7,636
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	10	7	15
Dog and cat food manufacturing	0	3	4	46
Other animal food manufacturing	0	16	36	253
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	0
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	0	0	0
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	11
Nonchocolate confectionery manufacturing	0	0	0	2
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	2	3	28
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	1	1	16
Canned fruits and vegetables manufacturing	0	4	5	68

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	74	80	796
Creamery butter manufacturing	0	19	28	473
Ice cream and frozen dessert manufacturing	0	25	28	169
Frozen cakes and other pastries manufacturing	0	46	69	134
Poultry processing	0	610	665	3,863
Animal, except poultry, slaughtering	0	17	19	418
Meat processed from carcasses	0	47	50	600
Rendering and meat byproduct processing	0	6	5	31
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	189	234	735
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	13	15	110
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	24	31	172
Other snack food manufacturing	0	17	21	170
Coffee and tea manufacturing	0	1	1	26
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	2	2	27
Spice and extract manufacturing	0	2	2	23
All other food manufacturing	0	0	0	0
Bottled and canned soft drinks & water	0	27	33	354
Manufactured ice	0	34	(1)	72
Breweries	0	10	12	150
Wineries	0	1	1	15
Distilleries	0	18	28	166
Tobacco product manufacturing	0	134	740	3,393
Fiber, yarn, and thread mills	0	2	3	16
Broadwoven fabric mills	0	0	0	0

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Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	11	21	81
Knit fabric mills	0	0	0	0
Textile and fabric finishing mills	0	1	1	6
Fabric coating mills	0	0	0	0
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	2	3	11
Textile bag and canvas mills	0	3	4	16
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	2	3	13
Hosiery and sock mills	0	0	1	1
Other apparel knitting mills	0	1	1	3
Cut and sew apparel contractors	0	11	13	30
Mens and boys cut and sew apparel manufacturing	0	2	8	16
Womens and girls cut and sew apparel manufacturing	0	0	1	3
Other cut and sew apparel manufacturing	0	1	2	7
Apparel accessories and other apparel manufacturing	0	0	1	2
Leather and hide tanning and finishing	0	0	0	0
Footwear manufacturing	0	0	0	0
Other leather and allied product manufacturing	0	0	0	4
Sawmills	0	330	461	1,840
Wood preservation	0	22	62	216
Veneer and plywood manufacturing	0	36	51	159
Engineered wood member and truss manufacturing	0	37	48	126
Reconstituted wood product manufacturing	0	47	108	355
Wood windows and door manufacturing	0	220	294	794
Cut stock, resawing lumber, and planing	0	28	45	125
Other millwork, including flooring	0	269	373	993
Wood container and pallet manufacturing	0	26	30	97
Manufactured home (mobile home) manufacturing	0	0	0	0

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Prefabricated wood building manufacturing	0	20	23	75
All other miscellaneous wood product manufacturing	0	111	134	391
Pulp mills	0	4	4	31
Paper mills	0	0	0	0
Paperboard mills	0	13	15	82
Paperboard container manufacturing	0	35	38	226
Paper bag and coated and treated paper manufacturing	0	29	30	142
Stationery product manufacturing	0	14	15	65
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	1,368	1,662	4,463
Support activities for printing	0	0	0	0
Petroleum refineries	0	371	3,683	20,092
Asphalt paving mixture and block manufacturing	0	35	56	255
Asphalt shingle and coating materials manufacturing	0	0	0	0
Petroleum lubricating oil and grease manufacturing	0	84	398	863
All other petroleum and coal products manufacturing	0	40	146	377
Petrochemical manufacturing	0	116	679	3,983
Industrial gas manufacturing	0	100	193	609
Synthetic dye and pigment manufacturing	0	3	6	24
Other basic inorganic chemical manufacturing	0	171	331	1,118
Other basic organic chemical manufacturing	0	446	749	5,544
Plastics material and resin manufacturing	0	646	945	6,084
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	0	0	0
Phosphatic fertilizer manufacturing	0	0	0	0
Fertilizer mixing	0	11	17	55

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	134	354	1,883
Medicinal and botanical manufacturing	0	2	3	8
Pharmaceutical preparation manufacturing	0	851	2,699	8,256
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	0	0	0
Paint and coating manufacturing	0	27	45	198
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	118	234	581
Polish and other sanitation good manufacturing	0	82	129	357
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	50	43	90
Printing ink manufacturing	0	0	0	0
Explosives manufacturing	0	0	0	0
Custom compounding of purchased resins	0	19	29	131
Photographic film and chemical manufacturing	0	174	275	825
Other miscellaneous chemical product manufacturing	0	28	35	121
Plastics packaging materials and unlaminated film and sheet manufacturing	0	42	73	268
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	8	21	68
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	1	2	7
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	49	82	252
Plastics bottle manufacturing	0	7	12	44
Other plastics product manufacturing	0	376	584	1,973
Tire manufacturing	0	2	3	13



## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	19	31	71
Other rubber product manufacturing	0	255	391	1,150
Pottery, ceramics, and plumbing fixture manufacturing	0	49	65	146
Brick, tile, and other structural clay product manufacturing	0	23	43	102
Flat glass manufacturing	0	10	21	52
Other pressed and blown glass and glassware manufacturing	0	56	81	248
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	8	13	32
Cement manufacturing	0	13	34	85
Ready-mix concrete manufacturing	0	319	567	2,036
Concrete block and brick manufacturing	0	70	138	317
Concrete pipe manufacturing	0	0	0	0
Other concrete product manufacturing	0	118	179	475
Lime manufacturing	0	14	40	103
Gypsum product manufacturing	0	44	125	335
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	28	33	82
Ground or treated mineral and earth manufacturing	0	10	31	80
Mineral wool manufacturing	0	73	186	427
Miscellaneous nonmetallic mineral products manufacturing	0	1	1	5
Iron and steel mills and ferroalloy manufacturing	0	241	371	1,853
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	0
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	8	17	80
Secondary smelting and alloying of aluminum	0	6	8	58
Aluminum sheet, plate, and foil manufacturing	0	52	92	364

## APPENDIX

Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	17	23	147
Nonferrous metal, except copper and aluminum, shaping	0	122	148	519
Secondary processing of other nonferrous metals	0	1	2	10
Ferrous metal foundries	0	3	4	11
Nonferrous metal foundries	0	10	14	29
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	16	23	64
Iron and steel forging	0	1	2	5
Nonferrous forging	0	15	18	51
Cutlery, utensil, pot, and pan manufacturing	0	10	31	74
Handtool manufacturing	0	4	6	16
Prefabricated metal buildings and components manufacturing	0	21	29	79
Fabricated structural metal manufacturing	0	71	104	389
Plate work manufacturing	0	11	11	32
Metal window and door manufacturing	0	9	14	37
Sheet metal work manufacturing	0	31	40	104
Ornamental and architectural metal work manufacturing	0	0	1	3
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	1	1	3
Metal cans manufacturing	0	7	16	74
Metal barrels, drums and pails manufacturing	0	7	9	37
Hardware manufacturing	0	3	5	16
Spring and wire product manufacturing	0	0	0	1
Machine shops	0	314	361	687
Turned product and screw, nut, and bolt manufacturing	0	15	20	53
Metal heat treating	0	5	7	16

## APPENDIX

Metal coating and nonprecious engraving	0	38	64	119
Electroplating, anodizing, and coloring metal	0	18	20	43
Valve and fittings, other than plumbing, manufacturing	0	2	4	11
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	4	8	17
Ammunition, except for small arms, manufacturing	0	0	0	0
Small arms, ordnance, and accessories manufacturing	0	2	4	13
Fabricated pipe and pipe fitting manufacturing	0	21	24	61
Other fabricated metal manufacturing	0	0	0	2
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	1	1	11
Mining machinery and equipment manufacturing	0	9	9	29
Oil and gas field machinery and equipment manufacturing	0	8	8	30
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	3	4	24
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	1
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1	1	5
Industrial mold manufacturing	0	0	0	1
Special tool, die, jig, and fixture manufacturing	0	1	1	2
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	4	4	14
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	3	3	12
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	5	5	14
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0

## APPENDIX

Industrial process furnace and oven manufacturing	0	0	0	1
Fluid power cylinder and actuator manufacturing	0	2	2	6
Fluid power pump and motor manufacturing	0	2	2	10
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1	1	3
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	0
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	1	1	3
Audio and video equipment manufacturing	0	1	1	4
Printed circuit assembly (electronic assembly) manufacturing	0	1	1	7
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	1	1	7
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	2	2	9
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	2	3	15

## APPENDIX

Industrial process variable instruments manufacturing	0	11	14	42
Totalizing fluid meter and counting device manufacturing	0	0	1	4
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	1	2
Irradiation apparatus manufacturing	0	0	0	1
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	1	1	2
Electric lamp bulb and part manufacturing	0	8	10	22
Lighting fixture manufacturing	0	0	0	1
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	1	2	5
Motor and generator manufacturing	0	10	12	45
Switchgear and switchboard apparatus manufacturing	0	2	2	8
Relay and industrial control manufacturing	0	2	2	7
Storage battery manufacturing	0	24	28	95
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	1
Wiring device manufacturing	0	2	2	8

## APPENDIX

Carbon and graphite product manufacturing	0	17	20	63
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	1	3	9
Motor vehicle body manufacturing	0	6	11	32
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	357	778	2,536
Motor vehicle electrical and electronic equipment manufacturing	0	291	575	1,645
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	105	200	494
Other motor vehicle parts manufacturing	0	64	153	717
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	149	416	964
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	66	140	372
Other aircraft parts and auxiliary equipment manufacturing	0	3	5	12
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	12	15	33
Railroad rolling stock manufacturing	0	1	1	10
Ship building and repairing	0	0	0	0
Boat building	0	6	8	77
Motorcycle, bicycle, and parts manufacturing	0	4	11	34

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	108	73	257
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	12	10	35
Other household nonupholstered furniture manufacturing	0	0	0	0
Institutional furniture manufacturing	0	0	0	1
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	2	2	6
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	1
Mattress manufacturing	0	2	0	17
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	1	3	5
Surgical appliance and supplies manufacturing	0	95	224	464
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	0	1
Dental laboratories	0	8	7	14
Jewelry and silverware manufacturing	0	6	10	26
Sporting and athletic goods manufacturing	0	1	2	10
Doll, toy, and game manufacturing	0	4	7	193
Office supplies (except paper) manufacturing	0	0	0	0
Sign manufacturing	0	52	50	228
Gasket, packing, and sealing device manufacturing	0	4	5	24
Musical instrument manufacturing	0	2	3	23
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0



## APPENDIX

Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	0	0	0
All other miscellaneous manufacturing	0	1	2	29
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	741	1,933	4,638
Wholesale - Professional and commercial equipment and supplies	0	2,504	4,559	8,511
Wholesale - Household appliances and electrical and electronic goods	0	788	1,987	4,648
Wholesale - Machinery, equipment, and supplies	0	2,750	5,180	9,200
Wholesale - Other durable goods merchant wholesalers	0	2,377	4,080	8,736
Wholesale - Drugs and druggists' sundries	0	2,815	8,541	16,374
Wholesale - Grocery and related product wholesalers	0	2,626	3,672	7,516
Wholesale - Petroleum and petroleum products	0	558	9,933	11,287
Wholesale - Other nondurable goods merchant wholesalers	0	3,704	8,512	16,256
Wholesale - Wholesale electronic markets and agents and brokers	0	5,039	2,195	2,693
Retail - Motor vehicle and parts dealers	0	4,517	7,617	11,340
Retail - Furniture and home furnishings stores	0	1,662	2,188	3,702
Retail - Electronics and appliance stores	0	2,264	2,327	4,002
Retail - Building material and garden equipment and supplies stores	0	2,557	4,983	7,318
Retail - Food and beverage stores	0	6,620	9,651	16,168
Retail - Health and personal care stores	0	6,099	7,462	11,110
Retail - Gasoline stores	0	2,578	4,873	9,233
Retail - Clothing and clothing accessories stores	0	2,211	3,766	8,073
Retail - Sporting goods, hobby, musical instrument and book stores	0	1,673	2,280	4,077

## APPENDIX

Retail - General merchandise stores	0	8,236	12,387	19,947
Retail - Miscellaneous store retailers	0	2,926	3,735	6,838
Retail - Nonstore retailers	0	2,446	8,906	20,315
Air transportation	0	297	623	1,204
Rail transportation	0	1,288	2,335	5,154
Water transportation	0	1,104	1,877	7,443
Truck transportation	0	10,346	12,181	24,088
Transit and ground passenger transportation	0	631	809	1,245
Pipeline transportation	0	1,257	2,564	3,565
Scenic and sightseeing transportation and support activities for transportation	0	10,006	11,775	24,964
Couriers and messengers	0	2,938	3,935	7,062
Warehousing and storage	0	2,800	3,078	7,602
Newspaper publishers	0	2,277	3,227	4,788
Periodical publishers	0	403	532	1,131
Book publishers	0	668	1,731	3,190
Directory, mailing list, and other publishers	0	1,438	3,998	6,613
Greeting card publishing	0	0	0	0
Software publishers	0	646	1,233	1,805
Motion picture and video industries	0	645	1,278	3,700
Sound recording industries	0	40	158	400
Radio and television broadcasting	0	10,114	8,511	23,208
Cable and other subscription programming	0	487	2,577	6,145
Wired telecommunications carriers	0	4,225	9,813	18,946
Wireless telecommunications carriers (except satellite)	0	291	1,441	4,806
Satellite, telecommunications resellers, and all other telecommunications	0	790	919	2,398
Data processing, hosting, and related services	0	2,891	6,466	14,520
News syndicates, libraries, archives and all other information services	0	167	250	494
Internet publishing and broadcasting and web search portals	0	611	1,391	5,504

## APPENDIX

Nondepository credit intermediation and related activities	0	1,980	2,740	5,331
Securities and commodity contracts intermediation and brokerage	0	4,548	4,870	11,517
Monetary authorities and depository credit intermediation	0	19,736	43,703	91,915
Other financial investment activities	0	2,354	3,073	8,705
Direct life insurance carriers	0	447	1,210	1,711
Insurance carriers, except direct life	0	4,943	23,524	45,206
Insurance agencies, brokerages, and related activities	0	6,905	11,681	28,475
Funds, trusts, and other financial vehicles	0	1,865	2,596	13,338
Other real estate	1	30,805	108,597	248,399
Tenant-occupied housing	0	2,043	29,949	33,964
Owner-occupied dwellings	0	0	105,063	132,746
Automotive equipment rental and leasing	0	1,366	3,911	5,536
General and consumer goods rental except video tapes and discs	0	1,922	2,278	3,445
Video tape and disc rental	0	372	598	949
Commercial and industrial machinery and equipment rental and leasing	0	2,048	5,807	7,758
Lessors of nonfinancial intangible assets	0	150	3,024	4,044
Legal services	1	50,958	109,380	148,495
Accounting, tax preparation, bookkeeping, and payroll services	0	12,014	10,564	16,857
Architectural, engineering, and related services	0	19,055	17,647	35,044
Specialized design services	0	1,312	1,366	1,552
Custom computer programming services	0	2,006	2,237	3,395
Computer systems design services	0	5,523	5,772	7,693
Other computer related services, including facilities management	0	623	646	1,543
Management consulting services	1	58,065	56,254	80,230
Environmental and other technical consulting services	0	12,081	8,776	12,535

## APPENDIX

Scientific research and development services	11	919,345	1,390,086	2,874,215
Advertising, public relations, and related services	0	5,012	4,753	10,494
Photographic services	0	1,700	1,117	1,429
Veterinary services	0	1,377	1,153	2,250
Marketing research and all other miscellaneous professional, scientific, and technical services	0	46,261	35,473	45,423
Management of companies and enterprises	1	51,749	58,963	91,617
Office administrative services	0	17,858	6,846	14,604
Facilities support services	0	721	990	1,909
Employment services	1	42,538	71,248	100,863
Business support services	0	8,050	7,233	13,120
Travel arrangement and reservation services	0	1,403	2,018	5,356
Investigation and security services	0	3,879	4,046	5,962
Services to buildings	0	7,055	7,564	11,917
Landscape and horticultural services	0	5,430	5,882	9,100
Other support services	0	1,809	2,406	5,207
Waste management and remediation services	0	3,447	6,774	11,959
Elementary and secondary schools	0	2,005	1,801	2,363
Junior colleges, colleges, universities, and professional schools	0	3,961	5,450	8,548
Other educational services	0	2,272	2,187	4,401
Offices of physicians	0	35,899	42,190	62,732
Offices of dentists	0	5,758	7,145	11,142
Offices of other health practitioners	0	9,137	8,540	11,869
Outpatient care centers	0	7,388	7,802	16,425
Medical and diagnostic laboratories	0	1,473	2,199	3,647
Home health care services	0	9,911	7,139	9,880
Other ambulatory health care services	0	2,670	2,949	5,131
Hospitals	1	70,912	78,078	151,739
Nursing and community care facilities	0	10,086	10,354	17,232
Residential mental retardation, mental health, substance abuse and other facilities	0	4,540	4,636	7,210

## APPENDIX

Individual and family services	0	10,237	9,393	14,560
Child day care services	0	3,275	3,934	5,477
Community food, housing, and other relief services, including rehabilitation services	0	2,623	2,946	7,004
Performing arts companies	0	425	774	1,616
Commercial Sports Except Racing	0	713	941	2,581
Racing and Track Operation	0	63	103	245
Independent artists, writers, and performers	0	1,117	1,449	2,070
Promoters of performing arts and sports and agents for public figures	0	269	733	1,964
Museums, historical sites, zoos, and parks	0	225	288	523
Amusement parks and arcades	0	72	121	214
Gambling industries (except casino hotels)	0	1,309	2,856	5,663
Other amusement and recreation industries	0	1,043	1,203	2,260
Fitness and recreational sports centers	0	688	936	1,689
Bowling centers	0	149	212	417
Hotels and motels, including casino hotels	0	750	1,373	2,274
Other accommodations	0	134	183	268
Full-service restaurants	1	12,718	18,908	35,255
Limited-service restaurants	1	10,799	17,035	38,018
All other food and drinking places	0	9,539	13,556	20,375
Automotive repair and maintenance, except car washes	0	6,543	8,175	12,412
Car washes	0	3,021	4,886	7,416
Electronic and precision equipment repair and maintenance	0	1,781	2,435	4,439
Commercial and industrial machinery and equipment repair and maintenance	0	4,109	4,099	6,839
Personal and household goods repair and maintenance	0	2,962	2,553	3,265
Personal care services	0	3,681	2,561	3,632
Death care services	0	442	531	901
Dry-cleaning and laundry services	0	939	1,020	1,479
Other personal services	0	3,518	2,896	4,160
Religious organizations	0	11,941	3,756	24,930
Grantmaking, giving, and social advocacy organizations	0	2,894	6,725	12,550

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Business and professional associations	0	1,821	2,386	4,464
Labor and civic organizations	0	2,694	5,214	11,636
Private households	0	1,103	1,103	1,103
Postal service	0	5,561	5,565	6,203
Federal electric utilities	0	0	0	0
Other federal government enterprises	0	181	103	380
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	947	1,300	2,436
Local government passenger transit	0	2,654	2,006	4,162
Local government electric utilities	0	0	0	0
Other local government enterprises	0	7,232	19,688	35,312
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	0	0	0	0

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### 51. Wisconsin

**Table 469: Detailed NASA Impacts by Types of Impact, Wisconsin.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	<i>252</i>	<i>16,299,739</i>	<i>24,992,025</i>	<i>49,888,504</i>
Oilseed farming	0	8,029	26,166	50,881
Grain farming	1	13,183	33,336	117,602
Vegetable and melon farming	0	7,181	10,654	23,035
Fruit farming	0	2,244	3,711	6,975
Tree nut farming	0	31	32	35
Greenhouse, nursery, and floriculture production	0	3,935	4,987	8,866
Tobacco farming	0	36	34	56
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	2,126	2,538	4,646
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	1	3,502	12,812	55,235
Dairy cattle and milk production	0	5,352	10,533	70,745
Poultry and egg production	0	1,147	1,583	15,140
Animal production, except cattle and poultry and eggs	0	4,676	15,710	25,872
Forestry, forest products, and timber tract production	0	524	582	741
Commercial logging	0	4,862	4,824	8,001
Commercial fishing	0	(73)	248	273
Commercial hunting and trapping	0	207	(230)	545
Support activities for agriculture and forestry	0	21,750	16,542	20,162
Oil and gas extraction	0	173	232	3,868
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	1,489	6,494	9,496
Sand and gravel mining	0	2,260	4,994	6,831

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Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	540	1,108	1,436
Drilling oil and gas wells	0	0	0	2
Support activities for oil and gas operations	0	2	2	42
Metal mining services	0	1	2	31
Other nonmetallic minerals services	0	1	1	7
Electric power generation - Hydroelectric	0	1,100	2,410	4,693
Electric power generation - Fossil fuel	0	22,043	88,486	219,593
Electric power generation - Nuclear	0	6,651	15,539	33,573
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	2,308	3,876	9,742
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	2,079	3,631	6,907
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	39,527	148,414	357,752
Natural gas distribution	0	10,415	26,309	57,782
Water, sewage and other systems	0	3,240	5,611	8,369
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0



## APPENDIX

Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	1	66,900	86,779	204,047
Maintenance and repair construction of residential structures	0	19,895	28,328	67,952
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	64	42	96
Dog and cat food manufacturing	0	2,147	8,961	34,508
Other animal food manufacturing	0	3,484	5,729	41,592
Flour milling	0	796	1,620	10,076
Rice milling	0	0	0	0
Malt manufacturing	0	1,076	2,531	13,461
Wet corn milling	0	397	1,093	7,337
Soybean and other oilseed processing	0	129	722	7,201
Fats and oils refining and blending	0	10	18	193
Breakfast cereal manufacturing	0	399	1,087	3,664
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	710	1,061	3,585
Chocolate and confectionery manufacturing from cacao beans	0	1,002	2,367	9,565
Confectionery manufacturing from purchased chocolate	0	1,542	1,944	7,216
Frozen fruits, juices and vegetables manufacturing	0	2,880	5,506	22,169
Frozen specialties manufacturing	0	8,013	12,566	47,558
Canned fruits and vegetables manufacturing	0	7,284	13,462	49,382
Canned specialties	0	1,714	4,664	18,299
Dehydrated food products manufacturing	0	347	608	2,228
Cheese manufacturing	0	20,965	31,448	288,231

## APPENDIX

Dry, condensed, and evaporated dairy product manufacturing	0	3,612	9,625	66,882
Fluid milk manufacturing	0	1,143	1,898	12,784
Creamery butter manufacturing	0	592	2,707	13,684
Ice cream and frozen dessert manufacturing	0	448	705	3,285
Frozen cakes and other pastries manufacturing	0	1,711	2,337	4,681
Poultry processing	0	8,729	11,873	46,956
Animal, except poultry, slaughtering	0	8,295	11,670	93,802
Meat processed from carcasses	0	13,145	14,102	99,450
Rendering and meat byproduct processing	0	249	265	1,157
Seafood product preparation and packaging	0	3,266	3,223	6,745
Bread and bakery product, except frozen, manufacturing	0	10,902	13,515	30,146
Cookie and cracker manufacturing	0	1,304	1,703	5,026
Dry pasta, mixes, and dough manufacturing	0	538	1,352	5,684
Tortilla manufacturing	0	688	858	3,079
Roasted nuts and peanut butter manufacturing	0	966	1,746	5,795
Other snack food manufacturing	0	2,018	4,530	16,241
Coffee and tea manufacturing	0	1,770	3,081	15,852
Flavoring syrup and concentrate manufacturing	0	190	693	1,972
Mayonnaise, dressing, and sauce manufacturing	0	1,047	2,029	7,696
Spice and extract manufacturing	0	2,349	3,524	14,703
All other food manufacturing	0	4,584	6,163	22,560
Bottled and canned soft drinks & water	0	2,122	4,578	22,761
Manufactured ice	0	275	157	847
Breweries	0	5,395	14,578	39,201
Wineries	0	132	232	1,256
Distilleries	0	319	2,003	5,697
Tobacco product manufacturing	0	95	1,980	4,612
Fiber, yarn, and thread mills	0	75	110	526
Broadwoven fabric mills	0	456	652	1,849
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	2,798	4,837	14,267
Knit fabric mills	0	246	324	826

## APPENDIX

Textile and fabric finishing mills	0	14	16	98
Fabric coating mills	0	157	202	866
Carpet and rug mills	0	179	301	1,227
Curtain and linen mills	0	72	103	396
Textile bag and canvas mills	0	480	590	1,518
Rope, cordage, twine, tire cord and tire fabric mills	0	31	49	150
Other textile product mills	0	689	843	2,273
Hosiery and sock mills	0	129	121	289
Other apparel knitting mills	0	20	29	118
Cut and sew apparel contractors	0	60	74	232
Mens and boys cut and sew apparel manufacturing	0	80	85	405
Womens and girls cut and sew apparel manufacturing	0	14	20	205
Other cut and sew apparel manufacturing	0	84	90	349
Apparel accessories and other apparel manufacturing	0	22	27	139
Leather and hide tanning and finishing	0	195	201	876
Footwear manufacturing	0	443	455	1,443
Other leather and allied product manufacturing	0	27	27	105
Sawmills	0	2,016	3,394	13,770
Wood preservation	0	268	1,096	2,814
Veneer and plywood manufacturing	0	1,045	1,796	5,988
Engineered wood member and truss manufacturing	0	430	662	1,895
Reconstituted wood product manufacturing	0	626	2,007	5,825
Wood windows and door manufacturing	0	5,370	8,419	21,849
Cut stock, resawing lumber, and planing	0	520	1,103	2,680
Other millwork, including flooring	0	1,718	2,877	7,803
Wood container and pallet manufacturing	0	2,606	3,346	9,222
Manufactured home (mobile home) manufacturing	0	1	1	3
Prefabricated wood building manufacturing	0	439	538	1,540
All other miscellaneous wood product manufacturing	0	1,219	1,719	4,918

## APPENDIX

Pulp mills	0	115	151	622
Paper mills	0	27,287	54,321	219,005
Paperboard mills	0	1,616	3,379	14,911
Paperboard container manufacturing	0	9,550	13,078	56,441
Paper bag and coated and treated paper manufacturing	0	13,413	20,820	71,531
Stationery product manufacturing	0	970	1,255	4,930
Sanitary paper product manufacturing	0	8,092	19,549	66,059
All other converted paper product manufacturing	0	4,394	5,811	18,355
Printing	1	83,358	120,180	227,421
Support activities for printing	0	2,537	3,591	5,118
Petroleum refineries	0	1,087	19,074	59,858
Asphalt paving mixture and block manufacturing	0	163	390	1,718
Asphalt shingle and coating materials manufacturing	0	14	71	264
Petroleum lubricating oil and grease manufacturing	0	292	2,184	4,240
All other petroleum and coal products manufacturing	0	463	2,650	5,702
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	940	2,011	7,557
Synthetic dye and pigment manufacturing	0	449	793	2,712
Other basic inorganic chemical manufacturing	0	758	1,439	4,884
Other basic organic chemical manufacturing	0	3,821	7,195	59,898
Plastics material and resin manufacturing	0	751	1,195	9,777
Synthetic rubber manufacturing	0	100	142	710
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	224	402	1,407
Phosphatic fertilizer manufacturing	0	18	39	162
Fertilizer mixing	0	555	774	2,646
Pesticide and other agricultural chemical manufacturing	0	1,561	4,579	23,794
Medicinal and botanical manufacturing	0	382	583	1,949

## APPENDIX

Pharmaceutical preparation manufacturing	0	1,898	6,236	23,064
In-vitro diagnostic substance manufacturing	0	310	442	1,113
Biological product (except diagnostic) manufacturing	0	1,818	3,840	9,341
Paint and coating manufacturing	0	2,630	4,452	17,161
Adhesive manufacturing	0	471	685	2,639
Soap and other detergent manufacturing	0	426	806	3,323
Polish and other sanitation good manufacturing	0	13,244	22,421	57,589
Surface active agent manufacturing	0	673	1,761	4,319
Toilet preparation manufacturing	0	410	642	2,521
Printing ink manufacturing	0	1,325	1,393	4,349
Explosives manufacturing	0	77	88	300
Custom compounding of purchased resins	0	474	758	3,155
Photographic film and chemical manufacturing	0	654	1,138	4,863
Other miscellaneous chemical product manufacturing	0	1,414	1,961	8,379
Plastics packaging materials and unlaminated film and sheet manufacturing	0	6,639	11,045	36,615
Unlaminated plastics profile shape manufacturing	0	1,365	3,038	9,219
Plastics pipe and pipe fitting manufacturing	0	203	486	1,503
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	236	430	1,208
Polystyrene foam product manufacturing	0	655	1,113	4,030
Urethane and other foam product (except polystyrene) manufacturing	0	802	1,307	4,842
Plastics bottle manufacturing	0	441	745	2,945
Other plastics product manufacturing	0	22,026	32,896	103,813
Tire manufacturing	0	104	142	507
Rubber and plastics hoses and belting manufacturing	0	678	1,097	2,589
Other rubber product manufacturing	0	6,385	9,551	33,741

## APPENDIX

Pottery, ceramics, and plumbing fixture manufacturing	0	92	157	602
Brick, tile, and other structural clay product manufacturing	0	61	168	397
Flat glass manufacturing	0	376	1,239	2,381
Other pressed and blown glass and glassware manufacturing	0	23	48	217
Glass container manufacturing	0	637	1,654	3,562
Glass product manufacturing made of purchased glass	0	2,727	6,720	13,673
Cement manufacturing	0	16	66	156
Ready-mix concrete manufacturing	0	3,296	8,175	21,418
Concrete block and brick manufacturing	0	314	902	2,107
Concrete pipe manufacturing	0	112	269	652
Other concrete product manufacturing	0	1,442	2,885	5,967
Lime manufacturing	0	437	1,806	3,516
Gypsum product manufacturing	0	295	1,352	2,717
Abrasive product manufacturing	0	807	4,489	6,303
Cut stone and stone product manufacturing	0	997	1,363	2,848
Ground or treated mineral and earth manufacturing	0	507	2,647	3,956
Mineral wool manufacturing	0	475	1,915	3,868
Miscellaneous nonmetallic mineral products manufacturing	0	99	421	799
Iron and steel mills and ferroalloy manufacturing	0	13,813	23,269	116,094
Iron, steel pipe and tube manufacturing from purchased steel	0	520	778	2,823
Rolled steel shape manufacturing	0	386	781	2,345
Steel wire drawing	0	294	437	1,343
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	81	144	1,256
Aluminum sheet, plate, and foil manufacturing	0	411	789	3,318
Other aluminum rolling, drawing and extruding	0	201	291	1,379
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0

## APPENDIX

Copper rolling, drawing, extruding and alloying	0	516	744	5,449
Nonferrous metal, except copper and aluminum, shaping	0	256	340	1,214
Secondary processing of other nonferrous metals	0	1	4	27
Ferrous metal foundries	0	4,130	7,218	14,908
Nonferrous metal foundries	0	3,582	5,372	11,543
Custom roll forming	0	81	111	535
Crown and closure manufacturing and metal stamping	0	2,922	3,894	11,426
Iron and steel forging	0	1,887	2,413	7,362
Nonferrous forging	0	367	439	1,546
Cutlery, utensil, pot, and pan manufacturing	0	4,936	12,317	26,097
Handtool manufacturing	0	1,769	2,612	4,521
Prefabricated metal buildings and components manufacturing	0	621	821	2,364
Fabricated structural metal manufacturing	0	1,663	2,268	6,823
Plate work manufacturing	0	1,866	1,916	5,255
Metal window and door manufacturing	0	1,794	2,536	6,677
Sheet metal work manufacturing	0	4,940	6,004	14,933
Ornamental and architectural metal work manufacturing	0	1,574	1,949	4,840
Power boiler and heat exchanger manufacturing	0	195	250	667
Metal tank (heavy gauge) manufacturing	0	521	611	1,857
Metal cans manufacturing	0	1,224	2,405	11,607
Metal barrels, drums and pails manufacturing	0	469	558	2,113
Hardware manufacturing	0	1,686	2,531	7,013
Spring and wire product manufacturing	0	803	1,022	2,873
Machine shops	0	13,323	14,836	29,275
Turned product and screw, nut, and bolt manufacturing	0	2,184	2,837	7,908
Metal heat treating	0	1,006	1,428	3,551
Metal coating and nonprecious engraving	0	2,673	4,177	10,488
Electroplating, anodizing, and coloring metal	0	1,663	1,810	4,194

## APPENDIX

Valve and fittings, other than plumbing, manufacturing	0	694	1,025	3,062
Plumbing fixture fitting and trim manufacturing	0	689	1,804	5,160
Ball and roller bearing manufacturing	0	547	910	2,457
Small arms ammunition manufacturing	0	1,297	2,695	5,759
Ammunition, except for small arms, manufacturing	0	61	73	183
Small arms, ordnance, and accessories manufacturing	0	451	929	2,473
Fabricated pipe and pipe fitting manufacturing	0	814	915	2,364
Other fabricated metal manufacturing	0	8,595	10,662	26,415
Farm machinery and equipment manufacturing	0	703	1,024	3,950
Lawn and garden equipment manufacturing	0	1,571	2,825	10,639
Construction machinery manufacturing	0	165	329	910
Mining machinery and equipment manufacturing	0	71	87	218
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	80	98	298
Sawmill, woodworking, and paper machinery	0	1,958	2,153	5,707
Printing machinery and equipment manufacturing	0	342	387	959
All other industrial machinery manufacturing	0	54	69	184
Optical instrument and lens manufacturing	0	2	3	8
Photographic and photocopying equipment manufacturing	0	14	22	89
Other commercial service industry machinery manufacturing	0	574	1,072	3,077
Air purification and ventilation equipment manufacturing	1	52,186	78,646	193,462



## APPENDIX

Heating equipment (except warm air furnaces) manufacturing	0	190	293	877
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	1,557	2,915	8,175
Industrial mold manufacturing	0	419	481	882
Special tool, die, jig, and fixture manufacturing	0	455	592	1,099
Cutting tool and machine tool accessory manufacturing	0	269	296	691
Machine tool manufacturing	0	83	93	245
Rolling mill and other metalworking machinery manufacturing	0	9,050	12,058	28,927
Turbine and turbine generator set units manufacturing	0	46	63	219
Speed changer, industrial high-speed drive, and gear manufacturing	0	3,457	5,077	13,458
Mechanical power transmission equipment manufacturing	0	1,651	2,440	5,807
Other engine equipment manufacturing	0	4,407	8,264	36,098
Pump and pumping equipment manufacturing	0	170	299	819
Air and gas compressor manufacturing	0	7	11	42
Elevator and moving stairway manufacturing	0	29	45	169
Conveyor and conveying equipment manufacturing	0	139	145	427
Overhead cranes, hoists, and monorail systems manufacturing	0	16	32	99
Industrial truck, trailer, and stacker manufacturing	0	31	50	154
Power-driven handtool manufacturing	0	420	1,062	1,968
Welding and soldering equipment manufacturing	0	183	240	649
Packaging machinery manufacturing	0	93	141	342
Industrial process furnace and oven manufacturing	0	42	52	122
Fluid power cylinder and actuator manufacturing	0	394	548	1,526

## APPENDIX

Fluid power pump and motor manufacturing	0	145	224	716
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	281	363	1,060
Electronic computer manufacturing	0	70	158	720
Computer storage device manufacturing	0	66	195	1,142
Computer terminals and other computer peripheral equipment manufacturing	0	103	202	792
Telephone apparatus manufacturing	0	80	155	749
Broadcast and wireless communications equipment manufacturing	0	16	24	77
Other communications equipment manufacturing	0	108	176	478
Audio and video equipment manufacturing	0	19	37	250
Printed circuit assembly (electronic assembly) manufacturing	0	3,224	5,000	19,118
Bare printed circuit board manufacturing	0	1,240	1,639	4,886
Semiconductor and related device manufacturing	0	37	65	188
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	432	617	1,400
Electronic connector manufacturing	0	174	265	721
Other electronic component manufacturing	0	2,499	2,890	10,349
Electromedical and electrotherapeutic apparatus manufacturing	0	99	210	440
Search, detection, and navigation instruments manufacturing	3	375,889	608,809	1,159,458
Automatic environmental control manufacturing	0	405	543	1,284
Industrial process variable instruments manufacturing	0	560	831	2,133
Totalizing fluid meter and counting device manufacturing	0	588	1,276	2,695

## APPENDIX

Electricity and signal testing instruments manufacturing	0	119	180	872
Analytical laboratory instrument manufacturing	0	34,165	61,142	128,943
Irradiation apparatus manufacturing	0	1,078	2,146	4,253
Watch, clock, and other measuring and controlling device manufacturing	0	51	90	221
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	242	363	1,031
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	2,061	3,258	7,445
Small electrical appliance manufacturing	0	1,053	2,297	5,441
Household cooking appliance manufacturing	0	1,080	2,681	5,946
Household refrigerator and home freezer manufacturing	0	1,099	3,308	6,922
Household laundry equipment manufacturing	0	2,140	4,765	14,613
Other major household appliance manufacturing	0	386	1,063	2,147
Power, distribution, and specialty transformer manufacturing	0	278	434	1,051
Motor and generator manufacturing	0	3,587	5,884	16,219
Switchgear and switchboard apparatus manufacturing	0	686	1,209	3,167
Relay and industrial control manufacturing	0	14,728	20,295	40,109
Storage battery manufacturing	0	486	817	2,176
Primary battery manufacturing	0	3,178	8,273	20,030
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	163	310	1,275
Wiring device manufacturing	0	792	1,680	5,072
Carbon and graphite product manufacturing	0	589	885	2,836
All other miscellaneous electrical equipment and component manufacturing	0	50	58	173

## APPENDIX

Automobile manufacturing	0	(40)	44	259
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	123	408	1,481
Motor vehicle body manufacturing	0	993	1,613	4,992
Truck trailer manufacturing	0	12	20	90
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	36	256	6,258
Motor vehicle gasoline engine and engine parts manufacturing	0	1,366	2,896	15,101
Motor vehicle electrical and electronic equipment manufacturing	0	1,003	3,112	20,865
Motor vehicle transmission and power train parts manufacturing	0	2,294	4,592	14,173
Motor vehicle seating and interior trim manufacturing	0	106	200	1,101
Motor vehicle metal stamping	0	429	1,168	8,737
Other motor vehicle parts manufacturing	0	3,953	9,320	32,844
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	731	1,677	5,728
Aircraft manufacturing	0	13	31	93
Aircraft engine and engine parts manufacturing	0	31	82	203
Other aircraft parts and auxiliary equipment manufacturing	0	9	14	39
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	53	87	376
Ship building and repairing	0	298	390	969
Boat building	0	3,576	5,078	18,783
Motorcycle, bicycle, and parts manufacturing	0	2,266	8,560	15,551
Military armored vehicle, tank, and tank component manufacturing	0	441	1,078	3,436
All other transportation equipment manufacturing	0	514	1,049	4,477

## APPENDIX

Wood kitchen cabinet and countertop manufacturing	0	1,842	2,495	5,891
Upholstered household furniture manufacturing	0	3,267	4,284	11,643
Nonupholstered wood household furniture manufacturing	0	389	435	1,280
Other household nonupholstered furniture manufacturing	0	451	660	1,862
Institutional furniture manufacturing	0	254	275	797
Wood office furniture manufacturing	0	196	268	779
Custom architectural woodwork and millwork	0	25	24	75
Office furniture, except wood, manufacturing	0	25,263	40,464	107,276
Showcase, partition, shelving, and locker manufacturing	0	928	1,249	3,301
Mattress manufacturing	0	439	865	3,093
Blind and shade manufacturing	0	96	100	371
Surgical and medical instrument manufacturing	0	854	1,630	4,480
Surgical appliance and supplies manufacturing	0	837	1,590	4,279
Dental equipment and supplies manufacturing	0	126	209	570
Ophthalmic goods manufacturing	0	130	256	620
Dental laboratories	0	680	649	1,164
Jewelry and silverware manufacturing	0	532	751	2,035
Sporting and athletic goods manufacturing	0	1,180	1,584	5,239
Doll, toy, and game manufacturing	0	346	499	1,773
Office supplies (except paper) manufacturing	0	316	410	1,188
Sign manufacturing	0	5,543	4,564	9,160
Gasket, packing, and sealing device manufacturing	0	440	542	1,474
Musical instrument manufacturing	0	163	166	433
Fasteners, buttons, needles, and pins manufacturing	0	35	43	115
Broom, brush, and mop manufacturing	0	918	1,322	3,451
Burial casket manufacturing	0	49	55	214

## APPENDIX

All other miscellaneous manufacturing	0	2,140	2,551	5,938
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	11,338	27,371	60,910
Wholesale - Professional and commercial equipment and supplies	1	58,170	102,954	182,812
Wholesale - Household appliances and electrical and electronic goods	0	27,766	62,922	132,530
Wholesale - Machinery, equipment, and supplies	0	31,633	56,060	98,418
Wholesale - Other durable goods merchant wholesalers	1	50,315	80,712	156,688
Wholesale - Drugs and druggists' sundries	0	15,989	45,560	92,255
Wholesale - Grocery and related product wholesalers	1	35,930	49,887	98,636
Wholesale - Petroleum and petroleum products	0	6,151	86,646	99,815
Wholesale - Other nondurable goods merchant wholesalers	1	78,137	155,879	284,511
Wholesale - Wholesale electronic markets and agents and brokers	1	53,192	26,893	31,241
Retail - Motor vehicle and parts dealers	1	39,976	58,424	88,880
Retail - Furniture and home furnishings stores	0	19,137	24,497	41,180
Retail - Electronics and appliance stores	0	21,715	21,412	38,647
Retail - Building material and garden equipment and supplies stores	1	26,622	44,546	68,891
Retail - Food and beverage stores	2	66,946	88,251	154,071
Retail - Health and personal care stores	1	39,197	45,881	73,243
Retail - Gasoline stores	1	20,993	36,430	76,313
Retail - Clothing and clothing accessories stores	1	20,091	30,044	68,237
Retail - Sporting goods, hobby, musical instrument and book stores	1	17,482	22,487	38,954
Retail - General merchandise stores	2	74,888	99,962	167,539
Retail - Miscellaneous store retailers	1	29,658	34,272	61,879

## APPENDIX

Retail - Nonstore retailers	2	61,014	144,880	267,217
Air transportation	0	11,889	34,322	51,250
Rail transportation	0	9,831	24,618	42,315
Water transportation	0	870	1,440	10,679
Truck transportation	1	107,129	126,009	253,600
Transit and ground passenger transportation	1	33,607	68,350	82,476
Pipeline transportation	0	4,026	11,828	14,827
Scenic and sightseeing transportation and support activities for transportation	1	49,025	55,482	124,433
Couriers and messengers	1	23,733	30,471	58,003
Warehousing and storage	1	52,732	59,760	120,003
Newspaper publishers	0	15,072	22,375	32,080
Periodical publishers	0	16,464	23,122	40,939
Book publishers	0	10,225	29,203	52,530
Directory, mailing list, and other publishers	0	9,948	26,643	45,456
Greeting card publishing	0	947	3,143	4,365
Software publishers	1	200,558	453,813	535,239
Motion picture and video industries	0	8,765	13,059	44,686
Sound recording industries	0	3,539	11,786	18,301
Radio and television broadcasting	0	44,265	35,746	139,452
Cable and other subscription programming	0	699	3,611	10,586
Wired telecommunications carriers	0	36,120	108,620	209,025
Wireless telecommunications carriers (except satellite)	0	8,044	52,092	128,274
Satellite, telecommunications resellers, and all other telecommunications	0	9,082	14,174	31,849
Data processing, hosting, and related services	1	72,091	159,831	323,957
News syndicates, libraries, archives and all other information services	0	1,792	2,507	4,446
Internet publishing and broadcasting and web search portals	0	17,384	43,909	141,429
Nondepository credit intermediation and related activities	1	49,104	63,933	116,166
Securities and commodity contracts intermediation and brokerage	1	103,034	100,057	212,355

## APPENDIX

Monetary authorities and depository credit intermediation	3	238,599	514,553	995,739
Other financial investment activities	2	90,837	100,701	248,835
Direct life insurance carriers	0	42,497	104,537	135,544
Insurance carriers, except direct life	1	87,815	408,656	737,087
Insurance agencies, brokerages, and related activities	3	171,685	326,319	705,157
Funds, trusts, and other financial vehicles	0	15,165	16,908	117,569
Other real estate	12	265,540	778,009	2,118,925
Tenant-occupied housing	1	19,028	296,177	330,392
Owner-occupied dwellings	0	0	854,852	1,080,095
Automotive equipment rental and leasing	0	10,594	35,274	59,542
General and consumer goods rental except video tapes and discs	0	9,968	15,105	26,521
Video tape and disc rental	0	3,537	5,860	10,008
Commercial and industrial machinery and equipment rental and leasing	0	14,895	37,240	72,826
Lessors of nonfinancial intangible assets	0	3,363	60,596	80,549
Legal services	3	283,649	486,241	693,019
Accounting, tax preparation, bookkeeping, and payroll services	1	94,849	124,713	177,996
Architectural, engineering, and related services	2	154,182	180,681	331,604
Specialized design services	1	38,509	40,705	50,828
Custom computer programming services	1	72,851	88,563	130,300
Computer systems design services	1	53,546	59,425	80,101
Other computer related services, including facilities management	0	17,054	34,078	58,861
Management consulting services	3	272,386	269,543	430,368
Environmental and other technical consulting services	1	41,122	35,388	54,472
Scientific research and development services	64	4,902,522	7,013,017	15,085,254
Advertising, public relations, and related services	1	86,430	117,352	207,979
Photographic services	0	18,703	6,966	14,258
Veterinary services	0	11,948	16,632	26,455



## APPENDIX

Marketing research and all other miscellaneous professional, scientific, and technical services	3	178,758	165,039	248,760
Management of companies and enterprises	6	777,825	914,180	1,320,297
Office administrative services	1	65,877	20,680	56,396
Facilities support services	0	3,694	4,738	10,862
Employment services	9	327,580	502,375	822,500
Business support services	2	104,565	89,191	158,455
Travel arrangement and reservation services	0	21,169	28,106	62,051
Investigation and security services	1	19,561	20,062	30,008
Services to buildings	3	68,571	71,421	117,758
Landscape and horticultural services	4	155,407	163,602	260,151
Other support services	1	38,950	49,180	100,027
Waste management and remediation services	0	24,720	46,955	82,290
Elementary and secondary schools	0	16,567	13,663	17,098
Junior colleges, colleges, universities, and professional schools	1	68,582	85,442	121,090
Other educational services	1	24,560	22,138	48,664
Offices of physicians	2	309,185	368,792	505,094
Offices of dentists	1	65,078	82,932	120,803
Offices of other health practitioners	1	59,440	55,710	79,351
Outpatient care centers	1	64,629	68,673	119,362
Medical and diagnostic laboratories	0	18,340	28,459	41,515
Home health care services	1	45,265	33,623	45,976
Other ambulatory health care services	0	15,108	16,875	30,319
Hospitals	6	442,280	521,491	999,823
Nursing and community care facilities	2	83,989	88,453	158,444
Residential mental retardation, mental health, substance abuse and other facilities	1	32,272	33,159	51,526
Individual and family services	3	82,433	78,315	118,464
Child day care services	1	30,422	38,192	51,678
Community food, housing, and other relief services, including rehabilitation services	1	22,567	25,950	58,705
Performing arts companies	0	5,017	10,124	21,777

## APPENDIX

Commercial Sports Except Racing	0	28,038	29,483	39,777
Racing and Track Operation	0	1,243	2,392	6,676
Independent artists, writers, and performers	1	5,742	10,291	19,280
Promoters of performing arts and sports and agents for public figures	0	4,404	14,427	34,962
Museums, historical sites, zoos, and parks	0	3,570	4,535	8,377
Amusement parks and arcades	0	1,107	5,116	6,258
Gambling industries (except casino hotels)	0	9,498	18,273	34,997
Other amusement and recreation industries	1	15,186	18,627	35,876
Fitness and recreational sports centers	1	8,149	16,329	25,380
Bowling centers	0	1,698	2,681	5,736
Hotels and motels, including casino hotels	0	14,746	25,249	44,107
Other accommodations	0	5,308	6,814	9,495
Full-service restaurants	5	105,410	158,028	305,251
Limited-service restaurants	4	72,764	115,978	268,560
All other food and drinking places	4	90,470	116,690	195,517
Automotive repair and maintenance, except car washes	2	86,024	101,737	155,083
Car washes	1	42,944	63,555	98,590
Electronic and precision equipment repair and maintenance	0	30,235	44,818	72,904
Commercial and industrial machinery and equipment repair and maintenance	0	32,769	40,610	62,253
Personal and household goods repair and maintenance	1	26,634	26,279	33,294
Personal care services	1	43,470	32,624	43,402
Death care services	0	4,365	5,663	8,746
Dry-cleaning and laundry services	0	10,632	11,907	16,750
Other personal services	1	35,838	32,435	43,026
Religious organizations	3	127,405	65,434	243,288
Grantmaking, giving, and social advocacy organizations	0	19,383	60,338	96,923
Business and professional associations	0	23,867	37,374	66,331
Labor and civic organizations	1	17,013	44,171	92,311
Private households	0	6,804	6,804	6,804
Postal service	1	47,886	47,952	53,301
Federal electric utilities	0	0	0	0

## APPENDIX

Other federal government enterprises	3	243,885	(597,951)	149,866
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	7,356	(1,712)	7,276
Local government electric utilities	0	3,887	11,582	20,986
Other local government enterprises	1	56,549	129,950	257,069
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	17	1,827,751	3,327,447	5,734,235

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 470: Detailed M2M Program Impacts by Types of Impact, Wisconsin.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	33	2,325,227	2,153,112	6,218,782
Oilseed farming	0	1,001	4,859	10,904
Grain farming	0	1,937	5,472	17,786
Vegetable and melon farming	0	1,093	1,703	3,472
Fruit farming	0	608	1,018	1,830
Tree nut farming	0	9	9	10

## APPENDIX

Greenhouse, nursery, and floriculture production	0	1,045	1,377	2,395
Tobacco farming	0	7	8	13
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	0	0	0
All other crop farming	0	259	322	573
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	516	1,833	7,193
Dairy cattle and milk production	0	1,608	3,239	19,253
Poultry and egg production	0	158	222	2,084
Animal production, except cattle and poultry and eggs	0	357	1,330	2,247
Forestry, forest products, and timber tract production	0	58	65	79
Commercial logging	0	686	678	1,043
Commercial fishing	0	(20)	51	56
Commercial hunting and trapping	0	50	(55)	113
Support activities for agriculture and forestry	0	2,236	1,684	2,047
Oil and gas extraction	0	39	70	1,098
Coal mining	0	0	0	0
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	0	0	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	251	558	834
Sand and gravel mining	0	417	463	529
Other clay, ceramic, refractory minerals mining	0	0	0	0
Potash, soda, and borate mineral mining	0	0	0	0
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	0	0	0
Other nonmetallic minerals	0	61	69	84
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	0	0	2
Metal mining services	0	0	0	2

## APPENDIX

Other nonmetallic minerals services	0	0	0	0
Electric power generation - Hydroelectric	0	413	797	1,426
Electric power generation - Fossil fuel	0	5,379	19,972	48,242
Electric power generation - Nuclear	0	1,456	3,393	7,226
Electric power generation - Solar	0	0	0	0
Electric power generation - Wind	0	511	818	1,917
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	1,010	1,321	2,422
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	8,608	31,977	75,578
Natural gas distribution	0	2,972	7,789	14,838
Water, sewage and other systems	0	1,125	1,485	1,975
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	6,556	8,541	19,501

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Maintenance and repair construction of residential structures	0	2,799	4,012	9,309
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	8	5	12
Dog and cat food manufacturing	0	260	1,125	4,154
Other animal food manufacturing	0	477	822	5,668
Flour milling	0	266	546	3,409
Rice milling	0	0	0	0
Malt manufacturing	0	443	997	5,535
Wet corn milling	0	78	235	1,584
Soybean and other oilseed processing	0	27	155	1,517
Fats and oils refining and blending	0	2	4	40
Breakfast cereal manufacturing	0	48	129	433
Beet sugar manufacturing	0	0	0	0
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	149	220	682
Chocolate and confectionery manufacturing from cacao beans	0	326	775	2,888
Confectionery manufacturing from purchased chocolate	0	279	355	1,220
Frozen fruits, juices and vegetables manufacturing	0	1,304	2,470	9,047
Frozen specialties manufacturing	0	3,006	4,705	16,954
Canned fruits and vegetables manufacturing	0	3,785	7,065	25,117
Canned specialties	0	619	1,704	6,322
Dehydrated food products manufacturing	0	193	337	1,152
Cheese manufacturing	0	7,874	11,838	107,614
Dry, condensed, and evaporated dairy product manufacturing	0	1,290	3,462	21,677
Fluid milk manufacturing	0	244	414	2,686
Creamery butter manufacturing	0	153	670	3,241
Ice cream and frozen dessert manufacturing	0	192	312	1,309
Frozen cakes and other pastries manufacturing	0	335	451	883
Poultry processing	0	1,624	2,319	8,731
Animal, except poultry, slaughtering	0	1,963	2,796	22,016
Meat processed from carcasses	0	1,856	2,021	13,791

## APPENDIX

Rendering and meat byproduct processing	0	50	53	230
Seafood product preparation and packaging	0	841	855	1,625
Bread and bakery product, except frozen, manufacturing	0	2,032	2,524	5,515
Cookie and cracker manufacturing	0	224	311	835
Dry pasta, mixes, and dough manufacturing	0	100	245	1,060
Tortilla manufacturing	0	103	127	447
Roasted nuts and peanut butter manufacturing	0	185	373	1,076
Other snack food manufacturing	0	334	753	2,598
Coffee and tea manufacturing	0	784	1,342	7,077
Flavoring syrup and concentrate manufacturing	0	45	156	456
Mayonnaise, dressing, and sauce manufacturing	0	476	908	3,283
Spice and extract manufacturing	0	1,087	1,669	6,357
All other food manufacturing	0	1,212	1,636	5,679
Bottled and canned soft drinks & water	0	366	820	3,905
Manufactured ice	0	48	30	134
Breweries	0	1,531	4,209	10,993
Wineries	0	39	69	367
Distilleries	0	76	495	1,277
Tobacco product manufacturing	0	12	340	690
Fiber, yarn, and thread mills	0	9	15	64
Broadwoven fabric mills	0	72	114	314
Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	345	632	1,694
Knit fabric mills	0	98	133	335
Textile and fabric finishing mills	0	5	6	33
Fabric coating mills	0	39	48	189
Carpet and rug mills	0	33	60	208
Curtain and linen mills	0	12	18	65
Textile bag and canvas mills	0	80	99	246
Rope, cordage, twine, tire cord and tire fabric mills	0	3	6	16
Other textile product mills	0	111	138	351
Hosiery and sock mills	0	20	20	42
Other apparel knitting mills	0	7	10	38
Cut and sew apparel contractors	0	37	46	135

## APPENDIX

Mens and boys cut and sew apparel manufacturing	0	19	20	82
Womens and girls cut and sew apparel manufacturing	0	4	6	51
Other cut and sew apparel manufacturing	0	21	22	76
Apparel accessories and other apparel manufacturing	0	5	6	28
Leather and hide tanning and finishing	0	28	30	124
Footwear manufacturing	0	72	76	226
Other leather and allied product manufacturing	0	6	6	21
Sawmills	0	247	436	1,673
Wood preservation	0	29	132	320
Veneer and plywood manufacturing	0	156	274	917
Engineered wood member and truss manufacturing	0	59	95	263
Reconstituted wood product manufacturing	0	78	266	795
Wood windows and door manufacturing	0	486	789	1,992
Cut stock, resawing lumber, and planing	0	70	159	358
Other millwork, including flooring	0	181	317	804
Wood container and pallet manufacturing	0	414	547	1,471
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	54	67	187
All other miscellaneous wood product manufacturing	0	196	288	743
Pulp mills	0	11	14	60
Paper mills	0	3,358	5,829	25,734
Paperboard mills	0	180	350	1,630
Paperboard container manufacturing	0	1,657	2,191	9,408
Paper bag and coated and treated paper manufacturing	0	1,914	2,704	9,621
Stationery product manufacturing	0	176	211	746
Sanitary paper product manufacturing	0	1,010	2,194	7,825



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All other converted paper product manufacturing	0	631	786	2,520
Printing	0	13,620	19,587	35,470
Support activities for printing	0	569	788	1,112
Petroleum refineries	0	267	4,197	13,399
Asphalt paving mixture and block manufacturing	0	19	44	180
Asphalt shingle and coating materials manufacturing	0	2	11	41
Petroleum lubricating oil and grease manufacturing	0	42	297	565
All other petroleum and coal products manufacturing	0	29	159	344
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	94	213	768
Synthetic dye and pigment manufacturing	0	57	102	377
Other basic inorganic chemical manufacturing	0	71	143	469
Other basic organic chemical manufacturing	0	478	909	7,841
Plastics material and resin manufacturing	0	85	137	1,173
Synthetic rubber manufacturing	0	6	9	45
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	65	125	393
Phosphatic fertilizer manufacturing	0	3	7	31
Fertilizer mixing	0	160	234	798
Pesticide and other agricultural chemical manufacturing	0	244	729	3,794
Medicinal and botanical manufacturing	0	84	140	395
Pharmaceutical preparation manufacturing	0	432	1,503	5,006
In-vitro diagnostic substance manufacturing	0	111	159	398
Biological product (except diagnostic) manufacturing	0	454	1,009	2,256
Paint and coating manufacturing	0	409	741	2,776
Adhesive manufacturing	0	76	121	429
Soap and other detergent manufacturing	0	49	114	388

## APPENDIX

Polish and other sanitation good manufacturing	0	1,647	3,252	6,879
Surface active agent manufacturing	0	51	155	344
Toilet preparation manufacturing	0	71	127	452
Printing ink manufacturing	0	292	311	950
Explosives manufacturing	0	8	10	33
Custom compounding of purchased resins	0	52	87	355
Photographic film and chemical manufacturing	0	54	102	397
Other miscellaneous chemical product manufacturing	0	157	231	994
Plastics packaging materials and unlaminated film and sheet manufacturing	0	1,154	1,899	6,169
Unlaminated plastics profile shape manufacturing	0	137	301	902
Plastics pipe and pipe fitting manufacturing	0	28	67	206
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	27	49	137
Polystyrene foam product manufacturing	0	87	146	526
Urethane and other foam product (except polystyrene) manufacturing	0	119	191	704
Plastics bottle manufacturing	0	100	167	647
Other plastics product manufacturing	0	3,753	5,585	16,699
Tire manufacturing	0	9	13	50
Rubber and plastics hoses and belting manufacturing	0	65	103	238
Other rubber product manufacturing	0	440	653	2,375
Pottery, ceramics, and plumbing fixture manufacturing	0	10	16	67
Brick, tile, and other structural clay product manufacturing	0	6	14	36
Flat glass manufacturing	0	32	100	202
Other pressed and blown glass and glassware manufacturing	0	2	4	20
Glass container manufacturing	0	143	347	782
Glass product manufacturing made of purchased glass	0	232	556	1,131

## APPENDIX

Cement manufacturing	0	2	6	15
Ready-mix concrete manufacturing	0	323	773	2,036
Concrete block and brick manufacturing	0	31	83	197
Concrete pipe manufacturing	0	12	27	67
Other concrete product manufacturing	0	174	337	702
Lime manufacturing	0	49	207	410
Gypsum product manufacturing	0	35	154	314
Abrasive product manufacturing	0	128	676	970
Cut stone and stone product manufacturing	0	94	128	264
Ground or treated mineral and earth manufacturing	0	50	255	394
Mineral wool manufacturing	0	72	271	552
Miscellaneous nonmetallic mineral products manufacturing	0	9	36	66
Iron and steel mills and ferroalloy manufacturing	0	49	74	390
Iron, steel pipe and tube manufacturing from purchased steel	0	75	100	361
Rolled steel shape manufacturing	0	42	78	258
Steel wire drawing	0	57	62	218
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	11	15	141
Aluminum sheet, plate, and foil manufacturing	0	61	104	488
Other aluminum rolling, drawing and extruding	0	45	57	288
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	26	36	257
Nonferrous metal, except copper and aluminum, shaping	0	22	27	105
Secondary processing of other nonferrous metals	0	0	0	1
Ferrous metal foundries	0	412	595	1,366
Nonferrous metal foundries	0	416	562	1,248
Custom roll forming	0	15	21	91
Crown and closure manufacturing and metal stamping	0	867	1,162	3,329

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Iron and steel forging	0	191	245	728
Nonferrous forging	0	42	51	170
Cutlery, utensil, pot, and pan manufacturing	0	1,027	2,743	5,500
Handtool manufacturing	0	381	566	980
Prefabricated metal buildings and components manufacturing	0	62	82	229
Fabricated structural metal manufacturing	0	136	186	553
Plate work manufacturing	0	209	215	569
Metal window and door manufacturing	0	202	287	738
Sheet metal work manufacturing	0	255	311	749
Ornamental and architectural metal work manufacturing	0	197	246	582
Power boiler and heat exchanger manufacturing	0	26	35	95
Metal tank (heavy gauge) manufacturing	0	55	65	192
Metal cans manufacturing	0	270	542	2,562
Metal barrels, drums and pails manufacturing	0	60	72	252
Hardware manufacturing	0	281	424	1,142
Spring and wire product manufacturing	0	137	174	477
Machine shops	0	1,568	1,751	3,382
Turned product and screw, nut, and bolt manufacturing	0	273	353	948
Metal heat treating	0	180	256	636
Metal coating and nonprecious engraving	0	344	539	1,354
Electroplating, anodizing, and coloring metal	0	243	265	602
Valve and fittings, other than plumbing, manufacturing	0	101	148	441
Plumbing fixture fitting and trim manufacturing	0	93	251	683
Ball and roller bearing manufacturing	0	369	613	1,590
Small arms ammunition manufacturing	0	105	217	469
Ammunition, except for small arms, manufacturing	0	8	9	23
Small arms, ordnance, and accessories manufacturing	0	67	136	338

## APPENDIX

Fabricated pipe and pipe fitting manufacturing	0	96	108	278
Other fabricated metal manufacturing	0	3,025	3,738	8,856
Farm machinery and equipment manufacturing	0	64	101	337
Lawn and garden equipment manufacturing	0	400	706	2,424
Construction machinery manufacturing	0	45	97	252
Mining machinery and equipment manufacturing	0	15	19	44
Oil and gas field machinery and equipment manufacturing	0	0	0	0
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	21	26	77
Sawmill, woodworking, and paper machinery	0	257	287	692
Printing machinery and equipment manufacturing	0	69	79	176
All other industrial machinery manufacturing	0	9	12	31
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	4	7	27
Other commercial service industry machinery manufacturing	0	63	128	351
Air purification and ventilation equipment manufacturing	0	317	485	1,136
Heating equipment (except warm air furnaces) manufacturing	0	28	45	118
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	195	378	1,026
Industrial mold manufacturing	0	50	59	103
Special tool, die, jig, and fixture manufacturing	0	77	102	181
Cutting tool and machine tool accessory manufacturing	0	23	25	58
Machine tool manufacturing	0	9	10	26

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Rolling mill and other metalworking machinery manufacturing	0	2	2	5
Turbine and turbine generator set units manufacturing	0	6	9	25
Speed changer, industrial high-speed drive, and gear manufacturing	0	387	588	1,403
Mechanical power transmission equipment manufacturing	0	147	219	518
Other engine equipment manufacturing	0	725	1,350	5,431
Pump and pumping equipment manufacturing	0	26	48	120
Air and gas compressor manufacturing	0	1	2	6
Elevator and moving stairway manufacturing	0	5	8	26
Conveyor and conveying equipment manufacturing	0	12	12	36
Overhead cranes, hoists, and monorail systems manufacturing	0	2	3	10
Industrial truck, trailer, and stacker manufacturing	0	4	6	19
Power-driven handtool manufacturing	0	145	370	610
Welding and soldering equipment manufacturing	0	39	52	117
Packaging machinery manufacturing	0	17	27	63
Industrial process furnace and oven manufacturing	0	10	12	27
Fluid power cylinder and actuator manufacturing	0	32	46	133
Fluid power pump and motor manufacturing	0	24	39	111
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	44	58	157
Electronic computer manufacturing	0	15	32	145
Computer storage device manufacturing	0	17	49	280
Computer terminals and other computer peripheral equipment manufacturing	0	20	39	144

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Telephone apparatus manufacturing	0	9	17	82
Broadcast and wireless communications equipment manufacturing	0	1	2	5
Other communications equipment manufacturing	0	16	25	72
Audio and video equipment manufacturing	0	5	10	64
Printed circuit assembly (electronic assembly) manufacturing	0	233	360	1,350
Bare printed circuit board manufacturing	0	72	95	301
Semiconductor and related device manufacturing	0	7	13	35
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	75	105	231
Electronic connector manufacturing	0	12	17	48
Other electronic component manufacturing	0	102	118	408
Electromedical and electrotherapeutic apparatus manufacturing	0	20	42	85
Search, detection, and navigation instruments manufacturing	0	0	1	1
Automatic environmental control manufacturing	0	117	154	335
Industrial process variable instruments manufacturing	0	28	41	105
Totalizing fluid meter and counting device manufacturing	0	40	88	185
Electricity and signal testing instruments manufacturing	0	0	0	1
Analytical laboratory instrument manufacturing	0	4	6	14
Irradiation apparatus manufacturing	0	59	116	221
Watch, clock, and other measuring and controlling device manufacturing	0	13	22	50
Blank magnetic and optical recording media manufacturing	0	0	0	0

## APPENDIX

Software and other prerecorded and record reproducing	0	51	77	193
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	350	536	1,199
Small electrical appliance manufacturing	0	200	427	952
Household cooking appliance manufacturing	0	152	393	876
Household refrigerator and home freezer manufacturing	0	157	498	1,087
Household laundry equipment manufacturing	0	310	718	2,192
Other major household appliance manufacturing	0	57	167	336
Power, distribution, and specialty transformer manufacturing	0	51	79	186
Motor and generator manufacturing	0	275	437	1,252
Switchgear and switchboard apparatus manufacturing	0	97	169	446
Relay and industrial control manufacturing	0	884	1,223	2,311
Storage battery manufacturing	0	81	129	349
Primary battery manufacturing	0	549	1,148	3,162
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	17	32	129
Wiring device manufacturing	0	115	243	682
Carbon and graphite product manufacturing	0	76	113	381
All other miscellaneous electrical equipment and component manufacturing	0	6	7	21
Automobile manufacturing	0	(6)	6	37
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	12	41	141
Motor vehicle body manufacturing	0	134	220	700
Truck trailer manufacturing	0	2	2	11
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	7	49	1,213
Motor vehicle gasoline engine and engine parts manufacturing	0	247	525	2,897



## APPENDIX

Motor vehicle electrical and electronic equipment manufacturing	0	164	505	3,095
Motor vehicle transmission and power train parts manufacturing	0	823	1,685	4,446
Motor vehicle seating and interior trim manufacturing	0	12	24	125
Motor vehicle metal stamping	0	19	53	386
Other motor vehicle parts manufacturing	0	454	975	3,888
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	136	338	1,079
Aircraft manufacturing	0	2	5	13
Aircraft engine and engine parts manufacturing	0	9	24	63
Other aircraft parts and auxiliary equipment manufacturing	0	1	2	7
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	38	64	254
Ship building and repairing	0	39	52	125
Boat building	0	398	569	2,060
Motorcycle, bicycle, and parts manufacturing	0	498	1,787	2,964
Military armored vehicle, tank, and tank component manufacturing	0	23	57	153
All other transportation equipment manufacturing	0	76	161	675
Wood kitchen cabinet and countertop manufacturing	0	466	577	1,398
Upholstered household furniture manufacturing	0	774	1,005	2,706
Nonupholstered wood household furniture manufacturing	0	106	114	331
Other household nonupholstered furniture manufacturing	0	82	117	319
Institutional furniture manufacturing	0	128	139	404
Wood office furniture manufacturing	0	144	207	594

## APPENDIX

Custom architectural woodwork and millwork	0	3	3	9
Office furniture, except wood, manufacturing	0	26,848	43,262	119,462
Showcase, partition, shelving, and locker manufacturing	0	359	444	1,212
Mattress manufacturing	0	61	107	418
Blind and shade manufacturing	0	11	11	46
Surgical and medical instrument manufacturing	0	132	245	634
Surgical appliance and supplies manufacturing	0	171	329	829
Dental equipment and supplies manufacturing	0	24	39	102
Ophthalmic goods manufacturing	0	22	43	105
Dental laboratories	0	127	121	214
Jewelry and silverware manufacturing	0	84	117	305
Sporting and athletic goods manufacturing	0	171	223	716
Doll, toy, and game manufacturing	0	65	87	277
Office supplies (except paper) manufacturing	0	67	88	233
Sign manufacturing	0	600	506	948
Gasket, packing, and sealing device manufacturing	0	53	63	169
Musical instrument manufacturing	0	52	53	105
Fasteners, buttons, needles, and pins manufacturing	0	7	8	19
Broom, brush, and mop manufacturing	0	156	257	546
Burial casket manufacturing	0	5	5	20
All other miscellaneous manufacturing	0	301	357	802
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,881	4,549	10,110
Wholesale - Professional and commercial equipment and supplies	0	13,778	24,432	42,327
Wholesale - Household appliances and electrical and electronic goods	0	2,311	5,262	10,962
Wholesale - Machinery, equipment, and supplies	0	3,505	6,235	10,896
Wholesale - Other durable goods merchant wholesalers	0	10,309	16,554	31,849

## APPENDIX

Wholesale - Drugs and druggists' sundries	0	2,108	5,909	11,690
Wholesale - Grocery and related product wholesalers	0	8,517	11,769	23,200
Wholesale - Petroleum and petroleum products	0	1,300	20,300	23,038
Wholesale - Other nondurable goods merchant wholesalers	0	15,827	32,655	58,408
Wholesale - Wholesale electronic markets and agents and brokers	0	25,831	12,440	14,420
Retail - Motor vehicle and parts dealers	0	5,156	7,580	11,435
Retail - Furniture and home furnishings stores	0	2,590	3,314	5,479
Retail - Electronics and appliance stores	0	2,902	2,873	5,085
Retail - Building material and garden equipment and supplies stores	0	3,571	5,977	9,132
Retail - Food and beverage stores	0	9,588	12,504	21,314
Retail - Health and personal care stores	0	5,095	6,000	9,545
Retail - Gasoline stores	0	3,534	5,698	11,254
Retail - Clothing and clothing accessories stores	0	2,807	4,165	9,181
Retail - Sporting goods, hobby, musical instrument and book stores	0	2,309	2,978	5,064
Retail - General merchandise stores	0	9,484	12,756	21,227
Retail - Miscellaneous store retailers	0	4,123	4,720	8,226
Retail - Nonstore retailers	0	8,868	21,305	37,433
Air transportation	0	2,350	6,956	10,223
Rail transportation	0	1,826	4,059	7,412
Water transportation	0	103	166	1,207
Truck transportation	0	33,242	38,081	74,377
Transit and ground passenger transportation	0	7,659	15,725	17,751
Pipeline transportation	0	681	2,123	2,715
Scenic and sightseeing transportation and support activities for transportation	0	5,016	5,749	12,902
Couriers and messengers	0	4,742	6,290	11,701
Warehousing and storage	0	7,468	8,444	16,814

## APPENDIX

Newspaper publishers	0	2,350	3,374	4,767
Periodical publishers	0	4,293	5,891	9,616
Book publishers	0	2,335	6,223	11,278
Directory, mailing list, and other publishers	0	6,971	18,801	31,764
Greeting card publishing	0	343	1,168	1,607
Software publishers	0	10,913	25,372	29,765
Motion picture and video industries	0	1,932	2,912	8,199
Sound recording industries	0	1,490	4,645	6,735
Radio and television broadcasting	0	11,994	10,641	27,599
Cable and other subscription programming	0	221	905	2,188
Wired telecommunications carriers	0	6,931	19,441	36,242
Wireless telecommunications carriers (except satellite)	0	1,595	8,487	20,242
Satellite, telecommunications resellers, and all other telecommunications	0	2,691	3,903	7,868
Data processing, hosting, and related services	0	25,073	52,131	100,497
News syndicates, libraries, archives and all other information services	0	1,091	1,510	2,499
Internet publishing and broadcasting and web search portals	0	7,869	18,855	51,987
Nondepository credit intermediation and related activities	0	14,618	19,145	32,689
Securities and commodity contracts intermediation and brokerage	0	17,524	16,719	33,163
Monetary authorities and depository credit intermediation	0	29,166	64,954	122,075
Other financial investment activities	0	18,104	19,501	38,422
Direct life insurance carriers	0	6,826	17,162	21,909
Insurance carriers, except direct life	0	13,079	62,722	108,663
Insurance agencies, brokerages, and related activities	1	92,987	177,359	368,588
Funds, trusts, and other financial vehicles	0	3,024	3,273	19,381
Other real estate	1	25,585	74,242	175,479
Tenant-occupied housing	0	3,012	44,203	48,597

## APPENDIX

Owner-occupied dwellings	0	0	126,326	159,612
Automotive equipment rental and leasing	0	5,102	13,932	22,625
General and consumer goods rental except video tapes and discs	0	2,002	2,841	4,660
Video tape and disc rental	0	495	791	1,317
Commercial and industrial machinery and equipment rental and leasing	0	8,868	19,001	36,136
Lessors of nonfinancial intangible assets	0	362	6,452	8,523
Legal services	0	20,406	36,343	50,557
Accounting, tax preparation, bookkeeping, and payroll services	0	16,789	22,177	30,843
Architectural, engineering, and related services	0	18,782	22,111	39,967
Specialized design services	0	8,376	8,883	10,867
Custom computer programming services	0	12,089	14,596	20,972
Computer systems design services	0	9,967	11,025	14,604
Other computer related services, including facilities management	0	6,152	11,799	19,405
Management consulting services	0	22,279	22,081	34,299
Environmental and other technical consulting services	0	4,477	3,887	5,894
Scientific research and development services	3	262,740	380,900	757,478
Advertising, public relations, and related services	0	11,202	15,125	25,564
Photographic services	0	2,463	966	1,868
Veterinary services	0	1,552	2,191	3,392
Marketing research and all other miscellaneous professional, scientific, and technical services	1	32,899	30,280	44,919
Management of companies and enterprises	0	59,854	70,985	99,348
Office administrative services	0	8,995	2,874	7,107
Facilities support services	0	444	571	1,238
Employment services	1	30,614	48,142	75,937
Business support services	1	44,374	38,592	66,368
Travel arrangement and reservation services	0	2,390	3,198	6,787
Investigation and security services	0	2,406	2,473	3,588
Services to buildings	0	7,524	7,858	12,340

## APPENDIX

Landscape and horticultural services	2	91,166	96,081	147,852
Other support services	0	15,338	19,400	39,090
Waste management and remediation services	0	3,349	6,405	11,065
Elementary and secondary schools	0	2,912	2,391	2,942
Junior colleges, colleges, universities, and professional schools	0	13,364	16,497	22,211
Other educational services	0	3,376	3,051	6,471
Offices of physicians	0	41,022	49,315	67,012
Offices of dentists	0	9,053	11,660	16,748
Offices of other health practitioners	0	7,902	7,466	10,609
Outpatient care centers	0	9,479	10,113	17,315
Medical and diagnostic laboratories	0	2,507	3,995	5,640
Home health care services	0	5,973	4,487	6,179
Other ambulatory health care services	0	2,101	2,361	4,173
Hospitals	1	65,630	77,064	144,184
Nursing and community care facilities	0	11,744	12,387	21,610
Residential mental retardation, mental health, substance abuse and other facilities	0	5,082	5,224	7,953
Individual and family services	0	12,715	12,293	18,485
Child day care services	0	4,410	5,618	7,418
Community food, housing, and other relief services, including rehabilitation services	0	3,715	4,326	9,457
Performing arts companies	0	820	1,600	3,125
Commercial Sports Except Racing	0	4,603	4,823	6,355
Racing and Track Operation	0	190	348	933
Independent artists, writers, and performers	0	926	1,619	2,899
Promoters of performing arts and sports and agents for public figures	0	711	2,132	4,833
Museums, historical sites, zoos, and parks	0	547	687	1,229
Amusement parks and arcades	0	173	699	864
Gambling industries (except casino hotels)	0	1,406	2,550	4,823
Other amusement and recreation industries	0	2,007	2,360	4,532

## APPENDIX

Fitness and recreational sports centers	0	1,241	2,324	3,563
Bowling centers	0	232	353	746
Hotels and motels, including casino hotels	0	3,799	6,222	10,695
Other accommodations	0	1,096	1,384	1,889
Full-service restaurants	1	14,397	21,712	41,040
Limited-service restaurants	1	10,489	16,620	37,119
All other food and drinking places	1	13,396	17,000	27,673
Automotive repair and maintenance, except car washes	0	13,261	15,087	22,853
Car washes	0	6,180	9,111	14,025
Electronic and precision equipment repair and maintenance	0	8,473	12,606	19,371
Commercial and industrial machinery and equipment repair and maintenance	0	4,485	5,461	8,326
Personal and household goods repair and maintenance	0	3,593	3,173	4,022
Personal care services	0	6,565	4,509	6,065
Death care services	0	687	842	1,294
Dry-cleaning and laundry services	0	1,324	1,460	2,050
Other personal services	0	4,968	3,956	5,391
Religious organizations	0	20,972	8,384	36,749
Grantmaking, giving, and social advocacy organizations	0	3,675	9,814	15,764
Business and professional associations	0	5,852	8,215	14,120
Labor and civic organizations	0	2,797	6,422	13,703
Private households	0	1,068	1,068	1,068
Postal service	0	7,790	7,801	8,653
Federal electric utilities	0	0	0	0
Other federal government enterprises	2	329,689	(979,514)	145,808
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	0	0	0
Local government passenger transit	0	1,389	(413)	921
Local government electric utilities	0	959	2,601	4,580
Other local government enterprises	0	8,502	18,080	35,429

## APPENDIX

* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	2	229,682	332,014	694,230

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## 52. Wyoming

**Table 471: Detailed NASA Impacts by Types of Impact, Wyoming.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	42	2,697,802	3,828,619	7,528,104
Oilseed farming	0	(0)	(0)	24
Grain farming	0	242	1,226	4,298
Vegetable and melon farming	0	31	53	111
Fruit farming	0	15	30	54
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	55	73	121
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	152	265	574
All other crop farming	0	822	1,106	1,783
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	24	689	3,449



## APPENDIX

Dairy cattle and milk production	0	3	9	57
Poultry and egg production	0	64	88	812
Animal production, except cattle and poultry and eggs	0	622	4,419	8,353
Forestry, forest products, and timber tract production	0	25	25	33
Commercial logging	0	86	85	127
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	575	282	361
Support activities for agriculture and forestry	0	2,122	1,293	2,038
Oil and gas extraction	0	3,424	18,401	30,467
Coal mining	0	4,480	16,094	21,440
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0
Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(383)	(93,682)	1,563
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	534	688	1,077
Sand and gravel mining	0	486	628	793
Other clay, ceramic, refractory minerals mining	0	51	83	129
Potash, soda, and borate mineral mining	0	63	123	180
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	26	51	62
Other nonmetallic minerals	0	54	71	90
Drilling oil and gas wells	0	1	2	6
Support activities for oil and gas operations	0	111	148	382
Metal mining services	0	47	249	466
Other nonmetallic minerals services	0	9	40	78
Electric power generation - Hydroelectric	0	6	17	36
Electric power generation - Fossil fuel	0	4,578	14,784	42,461
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	4	11	28
Electric power generation - Wind	0	179	1,201	2,787

## APPENDIX

Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	5,682	18,152	54,184
Natural gas distribution	0	2,238	5,683	17,862
Water, sewage and other systems	0	121	315	1,127
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0
Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	7,610	11,509	27,543
Maintenance and repair construction of residential structures	0	3,796	6,501	15,382
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	11	9	20
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	21	33	407
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	2	3	101

## APPENDIX

Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	97	149	1,323
Beet sugar manufacturing	0	173	227	1,810
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	9	10	57
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	4	5	60
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	0	0	0
Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	8	10	88
Frozen cakes and other pastries manufacturing	0	41	64	120
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	38	46	840
Meat processed from carcasses	0	20	21	275
Rendering and meat byproduct processing	0	1	1	8
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	125	176	531
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0

## APPENDIX

Roasted nuts and peanut butter manufacturing	0	24	25	138
Other snack food manufacturing	0	20	22	134
Coffee and tea manufacturing	0	1	1	42
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	1	2	49
All other food manufacturing	0	0	0	0
Bottled and canned soft drinks & water	0	342	454	3,208
Manufactured ice	0	54	38	134
Breweries	0	72	118	610
Wineries	0	2	2	11
Distilleries	0	37	90	263
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	(1)	0	64
Broadwoven fabric mills	0	0	0	0
Narrow fabric mills and schiffli machine embroidery	0	0	1	9
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	1	1	12
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	1	12
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	1	4
Textile bag and canvas mills	0	3	6	20
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	19	38	88
Hosiery and sock mills	0	0	1	2
Other apparel knitting mills	0	0	0	1
Cut and sew apparel contractors	0	0	0	5
Mens and boys cut and sew apparel manufacturing	0	0	0	1
Womens and girls cut and sew apparel manufacturing	0	0	0	1
Other cut and sew apparel manufacturing	0	0	0	1
Apparel accessories and other apparel manufacturing	0	0	0	1
Leather and hide tanning and finishing	0	0	0	19

## APPENDIX

Footwear manufacturing	0	1	1	8
Other leather and allied product manufacturing	0	0	0	7
Sawmills	0	110	132	525
Wood preservation	0	4	8	40
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	14	17	68
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	0	0	0
Cut stock, resawing lumber, and planing	0	5	6	23
Other millwork, including flooring	0	0	0	0
Wood container and pallet manufacturing	0	10	11	56
Manufactured home (mobile home) manufacturing	0	0	0	0
Prefabricated wood building manufacturing	0	16	18	107
All other miscellaneous wood product manufacturing	0	19	21	113
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	751	1,020	2,981
Support activities for printing	0	9	12	26
Petroleum refineries	0	3,154	11,982	130,167
Asphalt paving mixture and block manufacturing	0	31	41	502
Asphalt shingle and coating materials manufacturing	0	21	40	184
Petroleum lubricating oil and grease manufacturing	0	0	0	0

## APPENDIX

All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	162	408	1,048
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	326	700	2,004
Other basic organic chemical manufacturing	0	60	125	772
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	84	198	496
Phosphatic fertilizer manufacturing	0	28	72	218
Fertilizer mixing	0	0	0	0
Pesticide and other agricultural chemical manufacturing	0	20	67	223
Medicinal and botanical manufacturing	0	1	2	6
Pharmaceutical preparation manufacturing	0	7	30	129
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	15	38	96
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	0	0	0
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	65	193	442
Printing ink manufacturing	0	7	7	27
Explosives manufacturing	0	16	19	64
Custom compounding of purchased resins	0	9	15	52
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	23	34	123

## APPENDIX

Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	3	15	35
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	80	201	542
Tire manufacturing	0	0	0	0
Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	85	213	566
Pottery, ceramics, and plumbing fixture manufacturing	0	2	3	10
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	56	135	364
Ready-mix concrete manufacturing	0	452	767	2,715
Concrete block and brick manufacturing	0	23	41	108
Concrete pipe manufacturing	0	18	29	75
Other concrete product manufacturing	0	31	45	117
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	100	269	752
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	40	46	112

## APPENDIX

Ground or treated mineral and earth manufacturing	0	20	54	139
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	0
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	7	13	38
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0
Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	12	20	33
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	2	3	11
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	14	23	45
Prefabricated metal buildings and components manufacturing	0	0	0	4
Fabricated structural metal manufacturing	0	39	59	187
Plate work manufacturing	0	25	26	79
Metal window and door manufacturing	0	0	0	0



## APPENDIX

Sheet metal work manufacturing	0	3	4	14
Ornamental and architectural metal work manufacturing	0	10	14	68
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	19	23	62
Metal cans manufacturing	0	13	30	142
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	13	18	53
Machine shops	0	167	195	383
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	1	2	5
Metal coating and nonprecious engraving	0	0	1	12
Electroplating, anodizing, and coloring metal	0	0	0	2
Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	106	295	966
Ammunition, except for small arms, manufacturing	0	5	7	13
Small arms, ordnance, and accessories manufacturing	0	23	58	139
Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	11	15	60
Farm machinery and equipment manufacturing	0	5	5	34
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	1	1	4
Mining machinery and equipment manufacturing	0	1	1	3

## APPENDIX

Oil and gas field machinery and equipment manufacturing	0	30	30	110
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	1
Photographic and photocopying equipment manufacturing	0	0	0	0
Other commercial service industry machinery manufacturing	0	8	8	42
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	1
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	1	1	3

## APPENDIX

Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	1	1	2
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	2
Packaging machinery manufacturing	0	0	0	0
Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	2	2	5
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	1	1	2
Electronic computer manufacturing	0	0	1	2
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	1	2	7
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0

## APPENDIX

Semiconductor and related device manufacturing	0	0	0	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	3	4	12
Industrial process variable instruments manufacturing	0	3	4	11
Totalizing fluid meter and counting device manufacturing	0	1	3	8
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	1	2
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	1
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	1	1	5
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0

## APPENDIX

Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	1	1	4
Motor and generator manufacturing	0	2	3	9
Switchgear and switchboard apparatus manufacturing	0	4	5	16
Relay and industrial control manufacturing	0	1	2	4
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	2	3	16
Wiring device manufacturing	0	0	0	0
Carbon and graphite product manufacturing	0	7	9	37
All other miscellaneous electrical equipment and component manufacturing	0	0	0	1
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	26	28	115
Truck trailer manufacturing	0	0	0	1
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	10	11	72
Motor vehicle electrical and electronic equipment manufacturing	0	2	3	12
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	13	14	98
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	10	11	77

## APPENDIX

Aircraft manufacturing	0	0	0	1
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	2
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	0	0
Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	32	36	174
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	2	2	13
Other household nonupholstered furniture manufacturing	0	1	1	10
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	1
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	0	(0)	1

## APPENDIX

Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	2	(1)	5
Dental laboratories	0	2	2	4
Jewelry and silverware manufacturing	0	8	10	52
Sporting and athletic goods manufacturing	0	3	3	35
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	1	1	15
Sign manufacturing	0	212	130	706
Gasket, packing, and sealing device manufacturing	0	3	2	11
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0
Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	21	17	42
All other miscellaneous manufacturing	0	8	6	44
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	1,656	3,408	8,477
Wholesale - Professional and commercial equipment and supplies	0	1,443	2,224	4,715
Wholesale - Household appliances and electrical and electronic goods	0	1,690	3,354	8,047
Wholesale - Machinery, equipment, and supplies	0	4,661	7,423	13,161
Wholesale - Other durable goods merchant wholesalers	0	4,281	6,614	13,301
Wholesale - Drugs and druggists' sundries	0	1,688	3,925	10,042
Wholesale - Grocery and related product wholesalers	0	4,780	6,073	13,577
Wholesale - Petroleum and petroleum products	0	1,348	12,844	15,703
Wholesale - Other nondurable goods merchant wholesalers	0	8,520	15,408	30,726
Wholesale - Wholesale electronic markets and agents and brokers	0	1,051	560	659
Retail - Motor vehicle and parts dealers	0	7,774	13,422	19,110

## APPENDIX

Retail - Furniture and home furnishings stores	0	2,991	4,534	7,692
Retail - Electronics and appliance stores	0	3,508	4,323	7,384
Retail - Building material and garden equipment and supplies stores	0	4,164	8,737	12,604
Retail - Food and beverage stores	0	11,439	17,459	28,298
Retail - Health and personal care stores	0	5,257	6,651	10,876
Retail - Gasoline stores	0	3,954	8,031	14,544
Retail - Clothing and clothing accessories stores	0	3,830	6,559	12,723
Retail - Sporting goods, hobby, musical instrument and book stores	0	2,864	4,374	7,620
Retail - General merchandise stores	0	13,255	20,904	32,519
Retail - Miscellaneous store retailers	0	5,685	8,033	13,836
Retail - Nonstore retailers	0	5,303	18,939	44,930
Air transportation	0	5,646	6,249	12,384
Rail transportation	0	1,391	8,353	10,581
Water transportation	0	11	537	590
Truck transportation	0	12,862	16,515	33,603
Transit and ground passenger transportation	0	2,122	2,960	3,748
Pipeline transportation	0	13,522	12,243	12,458
Scenic and sightseeing transportation and support activities for transportation	0	12,135	14,125	30,431
Couriers and messengers	0	4,332	5,730	9,962
Warehousing and storage	0	3,206	3,653	7,856
Newspaper publishers	0	3,677	7,340	10,258
Periodical publishers	0	885	1,562	3,499
Book publishers	0	98	380	1,177
Directory, mailing list, and other publishers	0	170	697	1,281
Greeting card publishing	0	0	0	0
Software publishers	0	492	1,565	2,166
Motion picture and video industries	0	2,634	3,614	9,992
Sound recording industries	0	181	341	665
Radio and television broadcasting	0	4,428	3,040	20,541



## APPENDIX

Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	6,078	13,667	30,898
Wireless telecommunications carriers (except satellite)	0	1,077	5,024	16,386
Satellite, telecommunications resellers, and all other telecommunications	0	402	477	1,167
Data processing, hosting, and related services	0	2,081	6,939	15,311
News syndicates, libraries, archives and all other information services	0	218	332	562
Internet publishing and broadcasting and web search portals	0	1,885	6,142	15,958
Nondepository credit intermediation and related activities	0	4,061	5,686	12,656
Securities and commodity contracts intermediation and brokerage	0	5,897	6,046	24,771
Monetary authorities and depository credit intermediation	0	31,093	66,071	132,924
Other financial investment activities	0	(1,817)	2,689	43,515
Direct life insurance carriers	0	88	205	301
Insurance carriers, except direct life	0	5,066	21,411	47,758
Insurance agencies, brokerages, and related activities	0	8,805	14,529	41,369
Funds, trusts, and other financial vehicles	0	4,498	6,925	47,467
Other real estate	3	57,876	152,137	470,195
Tenant-occupied housing	0	5,381	56,470	67,500
Owner-occupied dwellings	0	0	185,198	233,995
Automotive equipment rental and leasing	0	1,724	4,317	7,642
General and consumer goods rental except video tapes and discs	0	2,549	3,242	5,549
Video tape and disc rental	0	621	1,067	1,723
Commercial and industrial machinery and equipment rental and leasing	0	2,840	8,205	12,094
Lessors of nonfinancial intangible assets	0	324	9,864	11,741

## APPENDIX

Legal services	1	32,312	45,941	80,530
Accounting, tax preparation, bookkeeping, and payroll services	0	10,320	14,027	21,277
Architectural, engineering, and related services	0	13,369	16,485	31,235
Specialized design services	0	1,134	1,192	1,462
Custom computer programming services	0	1,610	1,939	3,074
Computer systems design services	0	2,756	2,892	4,051
Other computer related services, including facilities management	0	838	2,046	3,484
Management consulting services	0	26,330	26,326	44,399
Environmental and other technical consulting services	0	12,148	11,067	16,627
Scientific research and development services	12	729,498	920,196	2,381,048
Advertising, public relations, and related services	0	6,564	9,271	20,852
Photographic services	0	1,794	1,465	2,250
Veterinary services	0	1,777	2,714	4,311
Marketing research and all other miscellaneous professional, scientific, and technical services	1	32,777	30,641	45,589
Management of companies and enterprises	0	13,252	22,508	43,998
Office administrative services	0	7,513	4,295	8,987
Facilities support services	0	654	904	2,658
Employment services	1	25,518	43,074	63,770
Business support services	0	3,903	3,732	6,869
Travel arrangement and reservation services	0	1,522	2,140	4,366
Investigation and security services	0	2,898	2,962	4,312
Services to buildings	0	8,351	8,702	14,540
Landscape and horticultural services	0	7,347	7,808	12,615
Other support services	0	2,858	3,619	7,616
Waste management and remediation services	0	3,241	6,423	11,838
Elementary and secondary schools	0	1,686	1,607	1,976
Junior colleges, colleges, universities, and professional schools	0	1,320	2,008	3,486
Other educational services	0	10,064	10,125	20,914
Offices of physicians	0	37,640	43,107	63,568
Offices of dentists	0	10,201	12,414	20,025

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Offices of other health practitioners	0	13,930	12,773	17,974
Outpatient care centers	0	8,691	9,053	17,966
Medical and diagnostic laboratories	0	3,469	4,859	7,119
Home health care services	0	7,619	6,194	7,892
Other ambulatory health care services	0	2,812	3,027	5,213
Hospitals	0	30,285	35,914	68,288
Nursing and community care facilities	0	10,507	12,089	20,500
Residential mental retardation, mental health, substance abuse and other facilities	0	4,985	5,323	8,014
Individual and family services	0	11,634	10,581	16,253
Child day care services	0	5,019	5,953	8,136
Community food, housing, and other relief services, including rehabilitation services	0	2,822	3,129	7,158
Performing arts companies	0	660	1,213	2,865
Commercial Sports Except Racing	0	524	1,123	3,909
Racing and Track Operation	0	113	259	850
Independent artists, writers, and performers	0	1,639	2,682	3,873
Promoters of performing arts and sports and agents for public figures	0	836	2,409	5,452
Museums, historical sites, zoos, and parks	0	739	933	1,588
Amusement parks and arcades	0	38	182	241
Gambling industries (except casino hotels)	0	2,658	5,998	10,525
Other amusement and recreation industries	0	1,583	3,580	5,376
Fitness and recreational sports centers	0	862	2,640	3,722
Bowling centers	0	219	509	859
Hotels and motels, including casino hotels	0	848	1,506	2,567
Other accommodations	0	192	237	341
Full-service restaurants	1	21,487	30,376	57,416
Limited-service restaurants	1	15,030	24,320	54,658
All other food and drinking places	1	13,131	20,805	33,604
Automotive repair and maintenance, except car washes	0	14,538	18,308	27,700
Car washes	0	7,327	12,179	18,107

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Electronic and precision equipment repair and maintenance	0	1,203	1,611	3,240
Commercial and industrial machinery and equipment repair and maintenance	0	4,921	5,418	8,642
Personal and household goods repair and maintenance	0	3,292	3,613	4,703
Personal care services	0	5,868	4,895	6,672
Death care services	0	587	763	1,323
Dry-cleaning and laundry services	0	1,406	1,574	2,342
Other personal services	0	5,198	5,089	7,014
Religious organizations	0	8,928	4,224	17,563
Grantmaking, giving, and social advocacy organizations	0	2,926	8,424	13,518
Business and professional associations	0	2,575	3,911	7,904
Labor and civic organizations	0	2,127	5,044	10,446
Private households	0	1,154	1,154	1,154
Postal service	0	6,263	6,267	7,002
Federal electric utilities	0	227	373	1,571
Other federal government enterprises	0	266	(112)	632
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	62	73	127
Local government passenger transit	0	613	(539)	212
Local government electric utilities	0	1	3	21
Other local government enterprises	0	14,191	27,546	56,150
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0

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* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	9	1,085,054	1,369,687	1,863,761

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

**Table 472: Detailed M2M Program Impacts by Types of Impact, Wyoming.**

Industry Description	Employment	Labor Income (\$)	Value Added (\$)	Output (\$)
<i>Total</i>	2	195,192	275,151	560,750
Oilseed farming	0	(0)	(0)	1
Grain farming	0	6	35	111
Vegetable and melon farming	0	2	3	7
Fruit farming	0	1	2	4
Tree nut farming	0	0	0	0
Greenhouse, nursery, and floriculture production	0	3	3	6
Tobacco farming	0	0	0	0
Cotton farming	0	0	0	0
Sugarcane and sugar beet farming	0	6	10	20
All other crop farming	0	35	48	76
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	0	1	18	77
Dairy cattle and milk production	0	0	0	1
Poultry and egg production	0	3	4	38
Animal production, except cattle and poultry and eggs	0	10	80	154
Forestry, forest products, and timber tract production	0	0	0	0
Commercial logging	0	3	3	4
Commercial fishing	0	0	0	0
Commercial hunting and trapping	0	32	15	17
Support activities for agriculture and forestry	0	29	17	27
Oil and gas extraction	0	110	762	1,257
Coal mining	0	97	304	450
Copper, nickel, lead, and zinc mining	0	0	0	0
Iron ore mining	0	0	0	0
Gold ore mining	0	0	0	0

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Silver ore mining	0	0	0	0
Uranium-radium-vanadium ore mining	0	(0)	78	0
Other metal ore mining	0	0	0	0
Stone mining and quarrying	0	21	14	23
Sand and gravel mining	0	14	10	10
Other clay, ceramic, refractory minerals mining	0	2	3	4
Potash, soda, and borate mineral mining	0	2	4	6
Phosphate rock mining	0	0	0	0
Other chemical and fertilizer mineral mining	0	1	1	1
Other nonmetallic minerals	0	1	1	1
Drilling oil and gas wells	0	0	0	0
Support activities for oil and gas operations	0	2	3	9
Metal mining services	0	0	3	5
Other nonmetallic minerals services	0	0	1	1
Electric power generation - Hydroelectric	0	0	1	2
Electric power generation - Fossil fuel	0	184	588	1,588
Electric power generation - Nuclear	0	0	0	0
Electric power generation - Solar	0	0	0	1
Electric power generation - Wind	0	5	33	72
Electric power generation - Geothermal	0	0	0	0
Electric power generation - Biomass	0	0	0	0
Electric power generation - All other	0	0	0	0
Electric power transmission and distribution	0	196	663	1,891
Natural gas distribution	0	95	248	697
Water, sewage and other systems	0	8	19	60
Construction of new health care structures	0	0	0	0
Construction of new manufacturing structures	0	0	0	0
Construction of new power and communication structures	0	0	0	0
Construction of new educational and vocational structures	0	0	0	0

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Construction of new highways and streets	0	0	0	0
Construction of new commercial structures, including farm structures	0	0	0	0
Construction of other new nonresidential structures	0	0	0	0
Construction of new single-family residential structures	0	0	0	0
Construction of new multifamily residential structures	0	0	0	0
Construction of other new residential structures	0	0	0	0
Maintenance and repair construction of nonresidential structures	0	167	253	587
Maintenance and repair construction of residential structures	0	227	391	896
Maintenance and repair construction of highways, streets, bridges, and tunnels	0	1	0	1
Dog and cat food manufacturing	0	0	0	0
Other animal food manufacturing	0	1	1	12
Flour milling	0	0	0	0
Rice milling	0	0	0	0
Malt manufacturing	0	0	0	5
Wet corn milling	0	0	0	0
Soybean and other oilseed processing	0	0	0	0
Fats and oils refining and blending	0	0	0	0
Breakfast cereal manufacturing	0	5	7	64
Beet sugar manufacturing	0	7	9	73
Sugar cane mills and refining	0	0	0	0
Nonchocolate confectionery manufacturing	0	1	1	4
Chocolate and confectionery manufacturing from cacao beans	0	0	0	0
Confectionery manufacturing from purchased chocolate	0	0	0	4
Frozen fruits, juices and vegetables manufacturing	0	0	0	0
Frozen specialties manufacturing	0	0	0	0
Canned fruits and vegetables manufacturing	0	0	0	0

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Canned specialties	0	0	0	0
Dehydrated food products manufacturing	0	0	0	0
Cheese manufacturing	0	0	0	0
Dry, condensed, and evaporated dairy product manufacturing	0	0	0	0
Fluid milk manufacturing	0	0	0	0
Creamery butter manufacturing	0	0	0	0
Ice cream and frozen dessert manufacturing	0	0	1	5
Frozen cakes and other pastries manufacturing	0	3	4	7
Poultry processing	0	0	0	0
Animal, except poultry, slaughtering	0	2	2	39
Meat processed from carcasses	0	1	1	16
Rendering and meat byproduct processing	0	0	0	1
Seafood product preparation and packaging	0	0	0	0
Bread and bakery product, except frozen, manufacturing	0	8	11	33
Cookie and cracker manufacturing	0	0	0	0
Dry pasta, mixes, and dough manufacturing	0	0	0	0
Tortilla manufacturing	0	0	0	0
Roasted nuts and peanut butter manufacturing	0	2	2	10
Other snack food manufacturing	0	1	1	8
Coffee and tea manufacturing	0	0	0	3
Flavoring syrup and concentrate manufacturing	0	0	0	0
Mayonnaise, dressing, and sauce manufacturing	0	0	0	0
Spice and extract manufacturing	0	0	0	4
All other food manufacturing	0	0	0	0
Bottled and canned soft drinks & water	0	19	26	174
Manufactured ice	0	3	2	7
Breweries	0	4	7	36
Wineries	0	0	0	1
Distilleries	0	2	6	16
Tobacco product manufacturing	0	0	0	0
Fiber, yarn, and thread mills	0	(0)	0	3
Broadwoven fabric mills	0	0	0	0



## APPENDIX

Narrow fabric mills and schiffli machine embroidery	0	0	0	0
Nonwoven fabric mills	0	0	0	0
Knit fabric mills	0	0	0	1
Textile and fabric finishing mills	0	0	0	0
Fabric coating mills	0	0	0	1
Carpet and rug mills	0	0	0	0
Curtain and linen mills	0	0	0	0
Textile bag and canvas mills	0	0	0	1
Rope, cordage, twine, tire cord and tire fabric mills	0	0	0	0
Other textile product mills	0	1	2	4
Hosiery and sock mills	0	0	0	0
Other apparel knitting mills	0	0	0	0
Cut and sew apparel contractors	0	0	0	0
Mens and boys cut and sew apparel manufacturing	0	0	0	0
Womens and girls cut and sew apparel manufacturing	0	0	0	0
Other cut and sew apparel manufacturing	0	0	0	0
Apparel accessories and other apparel manufacturing	0	0	0	0
Leather and hide tanning and finishing	0	0	0	1
Footwear manufacturing	0	0	0	1
Other leather and allied product manufacturing	0	0	0	1
Sawmills	0	3	4	16
Wood preservation	0	0	0	1
Veneer and plywood manufacturing	0	0	0	0
Engineered wood member and truss manufacturing	0	0	1	2
Reconstituted wood product manufacturing	0	0	0	0
Wood windows and door manufacturing	0	0	0	0
Cut stock, resawing lumber, and planing	0	0	0	1
Other millwork, including flooring	0	0	0	0
Wood container and pallet manufacturing	0	1	1	3
Manufactured home (mobile home) manufacturing	0	0	0	0

## APPENDIX

Prefabricated wood building manufacturing	0	0	1	3
All other miscellaneous wood product manufacturing	0	1	1	4
Pulp mills	0	0	0	0
Paper mills	0	0	0	0
Paperboard mills	0	0	0	0
Paperboard container manufacturing	0	0	0	0
Paper bag and coated and treated paper manufacturing	0	0	0	0
Stationery product manufacturing	0	0	0	0
Sanitary paper product manufacturing	0	0	0	0
All other converted paper product manufacturing	0	0	0	0
Printing	0	21	29	81
Support activities for printing	0	0	0	1
Petroleum refineries	0	168	579	6,412
Asphalt paving mixture and block manufacturing	0	1	2	17
Asphalt shingle and coating materials manufacturing	0	1	1	6
Petroleum lubricating oil and grease manufacturing	0	0	0	0
All other petroleum and coal products manufacturing	0	0	0	0
Petrochemical manufacturing	0	0	0	0
Industrial gas manufacturing	0	4	12	29
Synthetic dye and pigment manufacturing	0	0	0	0
Other basic inorganic chemical manufacturing	0	8	18	49
Other basic organic chemical manufacturing	0	2	5	30
Plastics material and resin manufacturing	0	0	0	0
Synthetic rubber manufacturing	0	0	0	0
Artificial and synthetic fibers and filaments manufacturing	0	0	0	0
Nitrogenous fertilizer manufacturing	0	3	8	19
Phosphatic fertilizer manufacturing	0	1	2	6
Fertilizer mixing	0	0	0	0

## APPENDIX

Pesticide and other agricultural chemical manufacturing	0	1	3	9
Medicinal and botanical manufacturing	0	0	0	1
Pharmaceutical preparation manufacturing	0	1	3	12
In-vitro diagnostic substance manufacturing	0	0	0	0
Biological product (except diagnostic) manufacturing	0	1	4	8
Paint and coating manufacturing	0	0	0	0
Adhesive manufacturing	0	0	0	0
Soap and other detergent manufacturing	0	0	0	0
Polish and other sanitation good manufacturing	0	0	0	0
Surface active agent manufacturing	0	0	0	0
Toilet preparation manufacturing	0	5	16	32
Printing ink manufacturing	0	0	0	1
Explosives manufacturing	0	1	1	2
Custom compounding of purchased resins	0	1	1	3
Photographic film and chemical manufacturing	0	0	0	0
Other miscellaneous chemical product manufacturing	0	1	1	4
Plastics packaging materials and unlaminated film and sheet manufacturing	0	0	0	0
Unlaminated plastics profile shape manufacturing	0	0	0	0
Plastics pipe and pipe fitting manufacturing	0	0	1	1
Laminated plastics plate, sheet (except packaging), and shape manufacturing	0	0	0	0
Polystyrene foam product manufacturing	0	0	0	0
Urethane and other foam product (except polystyrene) manufacturing	0	0	0	0
Plastics bottle manufacturing	0	0	0	0
Other plastics product manufacturing	0	3	7	17
Tire manufacturing	0	0	0	0

## APPENDIX

Rubber and plastics hoses and belting manufacturing	0	0	0	0
Other rubber product manufacturing	0	1	2	5
Pottery, ceramics, and plumbing fixture manufacturing	0	0	0	0
Brick, tile, and other structural clay product manufacturing	0	0	0	0
Flat glass manufacturing	0	0	0	0
Other pressed and blown glass and glassware manufacturing	0	0	0	0
Glass container manufacturing	0	0	0	0
Glass product manufacturing made of purchased glass	0	0	0	0
Cement manufacturing	0	1	3	7
Ready-mix concrete manufacturing	0	8	14	49
Concrete block and brick manufacturing	0	1	1	3
Concrete pipe manufacturing	0	0	1	2
Other concrete product manufacturing	0	1	1	3
Lime manufacturing	0	0	0	0
Gypsum product manufacturing	0	3	8	22
Abrasive product manufacturing	0	0	0	0
Cut stone and stone product manufacturing	0	1	2	4
Ground or treated mineral and earth manufacturing	0	1	2	4
Mineral wool manufacturing	0	0	0	0
Miscellaneous nonmetallic mineral products manufacturing	0	0	0	0
Iron and steel mills and ferroalloy manufacturing	0	0	0	0
Iron, steel pipe and tube manufacturing from purchased steel	0	0	0	1
Rolled steel shape manufacturing	0	0	0	0
Steel wire drawing	0	0	0	0
Alumina refining and primary aluminum production	0	0	0	0
Secondary smelting and alloying of aluminum	0	0	0	0
Aluminum sheet, plate, and foil manufacturing	0	0	0	0

## APPENDIX

Other aluminum rolling, drawing and extruding	0	0	0	0
Nonferrous metal (exc aluminum) smelting and refining	0	0	0	0
Copper rolling, drawing, extruding and alloying	0	0	0	0
Nonferrous metal, except copper and aluminum, shaping	0	0	0	0
Secondary processing of other nonferrous metals	0	0	0	0
Ferrous metal foundries	0	0	0	0
Nonferrous metal foundries	0	0	0	1
Custom roll forming	0	0	0	0
Crown and closure manufacturing and metal stamping	0	0	0	0
Iron and steel forging	0	0	0	0
Nonferrous forging	0	0	0	0
Cutlery, utensil, pot, and pan manufacturing	0	0	0	0
Handtool manufacturing	0	1	1	3
Prefabricated metal buildings and components manufacturing	0	0	0	0
Fabricated structural metal manufacturing	0	0	1	2
Plate work manufacturing	0	1	1	2
Metal window and door manufacturing	0	0	0	0
Sheet metal work manufacturing	0	0	0	0
Ornamental and architectural metal work manufacturing	0	0	0	1
Power boiler and heat exchanger manufacturing	0	0	0	0
Metal tank (heavy gauge) manufacturing	0	0	1	1
Metal cans manufacturing	0	1	1	7
Metal barrels, drums and pails manufacturing	0	0	0	0
Hardware manufacturing	0	0	0	0
Spring and wire product manufacturing	0	1	1	2
Machine shops	0	6	7	13
Turned product and screw, nut, and bolt manufacturing	0	0	0	0
Metal heat treating	0	0	0	0

## APPENDIX

Metal coating and nonprecious engraving	0	0	0	1
Electroplating, anodizing, and coloring metal	0	0	0	0
Valve and fittings, other than plumbing, manufacturing	0	0	0	0
Plumbing fixture fitting and trim manufacturing	0	0	0	0
Ball and roller bearing manufacturing	0	0	0	0
Small arms ammunition manufacturing	0	4	10	33
Ammunition, except for small arms, manufacturing	0	0	0	1
Small arms, ordnance, and accessories manufacturing	0	1	4	8
Fabricated pipe and pipe fitting manufacturing	0	0	0	0
Other fabricated metal manufacturing	0	0	1	2
Farm machinery and equipment manufacturing	0	0	0	0
Lawn and garden equipment manufacturing	0	0	0	0
Construction machinery manufacturing	0	0	0	0
Mining machinery and equipment manufacturing	0	0	0	0
Oil and gas field machinery and equipment manufacturing	0	1	1	3
Semiconductor machinery manufacturing	0	0	0	0
Food product machinery manufacturing	0	0	0	0
Sawmill, woodworking, and paper machinery	0	0	0	0
Printing machinery and equipment manufacturing	0	0	0	0
All other industrial machinery manufacturing	0	0	0	0
Optical instrument and lens manufacturing	0	0	0	0
Photographic and photocopying equipment manufacturing	0	0	0	0

## APPENDIX

Other commercial service industry machinery manufacturing	0	0	0	2
Air purification and ventilation equipment manufacturing	0	0	0	0
Heating equipment (except warm air furnaces) manufacturing	0	0	0	0
Air conditioning, refrigeration, and warm air heating equipment manufacturing	0	0	0	0
Industrial mold manufacturing	0	0	0	0
Special tool, die, jig, and fixture manufacturing	0	0	0	0
Cutting tool and machine tool accessory manufacturing	0	0	0	0
Machine tool manufacturing	0	0	0	0
Rolling mill and other metalworking machinery manufacturing	0	0	0	0
Turbine and turbine generator set units manufacturing	0	0	0	0
Speed changer, industrial high-speed drive, and gear manufacturing	0	0	0	0
Mechanical power transmission equipment manufacturing	0	0	0	0
Other engine equipment manufacturing	0	0	0	0
Pump and pumping equipment manufacturing	0	0	0	0
Air and gas compressor manufacturing	0	0	0	0
Elevator and moving stairway manufacturing	0	0	0	0
Conveyor and conveying equipment manufacturing	0	0	0	0
Overhead cranes, hoists, and monorail systems manufacturing	0	0	0	0
Industrial truck, trailer, and stacker manufacturing	0	0	0	0
Power-driven handtool manufacturing	0	0	0	0
Welding and soldering equipment manufacturing	0	0	0	0
Packaging machinery manufacturing	0	0	0	0

## APPENDIX

Industrial process furnace and oven manufacturing	0	0	0	0
Fluid power cylinder and actuator manufacturing	0	0	0	0
Fluid power pump and motor manufacturing	0	0	0	0
Scales, balances, and miscellaneous general purpose machinery manufacturing	0	0	0	0
Electronic computer manufacturing	0	0	0	0
Computer storage device manufacturing	0	0	0	0
Computer terminals and other computer peripheral equipment manufacturing	0	0	0	1
Telephone apparatus manufacturing	0	0	0	0
Broadcast and wireless communications equipment manufacturing	0	0	0	0
Other communications equipment manufacturing	0	0	0	0
Audio and video equipment manufacturing	0	0	0	0
Printed circuit assembly (electronic assembly) manufacturing	0	0	0	0
Bare printed circuit board manufacturing	0	0	0	0
Semiconductor and related device manufacturing	0	0	0	0
Capacitor, resistor, coil, transformer, and other inductor manufacturing	0	0	0	0
Electronic connector manufacturing	0	0	0	0
Other electronic component manufacturing	0	0	0	0
Electromedical and electrotherapeutic apparatus manufacturing	0	0	0	0
Search, detection, and navigation instruments manufacturing	0	0	0	0
Automatic environmental control manufacturing	0	0	0	0



## APPENDIX

Industrial process variable instruments manufacturing	0	0	0	0
Totalizing fluid meter and counting device manufacturing	0	0	0	0
Electricity and signal testing instruments manufacturing	0	0	0	0
Analytical laboratory instrument manufacturing	0	0	0	0
Irradiation apparatus manufacturing	0	0	0	0
Watch, clock, and other measuring and controlling device manufacturing	0	0	0	0
Blank magnetic and optical recording media manufacturing	0	0	0	0
Software and other prerecorded and record reproducing	0	0	0	0
Electric lamp bulb and part manufacturing	0	0	0	0
Lighting fixture manufacturing	0	0	0	0
Small electrical appliance manufacturing	0	0	0	0
Household cooking appliance manufacturing	0	0	0	0
Household refrigerator and home freezer manufacturing	0	0	0	0
Household laundry equipment manufacturing	0	0	0	0
Other major household appliance manufacturing	0	0	0	0
Power, distribution, and specialty transformer manufacturing	0	0	0	0
Motor and generator manufacturing	0	0	0	0
Switchgear and switchboard apparatus manufacturing	0	0	0	0
Relay and industrial control manufacturing	0	0	0	0
Storage battery manufacturing	0	0	0	0
Primary battery manufacturing	0	0	0	0
Fiber optic cable manufacturing	0	0	0	0
Other communication and energy wire manufacturing	0	0	0	1
Wiring device manufacturing	0	0	0	0

## APPENDIX

Carbon and graphite product manufacturing	0	0	0	0
All other miscellaneous electrical equipment and component manufacturing	0	0	0	0
Automobile manufacturing	0	0	0	0
Light truck and utility vehicle manufacturing	0	0	0	0
Heavy duty truck manufacturing	0	0	0	0
Motor vehicle body manufacturing	0	1	2	7
Truck trailer manufacturing	0	0	0	0
Motor home manufacturing	0	0	0	0
Travel trailer and camper manufacturing	0	0	0	0
Motor vehicle gasoline engine and engine parts manufacturing	0	0	0	3
Motor vehicle electrical and electronic equipment manufacturing	0	0	0	0
Motor vehicle transmission and power train parts manufacturing	0	0	0	0
Motor vehicle seating and interior trim manufacturing	0	0	0	0
Motor vehicle metal stamping	0	0	0	0
Other motor vehicle parts manufacturing	0	0	0	3
Motor vehicle steering, suspension component (except spring), and brake systems manufacturing	0	0	1	4
Aircraft manufacturing	0	0	0	0
Aircraft engine and engine parts manufacturing	0	0	0	0
Other aircraft parts and auxiliary equipment manufacturing	0	0	0	0
Guided missile and space vehicle manufacturing	0	0	0	0
Propulsion units and parts for space vehicles and guided missiles manufacturing	0	0	0	0
Railroad rolling stock manufacturing	0	0	0	0
Ship building and repairing	0	0	0	0
Boat building	0	0	0	0
Motorcycle, bicycle, and parts manufacturing	0	0	0	0

## APPENDIX

Military armored vehicle, tank, and tank component manufacturing	0	0	0	0
All other transportation equipment manufacturing	0	0	0	0
Wood kitchen cabinet and countertop manufacturing	0	1	1	5
Upholstered household furniture manufacturing	0	0	0	0
Nonupholstered wood household furniture manufacturing	0	0	0	1
Other household nonupholstered furniture manufacturing	0	0	0	1
Institutional furniture manufacturing	0	0	0	0
Wood office furniture manufacturing	0	0	0	0
Custom architectural woodwork and millwork	0	0	0	0
Office furniture, except wood, manufacturing	0	0	0	0
Showcase, partition, shelving, and locker manufacturing	0	0	0	0
Mattress manufacturing	0	0	0	0
Blind and shade manufacturing	0	0	0	0
Surgical and medical instrument manufacturing	0	0	0	0
Surgical appliance and supplies manufacturing	0	0	(0)	0
Dental equipment and supplies manufacturing	0	0	0	0
Ophthalmic goods manufacturing	0	0	(0)	0
Dental laboratories	0	0	0	0
Jewelry and silverware manufacturing	0	1	1	3
Sporting and athletic goods manufacturing	0	0	0	2
Doll, toy, and game manufacturing	0	0	0	0
Office supplies (except paper) manufacturing	0	0	0	1
Sign manufacturing	0	5	3	15
Gasket, packing, and sealing device manufacturing	0	0	0	0
Musical instrument manufacturing	0	0	0	0
Fasteners, buttons, needles, and pins manufacturing	0	0	0	0

## APPENDIX

Broom, brush, and mop manufacturing	0	0	0	0
Burial casket manufacturing	0	1	1	2
All other miscellaneous manufacturing	0	0	0	2
Wholesale - Motor vehicle and motor vehicle parts and supplies	0	83	170	423
Wholesale - Professional and commercial equipment and supplies	0	71	110	228
Wholesale - Household appliances and electrical and electronic goods	0	67	134	320
Wholesale - Machinery, equipment, and supplies	0	112	178	315
Wholesale - Other durable goods merchant wholesalers	0	188	290	580
Wholesale - Drugs and druggists' sundries	0	91	209	522
Wholesale - Grocery and related product wholesalers	0	260	327	732
Wholesale - Petroleum and petroleum products	0	61	659	793
Wholesale - Other nondurable goods merchant wholesalers	0	413	771	1,507
Wholesale - Wholesale electronic markets and agents and brokers	0	53	27	31
Retail - Motor vehicle and parts dealers	0	415	720	1,016
Retail - Furniture and home furnishings stores	0	173	262	437
Retail - Electronics and appliance stores	0	201	248	416
Retail - Building material and garden equipment and supplies stores	0	214	448	639
Retail - Food and beverage stores	0	706	1,067	1,688
Retail - Health and personal care stores	0	296	377	614
Retail - Gasoline stores	0	246	465	796
Retail - Clothing and clothing accessories stores	0	231	392	739
Retail - Sporting goods, hobby, musical instrument and book stores	0	162	248	424

## APPENDIX

Retail - General merchandise stores	0	717	1,139	1,760
Retail - Miscellaneous store retailers	0	338	473	786
Retail - Nonstore retailers	0	325	1,174	2,653
Air transportation	0	250	284	554
Rail transportation	0	55	293	394
Water transportation	0	0	14	16
Truck transportation	0	635	801	1,590
Transit and ground passenger transportation	0	119	168	200
Pipeline transportation	0	416	413	430
Scenic and sightseeing transportation and support activities for transportation	0	227	267	575
Couriers and messengers	0	191	260	442
Warehousing and storage	0	168	192	408
Newspaper publishers	0	96	187	258
Periodical publishers	0	32	57	117
Book publishers	0	4	14	43
Directory, mailing list, and other publishers	0	4	17	31
Greeting card publishing	0	0	0	0
Software publishers	0	23	78	106
Motion picture and video industries	0	180	250	578
Sound recording industries	0	12	21	37
Radio and television broadcasting	0	172	128	609
Cable and other subscription programming	0	0	0	0
Wired telecommunications carriers	0	286	593	1,307
Wireless telecommunications carriers (except satellite)	0	66	246	783
Satellite, telecommunications resellers, and all other telecommunications	0	22	21	45
Data processing, hosting, and related services	0	64	201	426
News syndicates, libraries, archives and all other information services	0	10	15	24
Internet publishing and broadcasting and web search portals	0	71	222	511

## APPENDIX

Nondepository credit intermediation and related activities	0	235	334	701
Securities and commodity contracts intermediation and brokerage	0	318	321	1,232
Monetary authorities and depository credit intermediation	0	1,046	2,324	4,524
Other financial investment activities	0	(138)	198	2,558
Direct life insurance carriers	0	4	11	15
Insurance carriers, except direct life	0	232	1,005	2,164
Insurance agencies, brokerages, and related activities	0	380	632	1,748
Funds, trusts, and other financial vehicles	0	315	477	2,763
Other real estate	0	910	2,343	6,298
Tenant-occupied housing	0	371	3,672	4,326
Owner-occupied dwellings	0	0	11,848	14,969
Automotive equipment rental and leasing	0	103	212	359
General and consumer goods rental except video tapes and discs	0	136	162	259
Video tape and disc rental	0	38	62	98
Commercial and industrial machinery and equipment rental and leasing	0	109	274	391
Lessors of nonfinancial intangible assets	0	5	160	189
Legal services	0	347	509	874
Accounting, tax preparation, bookkeeping, and payroll services	0	305	414	616
Architectural, engineering, and related services	0	90	112	208
Specialized design services	0	43	45	54
Custom computer programming services	0	40	48	75
Computer systems design services	0	68	71	98
Other computer related services, including facilities management	0	20	47	77
Management consulting services	0	237	237	392
Environmental and other technical consulting services	0	221	203	301

## APPENDIX

Scientific research and development services	0	116	148	358
Advertising, public relations, and related services	0	162	227	490
Photographic services	0	65	55	80
Veterinary services	0	96	148	229
Marketing research and all other miscellaneous professional, scientific, and technical services	0	230	216	322
Management of companies and enterprises	0	215	369	699
Office administrative services	0	141	82	158
Facilities support services	0	14	20	57
Employment services	0	308	530	761
Business support services	0	81	79	141
Travel arrangement and reservation services	0	46	64	127
Investigation and security services	0	83	85	120
Services to buildings	0	185	193	308
Landscape and horticultural services	0	179	190	295
Other support services	0	74	94	197
Waste management and remediation services	0	98	195	355
Elementary and secondary schools	0	127	120	145
Junior colleges, colleges, universities, and professional schools	0	109	165	272
Other educational services	0	229	230	460
Offices of physicians	0	2,165	2,499	3,656
Offices of dentists	0	616	757	1,205
Offices of other health practitioners	0	803	743	1,043
Outpatient care centers	0	553	578	1,130
Medical and diagnostic laboratories	0	206	296	419
Home health care services	0	436	359	460
Other ambulatory health care services	0	168	182	308
Hospitals	0	1,945	2,297	4,262
Nursing and community care facilities	0	641	739	1,221
Residential mental retardation, mental health, substance abuse and other facilities	0	341	364	537

## APPENDIX

Individual and family services	0	775	718	1,096
Child day care services	0	314	377	503
Community food, housing, and other relief services, including rehabilitation services	0	201	225	498
Performing arts companies	0	41	74	159
Commercial Sports Except Racing	0	23	48	165
Racing and Track Operation	0	7	16	51
Independent artists, writers, and performers	0	66	105	146
Promoters of performing arts and sports and agents for public figures	0	48	127	271
Museums, historical sites, zoos, and parks	0	49	61	101
Amusement parks and arcades	0	3	11	14
Gambling industries (except casino hotels)	0	171	363	630
Other amusement and recreation industries	0	86	187	281
Fitness and recreational sports centers	0	54	153	214
Bowling centers	0	13	29	48
Hotels and motels, including casino hotels	0	52	88	148
Other accommodations	0	16	20	28
Full-service restaurants	0	1,063	1,511	2,799
Limited-service restaurants	0	877	1,411	3,060
All other food and drinking places	0	633	987	1,552
Automotive repair and maintenance, except car washes	0	804	979	1,473
Car washes	0	408	677	999
Electronic and precision equipment repair and maintenance	0	27	36	72
Commercial and industrial machinery and equipment repair and maintenance	0	155	168	267
Personal and household goods repair and maintenance	0	124	124	162
Personal care services	0	384	293	404
Death care services	0	40	49	85
Dry-cleaning and laundry services	0	59	65	96
Other personal services	0	279	241	341
Religious organizations	0	636	234	1,148
Grantmaking, giving, and social advocacy organizations	0	240	592	949



## APPENDIX

Business and professional associations	0	119	164	319
Labor and civic organizations	0	151	317	671
Private households	0	78	78	78
Postal service	0	256	256	286
Federal electric utilities	0	4	6	25
Other federal government enterprises	0	16	(8)	39
State government passenger transit	0	0	0	0
State government electric utilities	0	0	0	0
Other state government enterprises	0	1	1	2
Local government passenger transit	0	30	(32)	7
Local government electric utilities	0	0	0	1
Other local government enterprises	0	544	982	1,991
* Not an industry (Used and secondhand goods)	0	0	0	0
* Not an industry (Scrap)	0	0	0	0
* Not an industry (Rest of world adjustment)	0	0	0	0
* Not an industry (Noncomparable foreign imports)	0	0	0	0
* Employment and payroll of state govt, education	0	0	0	0
* Employment and payroll of state govt, non-education	0	0	0	0
* Employment and payroll of local govt, education	0	0	0	0
* Employment and payroll of local govt, non-education	0	0	0	0
* Employment and payroll of federal govt, military	0	0	0	0
* Employment and payroll of federal govt, non-military	1	160,355	206,563	431,916

**Note:** Due to rounding, sum of columns may not be equal to the total figures. Employment figures that appear as zero may be greater than zero (but less than 1) if the corresponding labor income/value added/output figure is not zero. Figures in such cases appear as zero due to rounding. All monetary values are in 2019 dollars.

## APPENDIX

### E. IMPLAN SECTOR SCHEME

**Table 473: IMPLAN Industry Classes and North American Industry Classification System (NAICS) Sectors.**

IMPLAN Code	IMPLAN Sector Description	NAICS Code
1	Oilseed farming	111110
1	Oilseed farming	111120
1	Oilseed farming	111191
2	Grain farming	111130
2	Grain farming	111140
2	Grain farming	111150
2	Grain farming	111160
2	Grain farming	111191
2	Grain farming	111199
3	Vegetable and melon farming	111211
3	Vegetable and melon farming	111219
4	Fruit farming	111310
4	Fruit farming	111320
4	Fruit farming	111331
4	Fruit farming	111332
4	Fruit farming	111333
4	Fruit farming	111334
4	Fruit farming	111336
4	Fruit farming	111339
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5	Tree nut farming	111336
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6	Greenhouse, nursery, and floriculture production	111419
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8	Cotton farming	111920
9	Sugarcane and sugar beet farming	111930
9	Sugarcane and sugar beet farming	111991
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10	All other crop farming	111992
10	All other crop farming	111998
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13	Poultry and egg production	112330
13	Poultry and egg production	112340
13	Poultry and egg production	112390
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14	Animal production, except cattle and poultry and eggs	112410
14	Animal production, except cattle and poultry and eggs	112420
14	Animal production, except cattle and poultry and eggs	112511
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14	Animal production, except cattle and poultry and eggs	112910
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15	Forestry, forest products, and timber tract production	113210
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145	Paper mills	322122
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159	Petrochemical manufacturing	325110
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163	Other basic organic chemical manufacturing	325194
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192	Plastics bottle manufacturing	326160
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276	Industrial mold manufacturing	333511
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303	Other communications equipment manufacturing	334290
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309	Electronic connector manufacturing	334417
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311	Electromedical and electrotherapeutic apparatus manufacturing	334510
312	Search, detection, and navigation instruments manufacturing	334511
313	Automatic environmental control manufacturing	334512
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316	Electricity and signal testing instruments manufacturing	334515
317	Analytical laboratory instrument manufacturing	334516
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319	Watch, clock, and other measuring and controlling device manufacturing	334519
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342	Heavy duty truck manufacturing	336120
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350	Motor vehicle seating and interior trim manufacturing	336360
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366	Upholstered household furniture manufacturing	337121
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380	Dental laboratories	339116
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398	Wholesale - Grocery and related product wholesalers	424450
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405	Retail - Building material and garden equipment and supplies stores	444130
405	Retail - Building material and garden equipment and supplies stores	444190
405	Retail - Building material and garden equipment and supplies stores	444210
405	Retail - Building material and garden equipment and supplies stores	444220
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406	Retail - Food and beverage stores	445120
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406	Retail - Food and beverage stores	445299
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409	Retail - Clothing and clothing accessories stores	448140
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418	Transit and ground passenger transportation	485113
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418	Transit and ground passenger transportation	485320
418	Transit and ground passenger transportation	485410
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