ANNUAL PROCUREMENT REPORT Fiscal Year 1999





National Aeronautics and Space Administration

INTRODUCTION

This report presents summary data on all NASA procurement actions and detailed information on contracts, grants, agreements, and other procurements over \$25,000 awarded by NASA during Fiscal Year 1999 using appropriated funds.

The dollar value of procurements over \$25,000 amounted to 98 percent of the total dollar value of procurement actions completed during Fiscal Year 1999. However, procurements over \$25,000 accounted for only 53 percent of the total actions.

Procurement action, as used in this report, means contractual actions to obtain supplies, services or construction that increase or decrease funds. A procurement action thus may be a new procurement, or a modification such as a supplemental agreement, change order, or termination to an existing contract that changes the total amount of funds obligated. An obligation is a contractual commitment to pay for supplies or services that are specified in the contract. (See Glossary for more information.)

The Annual Procurement Report is also available via the internet on the Procurement homepage. The address is: http://www.hq.nasa.gov/office/procurement/. The report was prepared by the Program Operations Division, Office of Procurement, NASA Headquarters. Inquiries should be addressed to:

National Aeronautics and Space Administration Office of Procurement (Code HS) Washington, DC 20546

TABLE OF CONTENTS

SUMMARY

- I. TOTAL PROCUREMENTS
- II. AWARDS BY TYPE OF CONTRACTOR
- III. COMPETITION IN NASA AWARDS

A. Competition in Contracting Act

B. Reporting of Competition

C. Competition During Fiscal Year 1999

IV. AWARDS TO BUSINESS FIRMS

A. Awards By Contract Type

B. Small Business Participation

C. Distribution of Small Business Awards

D. Small Disadvantaged Business Participation

E. Women-Owned Small Business Participation

F. Awards by Type of Effort

G. One Hundred Principal Contractors

V. AWARDS TO EDUCATIONAL & OTHER NONPROFIT INSTITUTIONS

A. Distribution by Type of Institution & Award

B. One Hundred Principal Educational & Nonprofit Institutions

- VI . CONTRACT FOR OPERATION OF JET PROPULSION LABORATORY
- VII. AWARDS THROUGH OTHER GOVERNMENT AGENCIES
- VIII. U.S. GEOGRAPHICAL DISTRIBUTION OF AWARDS
- IX. AWARDS PLACED OUTSIDE THE UNITED STATES
- X. PROCUREMENT ACTIVITY BY INSTALLATION

<u>GLOSSARY</u>

APPENDIXES

SUMMARY

NASA's procurements during Fiscal Year 1999 totaled \$12,674.6 million. This is 0.9 percent more than was awarded during Fiscal Year 1998 (for further detail see Page 4).

Approximately 74 percent of the total awards were placed directly with business firms, 10 percent with the California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory, 12 percent with educational and other nonprofit institutions, 3 percent with or through other Government agencies and 1 percent outside the U.S. (Page 5).

Fifty-six point seven percent, or \$5.5 billion, of the \$9.6 billion total procurement awards available for competition were made on a competitive basis. Of the total awards available for competition, \$803.4 million, or 8.4 percent, represented competitive new awards, and \$4.7 billion, or 48 percent, constituted within-scope modifications (incremental funding actions and change orders) to contracts awarded competitively in prior years. Approximately \$3.3 billion, or 35 percent, of the total awards available for competition were noncompetitive. Of these, \$128.2 million, or 1.3 percent, of the total available for competition represented new noncompetitive awards, and \$3.2 billion, or 33.2 percent, constituted other than competitive modifications to contracts awarded in prior years. In addition, \$850.1 million, or 8.8 percent, of the total available for competition represented new noncompetitive basis (Page 11). It should be noted that awards associated with the contracts for the operation of NASA's Jet Propulsion Laboratory during Fiscal Year 1999 are excluded from the procurements available for competition.

With respect to contract types, awards on contracts having cost-plus-award-fee provisions amounted to 51 percent of the total awards over \$25,000 to business firms. Awards on firm-fixed-price contracts constituted 14 percent of the total. Cost-plus-fixed-fee contracts accounted for 5 percent of the total. Incentive contracts, both cost-plus-incentive-fee and fixed-price-incentive, made up 25 percent of the total awards (Page 13).

Small business firms received \$1,287 million or 14 percent of NASA's direct awards to business firms. This percentage reflects the fact that most of the awards to business firms were for large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$981.7 million to business firms during the year, small business firms received \$316.2 million, or 32 percent (Page 14). Included in the small business total were NASA awards of \$95.7 million to small and small disadvantaged business through the Small Business Innovation Research Program and the Small Business Technology Transfer Program (Page 15).

Disadvantaged firms received \$566 million of the \$1,287 million awarded to small business firms in prime contract awards. The \$566 million comprised \$215 million direct awards and \$351 million under Section 8(a) of the Small Business Act (Page 19). In addition, small business firms owned and controlled by women have participated in NASA's procurement program and have received prime contract awards totaling \$176.9 million.

During the year, all 50 states and the District of Columbia participated in NASA procurements over \$25,000. These larger awards went to 2,341 business firms in 47 states and the District of Columbia and to 725 educational and nonprofit organizations in 50 states and the District of Columbia (Page 30).

NOTE: In this report, all tables and charts present data on total procurements of the types specified in the respective sections. Where the information is limited, e.g., to contracts over \$25,000, such limitation is indicated by footnotes.

NASA PROCUREMENTS FOR FISCAL YEAR 1999

I. TOTAL PROCUREMENTS

<u>Fiscal Year 1999</u> - NASA's procurements in Fiscal Year 1999 totaled \$12,674.6 million. This is \$113.4 million, or .9 percent more than in Fiscal Year 1998. The number of procurement actions totaled 64,683.

<u>Trend, Fiscal Years 1995 - 1999</u> - The trend in procurement obligations versus total NASA obligations during the period Fiscal Years 1995-1999 is shown in terms of dollars and percentages in the table listed below.

PROCUREMENT OBLIGATIONS VS. TOTAL NASA OBLIGATIONS * FISCAL YEARS 1995 - 1999 (MILLIONS OF DOLLARS)

Fiscal Year 1999 Total NASA Obligations \$14,530.1 **Procurement Obligations**

\$12,674.6

Amount

% of Total Obligations 87.2 **INTRODUCTION - 1999 Annual Procurement Report**

1998	14,430.1	12,561.2	87.1
1997	14,584.2	12,789.5	87.7
1996	14,403.3	12,699.2	88.2
1995	15,097.0	13,341.4	88.4

* Total NASA obligations include salaries, benefits and travel of NASA employees, as well as 127,960 credit card purchases in the amount of \$74 million.

II. AWARDS BY TYPE OF CONTRACTOR

<u>Fiscal Year 1999</u> - The distribution of NASA's procurement obligations is shown in Figure 1. Awards to business firms accounted for 74 percent of the total obligations. These awards totaled \$9,386.5 million, which is \$164 million or 1.7 percent less than in Fiscal Year 1998. Procurements placed through other Government agencies totaled \$389.6 million, \$18.1 million or 4.4 percent less than in Fiscal Year 1998. Awards, including grants and agreements, to educational and other nonprofit institutions totaled \$1,450.2 million, \$145.8 million or 10.1 percent more than in Fiscal Year 1998. Awards on contracts with California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory amounted to \$1,294.6 million, \$123.3 million or 9 percent more than in Fiscal Year 1998. NASA awarded \$153.7 million outside the United States which was \$26.4 million more than in Fiscal Year 1998.



<u>Trend, Fiscal Year 1995 - 1999</u> - The trend in the distribution of NASA's direct procurements by type of contractor during the period Fiscal Years 1995-1999 is shown in terms of dollars and in percentages of total annual procurements in the table listed below.

AWARDS BY TYPE OF CONTRACTOR

FISCAL YEARS 1995 - 1999

FY 1995	FY 1996	FY 1997	FY 19	98 F\	1999
<u>TOTAL</u>	<u>\$13,341</u>	<u>AWARDS</u> \$12,699_	<u>8 IN MILLIONS</u> <u>\$12,790</u>	<u>\$12,561</u>	<u>\$12,675</u>
BUSINESS FIRMS	10,311	9,801	9,817	9,551	9,386
EDUCATIONAL	814	746	808	898	1,019
NONPROFIT	311	288	384	406	431
JPL	1,135	1,188	1,126	1,171	1,295
GOV'T AGENCIES	563	484	464	408	390
OUTSIDE U.S.	207	192	191	127	154

PERCENT OF TOTAL

T OTAL	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
BUSINESS FIRMS	77	77	77	76	74
EDUCATIONAL	6	6	6	7	8
NONPROFIT	2	2	3	3	4
JPL	9	9	9	9	10
GOV'T AGENCIES	4	4	4	4	3
OUTSIDE U.S.	2	2	1	1	1

Appendix I shows distribution of NASA direct procurements by type of contractor for the period Fiscal Years 1961 - 1999 (See Page 38).

III. COMPETITION IN NASA AWARDS

A. Competition in Contracting Act

Full and open competition, with limited exceptions, is the required standard for procurements within the federal government in accordance with the Competition in Contracting Act (P.L. 98-369). Full and open competition means that all responsible sources are permitted to compete. The competitive procedures authorized for use in full and open competition are sealed bidding; competitive proposals (if sealed bidding is not appropriate); a combination of these procedures (such as two-step sealed bidding); and other competitive procedures expressly provided for, including architect-engineer

procedures in accordance with Public Law 92-582, broad agency announcements for basic research proposals, and General Services Administration multiple award schedules.

Contracting without providing for full and open competition is provided for only under the following circumstances:

(1) Only one responsible source exists and no other supplies or services will satisfy agency requirements;

- (2) Unusual and compelling urgency;
- (3) Industrial mobilization; or engineering, developmental, or research capability;
- (4) International agreement;
- (5) Statutory authorization or requirement;
- (6) National security; and,
- (7) Public interest.

Written justifications are required at NASA in order to award procurements on other than a full and open competition basis. The approvals for these justifications are as follows:

Size of Procurement	<u>Approving Official</u>
\$500,000 or less	A level above the Contracting Officer
\$500,000 - \$10 million	Center Competition Advocate
\$10 million - \$50 million	Center Director
Over \$50 million	NASA Procurement Executive

To enhance and promote competition and eliminate barriers to full and open competition, NASA has developed a competition advocacy program. In addition to appointing an agency competition advocate, a competition advocate has been designated at each NASA center.

B. Reporting of Competition

Federal agencies are required to submit to Congress an annual report summarizing accomplishments of the agency's competition advocacy program during the past year. In addition, the report describes proposed actions for the current year to increase competition and reduce noncompetitive contract awards. For measuring competition statistics, awards to educational and nonprofit organizations, as well as awards to business, are included in the overall base. For the purpose of developing and reporting uniform competition statistics, all federal agencies use this common baseline.

The reporting of competition excludes from the base the following categories of procurement actions for which there is no opportunity for competition:

(1) Any procurements authorized or required by statute to be awarded to a designated source;

(2) Noncompetitive awards under Section 8(a) of the Small Business Act, as amended;

(3) Awards for utilities (excluding telecommunications) where there is no opportunity for competition;

- (4) Directed acquisitions for foreign governments;
- (5) Brand named products for authorized resale; and
- (6) Other awards for which there is no opportunity for competition.

C. Competition During Fiscal Year 1999

<u>Overall Competitive Performance</u> - NASA's awards to business firms, educational institutions, and nonprofit organizations for Fiscal Year 1999 are shown in Figure 2. Of the total awards of \$9,635 million available for competition, \$5,459.6 million, or 56.7 percent, represents competed procurements; \$850.1 million, or 8.8 percent, represents follow-on procurements which were made to contractors that had been previously awarded competitive contracts; \$3,325.3 million, or 34.5 percent, constituted other than competitive procurements. It should also be noted that \$3,039.6 million in awards represented procurements that were not available for competition. These are the procurements identified above in the Reporting of Competition discussion. Also included in this category are grants, cooperative agreements, awards to other government agencies, small purchases not over \$2,500 and awards to the California Institute of Technology for operation of the Jet Propulsion Laboratory.

<u>Competitive Procurements</u> - Of the \$5,459.6 million in awards which were competed, \$803.4 million, or 14.7 percent of these awards represented new contracts, and \$4,656.2 million, or 85.3 percent, were in-scope modifications (incremental funding actions and change orders) to contracts awarded on a competitive basis in prior years. Of the \$803.4 million in new awards, \$748.3 million, or 93.1 percent, were contracts awarded through negotiation; while \$55.1 million, or 6.9 percent, were awarded on the basis of sealed bidding. The preponderance of competitive awards made through the negotiation process reflects NASA's principal mission as a research and development agency. A significant portion of the procurements awarded through sealed bidding were for construction efforts.

<u>Noncompetitive Procurements</u> - Of the \$3,325.3 million in noncompetitive awards, \$128.2 million, or 4 percent, represented new awards; whereas \$3,197.1 million, or 96 percent, constituted other than competitive modifications to contracts awarded in prior years. Awards in this category are supported by justifications for other than full and open competition.

<u>Noncompetitive New Awards</u> - Of the \$128.2 million in noncompetitive new awards, \$81 million were awards over \$25,000. Simplified acquisitions accounted for \$49.2 million. Of the remaining awards, the justifications for other than full and open competition for 37.1 percent, or \$11.8 million, in new noncompetitive awards were based on the first CICA exception, only one responsible source. The justifications for 36.4 percent, or \$11.6 million, in new noncompetitive awards were based on the second CICA exception, urgency. The justifications for 14.5 percent, or \$4.6 million, in new noncompetitive awards were based on the fifth CICA exception, authorized by statute. The justifications for the remaining 12 percent of the new noncompetitive awards cited CICA exceptions 3, mobilization, essential R&D capabilities or expert services, 4, international agreement, and 6, national security.

<u>Follow-on Awards</u> - In addition to the categories of competitive and noncompetitive awards, NASA awarded \$850.1 million in follow-ons to competitive procurements, of which \$208.1 million represented new awards, and \$642 million were modifications to existing contracts awarded in prior years.





Total Available for Competition*	Millions \$ 9,635.0	Percent 100.0
Competed	5,459.6	56.7
New Awards	803.4	8.4
Sealed Bids	55.1	0.6
Negotiated	748.3	7.8
Modifications	4,656.2	48.3
Sealed Bids	12.8	0.1
Negotiated	4,643.4	48.2
Not Competed	3,325.3	34.5
New Awards	128.2	1.3
Modifications	3,197.1	33.2
Follow-on	850.1	8.8
New Awards	208.1	2.1
Modifications	642.0	5.7

 The 59,505.0 million does not include 50,009.6 million in awards which were not available for competition.

Figure 2

IV. AWARDS TO BUSINESS FIRMS

A. Awards By Contract Type

<u>Fiscal Year 1999</u> - Figure 3 categorizes Fiscal Year 1999 awards over \$25,000 to business firms by contract type.

Contracts and modifications to contracts having cost-plus-award-fee provisions with business firms accounted for 51 percent of the total dollars in Fiscal Year 1999, as compared to 55 percent in Fiscal Year 1998. Incentive contracts, both cost-plus and fixed-price, were 25 percent of the total dollars in Fiscal Year 1999, compared to 22 percent in Fiscal Year 1998. Firm-fixed-price contracts amounted to

14 percent of the total, and cost-plus-fixed-fee contracts represented 5 percent of the total in Fiscal Year 1999.

<u>Trends, Fiscal Years 1995 - 1999</u> - The following table shows a 5-year trend in dollars and percent of total annual procurements to business firms by contract type. The large percentage of procurements which have award fee and incentive provisions resulted from major procurements for the Space Shuttle and Space Station programs.

AWARDS TO BUSINESS FIRMS BY CONTRACT TYPE* FISCAL YEAR 1995 - 1999

	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
		AWARDS	IN MILLIONS		
TOTAL BUSINESS	\$9,893	\$9,441	\$9,323	\$8,971	\$8,795
Firm-Fixed-Price	912	967	1,035	1,005	1,197
Incentive	447	577	1,700	1,957	2,227
Cost-Plus-Award- Fee	7,484	6,826	5,520	4,955	4,451
Cost-Plus-Fixed-Fee	666	629	572	530	466
Other	384	442	496	524	454
		PERCEN	<u>r of tota</u>	L	
TOTAL BUSINESS	100	100	100	100	100
Firm-Fixed-Price	9	10	11	11	14
Incentive	4	6	18	22	25
Cost-Plus-Award- Fee	76	72	59	55	51
Cost-Plus-Fixed-Fee	7	7	6	6	5
Other	4	5	6	6	5

* Excludes smaller procurements, generally those of \$25,000 or less.

AWARDS BY CONTRACT TYPE DIRECT AWARDS TO BUSINESS FIRMS* FISCAL YEAR 1999



* Excludes smaller procurements, generally those of \$25,000 or less, and orders under GSA Federal Supply Schedule contracts.

Figure 3

B. Small Business Participation

<u>Total Small Business</u> - During Fiscal Year 1999, NASA direct awards to small business firms exceeded \$1 billion, totaling \$1,287 million. These awards constituted 14 percent of the total awards to business firms. The dollar awards to small business firms in Fiscal Year 1999 resulted from 29 thousand procurement actions, or 62 percent of the total number of actions placed with business firms (See Figure 4).

<u>Share of New Contracts</u> - The majority of NASA's direct awards to business firms involve large continuing research and development contracts for major systems and major items of hardware. Of

the total new contract awards of \$981.7 million to business firms during Fiscal Year 1999, small business firms received \$316.2 million or 32 percent.

<u>Share of Smaller Awards</u> - Awards of \$25,000 or less to business firms during Fiscal Year 1999 totaled \$209.1 million. Of these smaller awards, small business firms received \$94.6 million or 45 percent.

<u>Extent of Maximum Possible Participation in New Awards</u> - Assuming that the smaller awards represented new purchases, the total amount of new business awards in which small business could have participated was \$1,190.8 million, consisting of the \$981.7 million in new awards over \$25,000 and the \$209.1 million in awards of \$25,000 or less. Of this \$1,190.8 million in new business awards, small business received \$410.8 million or 35 percent.

<u>Small Business Set-Asides</u> - Small business set-asides are defined as competitive awards which are limited only to small business. The small business set-aside program continues to exert a strong influence on the capability of small business firms to participate in the space program. In Fiscal Year 1999, these set-asides amounted to \$530.4 million, representing 41.2 percent of the total awards to small business and 5.6 percent of the total awards to all business firms.

<u>Small Business Innovation Research (SBIR)</u> - The Small Business Innovation Development Act requires that Federal agencies, whose extramural budgets for research or research and development exceeded a stated threshold, establish a Small Business Innovation Research Program. Statutory requirements are aimed at assisting small/small disadvantaged business participation in the objectives of the program: to stimulate technological innovation in the private sector; to strengthen the role of small business in meeting Federal research and development needs; to increase the commercialization of innovations derived from Federal research and development; and to encourage small disadvantaged business participation in technological innovation. During Fiscal Year 1999, NASA awarded 469 new SBIR contracts totaling \$55.8 million. Of this amount, 346 were Phase I awards totaling \$24.4 million and 123 were Phase II awards totaling \$31.4 million. Also in Fiscal Year 1999, NASA funded on-going Phase II contracts totaling \$33.7 million. Included in the total awards of \$89.5 million, 65 contracts, or \$8 million, were to small disadvantaged business firms, and 53 contracts, or \$6.9 million were to women-owned firms.

SMALL BUSINESS PARTICIPATION

FISCAL YEAR 1999





<u>Small Business Technology Transfer (STTR)</u> - The Small Business Technology Transfer Act authorizes Federal agencies, whose extramural budgets are in excess of \$1 billion, to establish a Small Business Technology Transfer Program. The intent of the program is the same as the SBIR program, as stated above, with an additional requirement for cooperative research and development wherein the small business must perform not less than 40 percent of the work and a research institution must perform not less than 30 percent of the work. During Fiscal Year 1999, NASA awarded 42 new STTR contracts totaling \$6.2 million. Of this amount, 28 were Phase I awards totaling \$2.7 million, and 14 were Phase II awards totaling \$3.5 million. There were also 2 on-going Phase II STTR contracts totaling \$85 thousand. Included in the STTR awards are 4 contracts for \$788 thousand to small disadvantaged business firms, and 3 contracts amounting to \$841 thousand to women-owned firms.

<u>Representation Among NASA's 100 Largest Contractors</u> - The 100 contractors that received the largest dollar value of NASA's direct awards to business firms are listed on Pages 21-24. Thirty-two of these contractors are small business firms and, of these, twenty are disadvantaged firms.

C. Distribution of Small Business Awards

In addition to the \$530.4 million in small business set-asides and the \$95.7 million awarded through the Small Business Innovation Research/Small Business Technology Transfer Programs, small business firms eligible for participation in the Section 8(a) Program received a total of \$351 million in such awards. Also, small business firms received \$174 million in other competitive awards and \$135.9 million in procurement awards which were not competed (See Figure 5).



<u>Trend, Fiscal Years 1995 - 1999 - Prime Contract Awards</u>. The table below shows the extent of small business participation in NASA's procurements for the period Fiscal Year 1995 - 1999.

SMALL BUSINESS PARTICIPATION FISCAL YEARS 1995 - 1999

(MILLIONS OF DOLLARS)

-	<u>FY 1995</u>	<u>FY 1996</u>	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>
TOTAL BUSINESS	<u>\$10,312</u>	<u>\$9,801</u>	<u>\$9,817</u>	<u>\$9,551</u>	<u>\$9,386</u>
<u>SMALL</u> <u>BUSINESS</u> *	<u>\$1,171</u>	<u>\$1,163</u>	<u>\$1,244</u>	<u>\$1,218</u>	<u>\$1,287</u>
% OF TOTAL	11.4%	11.9%	12.7%	12.8%	13.7%
SET-ASIDES	<u>\$367</u>	<u>\$349</u>	<u>\$429</u>	<u>\$457</u>	\$ <u>530</u>

10/3/2018		INTRODUCTION	l - 1999 Annual Pr	ocurement Report	
% OF TOTAL	3.6%	3.6%	4.4%	4.8%	5.6%
% OF SMALL	31.3%	30.0%	34.5%	37.5%	41.2%

* Includes awards placed under Authority of Section 8(a) of the Small Business Act and through the Small Business Innovation Research/Small Business Technology Transfer Programs.

Appendix III shows NASA direct awards to small business firms for the period Fiscal Years 1961-1999 (See Page 46).

D. Small Disadvantaged Business Participation

NASA's prime contract awards to small disadvantaged business firms during Fiscal Year 1999 totaled \$566 million. The tabulation shown below indicates that NASA has made continuing efforts to increase disadvantaged business participation in NASA's procurements through direct awards and awards placed under the provisions of Section 8(a) of the Small Business Act. Service contract awards have also been expanded to include a variety of technical services and research and development efforts as well as other services.

Public Laws 101-144 and 101-507 mandated that NASA establish a goal of awarding at least 8 percent of the value of its prime and subcontracts to small disadvantaged and women-owned small business firms, Historically Black Colleges and Universities, and other minority institutions. NASA developed a plan for achieving the prescribed goal by Fiscal Year 1994, but exceeded it in Fiscal Year 1993. NASA surpassed the 8 percent goal in Fiscal Year 1999 for the seventh year in a row and exceeded 16 percent.

SMALL DISADVANTAGED BUSINESS PRIME CONTRACT AWARDS FISCAL YEARS 1995 - 1999

(MILLIONS OF DOLLARS)

Fiscal Year	Total Awards To Disadvantaged Business	Direct Awards*	Section 8(a) Awards	
1999	\$566.0	\$215.0	\$351.0	
1998	499.5	183.1	316.4	
1997	494.2	159.1	335.1	
1996	460.2	131.0	329.2	
1995	486.2	143.7	342.5	

* Includes disadvantaged direct awards through the Small Business Innovation Research and Small Business Technology Transfer Programs.

E. Women-Owned Small Business Participation

In accordance with Executive Order 12138, Women's Business Enterprise, NASA extends a particular effort to ensure that business firms owned and controlled by women have an equitable opportunity to participate in NASA's Procurement Program. In Fiscal Year 1999, women-owned small business firms received prime contract awards totaling \$176.9 million.

F. Awards by Type of Effort.

During Fiscal Year 1999, \$9,177.3 million was awarded to business firms in support of effort in research and development, services, and supplies and equipment procurements. A breakout of these awards by category is shown below:

	Number of	Total
<u>Category</u>	<u>Contracts</u>	(<u>Millions)</u>
Total	<u>5,850</u>	<u>\$9,177.3*</u>
<u></u>	<u>0,000</u>	<u></u>
Research & Development	<u>1,988</u>	<u>2,703.0</u>
Space Station	25	1,141.7
Aeronautics & Space Technology	751	432.3
Space Flight	85	260.1
Space Science & Applications	377	183.2
Space Operations	34	40.9
Commercial Programs	72	12.8
Other Space R&D	342	541.4
Other R&D	302	90.6
<u>Services</u>	<u>1,456</u>	<u>4,718.7</u>
Professional, Admin. & Mgmt. Support	341	2,535.8
ADP & Telecommunications	155	747.7
Operation of Gov't-owned Facilities	35	409.0
Maint., Repair & Rebldg. of Equipment	113	303.6
Maint., Repair & Alter. of Real Property	223	157.5
Utilities and Housekeeping	132	132.6
Quality Control Testing & Inspection	17	106.0
Other Services	440	326.5
Supplies & Equipment	<u>2,406</u>	<u>1,755.6</u>
Space Vehicles	45	1,076.2
Ammunition & Explosives	4	333.5
ADP Equipment, Software, Supplies		
& Support Equipment	1,367	142.8
Engines, Turbines & Components	13	59.9
Maintenance & Repair Shop Equip.	10	32.5
Instruments & Laboratory Equipment	321	21.8
Fuels, Lubricants, Oils & Waxes	35	16.1

Chemicals & Chemical Products	30	13.8
Other Supplies & Equipment	581	59.0

* Excludes smaller procurements, generally those of \$25,000 or less.

G. One Hundred Principal Contractors (Business Firms)

The one hundred contractors that received the largest dollar value of NASA direct awards to business firms during Fiscal Year 1999 are shown below. The awards to these contractors accounted for 89 percent of the direct awards to business firms during the year. The smallest aggregate award to any contractor was in excess of \$6 million. Of the one hundred contractors, 32 were small business firms and of these 20 were disadvantaged firms at the time of award.

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED ACCORDING TO TOTAL AWARDS RECEIVED FISCAL YEAR 1999

(S=Small Business/D=Disadvantaged Business)

AWARDS

	CONTRACTOR		(THOUSANDS	<u>5)</u>	PERCENT
	TOTAL AWARDS TO BUSINESS FIRMS		\$9,386,4	469	100.00
1.	UNITED SPACE ALLIANCE LLC		1,464,8	338	15.61
2.	BOEING CO.		1,204,5	519	12.83
3.	LOCKHEED MARTIN CORP.		905,9	927	9.65
4.	MCDONNELL DOUGLAS CORP.		415,8	342	4.43
5.	THIOKOL CORP.		395,3	374	4.21
6.	LOCKHEED MARTIN SPACE OPERATIONS CO.		295,7	705	3.15
7.	BOEING NORTH AMERICAN INC.		272,0	085	2.90
8.	LOCKHEED MARTIN ENGRG & SCIENCE CO.		230,6	592	2.46
9.	SPACE GATEWAY SUPPORT		220,9	992	2.35
10.	T R W INC.		183,7	799	1.96
11.	HUGHES AIRCRAFT CO.		173,7	724	1.85
12.	COMPUTER SCIENCES CORP.		173,6	596	1.85
13.	HUGHES INFORMATION TECH. CORP.		123,2	201	1.31
14.	UNITED TECHNOLOGIES CORP.		104,2	231	1.11
15.	RAYTHEON S T X CORP.		92,2	200	.98
16.	SCIENCE APPLICATIONS INTL. CORP.		91,3	361	.97
17.	ALLIEDSIGNAL TECHNICAL SERVICES		85,2	232	.91
18.	LOCKHEED MARTIN AEROSPACE CORP.		75,3	306	.80
19.	ORBITAL SCIENCES CORP.		72,5	565	.77
20.	DYNACS ENGINEERING CO. INC.	(S)	(D) 64,3	329	.69
21.	BALL AEROSPACE & TECH. CORP.		62,6	503	.67

10/3/2018	INTRODUCTION - 19	99 Annua	al Procurement Repor	t
22. SVERDRUP TECHNOLOGY INC			58,028	.62
23. HAMILTON SUNDSTRAND SPAC SYSTEMS	E		57,779	.62
24. JOHNSON ENGINEERING CORI	P. (S)		57,701	.61
25. SWALES & ASSOCIATES INC.	(S)		56,807	.61
26. OAO CORP.			55,373	.59
27. RAYTHEON TECHNICAL SERVI	CES CO.		49,406	.53
28. CORTEZ III SERVICE CORP.		(D)	48,008	.51
29. I T T CORP.			46,710	.50
30. JOHNSON CONTROLS WORLD	SERVICES		46,453	.49
31. WYLE LABORATORIES	(S)		45,808	.49
32. GENERAL ELECTRIC CO.			44,786	.48
33. BOEING COMMERCIAL AIRPLA	NE GROUP		43,098	.46
34. B R S P			39,872	.42
35. K P M G PEAT MARWICK LLP			37,648	.40
36. AEROJET GENERAL CORP.			33,718	.36
37. SPACEHAB INC.	(S)		31,743	.34
38. E G & G ALABAMA INC.			30,132	.32
39. MICRO CRAFT INC.	(S)		25,888	.28
40. DYNCORP			25,215	.27
41. N S I TECHNOLOGY SERV. COP	RP.		25,175	.27
42. INFORMATION DYNAMICS INC.	(S)	(D)	24,442	.26
43. SILICON GRAPHICS INC.			24,150	.26
44. INDUSTRIAL CONSTRUCTION I	NC. (S)		23,702	.25
45. SPACE SYSTEMS LORAL INC.			22,543	.24
46. Q S S GROUP INC.	(S)	(D)	22,294	.24
47. UNISYS CORP.			21,273	.23
48. GOVERNMENT MICRO RESOUR	RCES (S)	(D)	21,194	.23
49. FAIRCHILD SPACE & DEFENSE	CORP.		20,492	.22
50. DANIEL MANN JOHNSON MEN	DENHAL		20,183	.22
51. INTERMETRICS INC.			20,160	.21
52. INTELLISOURCE INFORMATION	I SYS.		20,039	.21
53. P R C INC.			19,998	.21
54. SCIENTIFIC & COMMERCIAL SY	′S (S)	(D)	19,827	.21
55. E G & G LANGLEY INC.			19,632	.21
56. ANALEX CORP.	(S)		19,575	.21
57. SCIENCE SYSTEMS APPLICATI	()	. ,	18,741	.20
58. N C I INFORMATION SYSTEMS	()		18,674	.20
59. HERNANDEZ ENGINEERING IN	()	(D)	17,230	.18
60. MISSISSIPPI SPACE SERVICES			16,107	.17
61. WOODSIDE SUMMIT GROUP IN	C. (S)	(D)	15,589	.17
62. C T A INC.			15,051	.16
63. JACKSON & TULL INC.	(S)	(D)	14,921	.16
https://prod.nais.nasa.gov/pub/pub_library/Annual99_A.htm	I			

https://prod.nais.nasa.gov/pub/pub_library/Annual99_A.html

64. A I SIGNAL RESEARCH INC.(S) (D)14,713.1665. GILCREST ELECTRIC & SUPPLY CO.(S) (D)14,353.1566. CAELUM RESEARCH CORP.(S) (D)14,182.1567. AIR PRODUCTS & CHEMICALS INC.13,840.1568. NYMA INC.(S) (D)13,838.1569. ROTHE JV(S)13,741.1570. CALL HENRY INC(S)13,372.1471. GENERAL SCIENCES CORP.13,009.1472. CLEVELAND ELECTRIC ILLUMINATING12,564.1373. M R J INC.(S)12,449.1374. SYSCON SERVICES INC.12,325.1375. SANTA BARBARA RESEARCH CENTER12,056.1376. BROWN & ROOT SERVICES CORP.11,729.1277. WANG GOVERNMENT SERVICES INC.(D)11,567.1278. VIRGINIA ELECTRIC & POWER CO.11,249.1279. STERLING SOFTWARE US INC.11,197.1280. HONEYWELL INC.10,279.11
66. CAELUM RESEARCH CORP. (S) (D) 14,182 .15 67. AIR PRODUCTS & CHEMICALS INC. 13,840 .15 68. NYMA INC. (S) (D) 13,838 .15 69. ROTHE JV (S) 13,741 .15 70. CALL HENRY INC (S) 13,372 .14 71. GENERAL SCIENCES CORP. 13,009 .14 72. CLEVELAND ELECTRIC ILLUMINATING 12,564 .13 73. M R J INC. (S) 12,449 .13 74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
67. AIR PRODUCTS & CHEMICALS INC. 13,840 .15 68. NYMA INC. (S) (D) 13,838 .15 69. ROTHE JV (S) 13,741 .15 70. CALL HENRY INC (S) 13,372 .14 71. GENERAL SCIENCES CORP. 13,009 .14 72. CLEVELAND ELECTRIC ILLUMINATING 12,564 .13 73. M R J INC. (S) 12,449 .13 74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
68. NYMA INC.(S)(D)13,838.1569. ROTHE JV(S)13,741.1570. CALL HENRY INC(S)13,372.1471. GENERAL SCIENCES CORP.13,009.1472. CLEVELAND ELECTRIC ILLUMINATING12,564.1373. M R J INC.(S)12,449.1374. SYSCON SERVICES INC.12,325.1375. SANTA BARBARA RESEARCH CENTER12,056.1376. BROWN & ROOT SERVICES CORP.11,729.1277. WANG GOVERNMENT SERVICES INC.(D)11,567.1278. VIRGINIA ELECTRIC & POWER CO.11,249.1279. STERLING SOFTWARE US INC.11,197.12
69. ROTHE JV (S) 13,741 .15 70. CALL HENRY INC (S) 13,372 .14 71. GENERAL SCIENCES CORP. 13,009 .14 72. CLEVELAND ELECTRIC ILLUMINATING 12,564 .13 73. M R J INC. (S) 12,449 .13 74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
70. CALL HENRY INC (S) 13,372 .14 71. GENERAL SCIENCES CORP. 13,009 .14 72. CLEVELAND ELECTRIC ILLUMINATING 12,564 .13 73. M R J INC. (S) 12,449 .13 74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
70. CALL HENRY INC (S) 13,372 .14 71. GENERAL SCIENCES CORP. 13,009 .14 72. CLEVELAND ELECTRIC ILLUMINATING 12,564 .13 73. M R J INC. (S) 12,449 .13 74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
72. CLEVELAND ELECTRIC ILLUMINATING 12,564 .13 73. M R J INC. (S) 12,449 .13 74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
73. M R J INC.(S)12,449.1374. SYSCON SERVICES INC.12,325.1375. SANTA BARBARA RESEARCH CENTER12,056.1376. BROWN & ROOT SERVICES CORP.11,729.1277. WANG GOVERNMENT SERVICES INC.(D)11,567.1278. VIRGINIA ELECTRIC & POWER CO.11,249.1279. STERLING SOFTWARE US INC.11,197.12
74. SYSCON SERVICES INC. 12,325 .13 75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
75. SANTA BARBARA RESEARCH CENTER 12,056 .13 76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
76. BROWN & ROOT SERVICES CORP. 11,729 .12 77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
77. WANG GOVERNMENT SERVICES INC. (D) 11,567 .12 78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
78. VIRGINIA ELECTRIC & POWER CO. 11,249 .12 79. STERLING SOFTWARE US INC. 11,197 .12
79. STERLING SOFTWARE US INC.11,197.12
80 HONEVWELLING 10 279 11
81. DYNAMAC CORP. (S) 10,242 .11
82. GENERAL ELECTRIC U T C JV 9,987 .11
83. KELSEY SEYBOLD MEDICAL GROUP 9,896 .11
84. R S INFORMATION SYSTEMS INC. (S) (D) 9,269 .10
85. WILLIAMS INTERNATIONAL CORP. 9,098 .10
86. MADISON ROBERT P. INTL. INC. (S) (D) 8,979 .10
87. RUSH CONSTRUCTION (S) (D) 8,928 .10
88. GLOBAL SCIENCE & TECH INC. (S) (D) 8,820 .09
89. POTOMAC ELECTRIC POWER CO.8,184.09
90. TELEDYNE INDUSTRIES INC.8,076.09
91. ALLIEDSIGNAL INC. 7,636 .08
92. NORTH AMERICAN TELECOMM INC. (S) (D) 7,615 .08
93. UNISYS GOVERNMENT SYSTEMS INC. 7,566 .08
94. STANFORD TELECOMMUNICATIONS 7,499 .08
95. SUN MICROSYSTEMS FEDERAL INC. 7,400 .08
96. QUANTUM SERVICES INC. (S) 7,142 .08
97. GRUMMAN AEROSPACE CORP. 7,069 .08
98. CHAPPY CORP. 7,047 .08
99. SECTEK INC. (S) (D) 7,036 .07
100. PARSONS INFRASTRUCTURE & TECH6,993.07
OTHER* 1,002,138 10.68 * Includes other awards over \$25,000 and smaller procurements of \$25,000 or less

* Includes other awards over \$25,000 and smaller procurements of \$25,000 or less.

V. AWARDS TO EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS*

A. Distribution by Type of Institution and Award

During Fiscal Year 1999, \$1,450.2 million was awarded to educational and other nonprofit institutions. Of this amount, \$1,019 million was awarded to educational institutions and \$431.2 million to other nonprofit organizations. A breakout of these awards between contracts, grants and agreements is shown below:

Type of Award	Total (Millions)	Educational Institutions (Millions)	Nonprofit Organizations (Millions)
Total	1,450.2	1,019.0	431.2
Contracts	613.0	370.2	242.8
Grants	498.9	419.8	79.1
Agreements	338.3	229.0	109.3

* Excludes JPL.

In addition to the \$498.9 million in grant awards to educational and nonprofit firms, NASA also awarded \$4.2 million in grants to business firms and \$4.5 million to foreign firms bringing the total grant awards to \$507.6 million. Agreements (both Space Act and Cooperative) totaled \$622.2 million when you include awards to business firms of \$281.1 million and awards to foreign firms of \$2.8 million.

B. One Hundred Principal Educational & Nonprofit Institutions*

The one hundred educational and nonprofit institutions that received the largest dollar value of NASA awards during Fiscal Year 1999 are shown on Pages 26-28.

The awards to these institutions accounted for 83 percent of the total awards to educational and nonprofit institutions during the period. Seventy-eight of the top 100 were educational institutions; 22 were nonprofit organizations.

* Excludes JPL.

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS LISTED ACCORDING TO TOTAL AWARDS RECEIVED* FISCAL YEAR 1999

(N = Nonprofit Institution)

			AWARD	<u>S</u>	
<u>IN</u> :	<u>STITUTION</u>		(<u>THOUSAN</u>	<u>DS) (PERCE</u>	<u>NT</u>)
	TOTAL AWARDS TO EDUCATIONAL				
	& NONPROFIT INSTITUTIONS		\$1,450,242	100.00	
1.	JOHNS HOPKINS UNIVERSITY		110,122	7.59	
2.	UNIVERSITIES SPACE RESEARCH	(N)	85,612	5.90	
3.	ASSN UNIV RESEARCH & ASTRONOMY	(N)	62,222	4.29	

4. UNIVERSITY OF COLORADO BOULDER61,1344.225. STANFORD UNIVERSITY58,8904.066. SMITHSONIAN INSTITUTION(N)47,6303.287. UNIVERSITY OF MARYLAND COLLEGE PARK38,5222.668. UNIVERSITY OF CALIFORNIA BERKELEY34,9872.47
6. SMITHSONIAN INSTITUTION(N)47,6303.287. UNIVERSITY OF MARYLAND COLLEGE PARK38,5222.66
7. UNIVERSITY OF MARYLAND COLLEGE PARK38,5222.66
8 LINII/ERSITY OF CALIFORNIA BERKELEV 34.087 2.44
0. 0. 0. 0. 0. 0. 0. 0.
9. CALIFORNIA INSTITUTE OF TECHNOLOGY 31,784 2.19
10. UNIVERSITY OF CALIFORNIA SAN DIEGO 27,001 1.86
11. UNIVERSITY OF ARIZONA 26,708 1.84
12. MASSACHUSETTS INSTITUTE OF 24,219 1.67 TECHNOLOGY
13. UNIVERSITY OF ALABAMA HUNTSVILLE 23,587 1.63
14. AMERICAN TECHNOLOGY ALLIANCES (N) 22,491 1.55
15. SOUTHWEST RESEARCH INSTITUTE (N) 21,427 1.48
16. NATIONAL ACADEMY OF SCIENCES (N) 19,663 1.36
17. NEW MEXICO STATE UNIV LAS CRUCES 14,744 1.02
18. ROTORCRAFT INDUSTRY TECH. (N) 12,656 .87 ASSOCIATION
19. BAYLOR COLLEGE OF MEDICINE 12,080 .83
20. LOMA LINDA UNIVERSITY 12,000 .83
21. UNIVERSITY OF ALABAMA BIRMINGHAM 11,925 .82
22. UNIVERSITY OF WISCONSIN MADISON 11,648 .80
23. COLUMBIA UNIVERSITY 10,880 .75
24. BATTELLE MEMORIAL INSTITUTE (N) 10,404 .72
25. CARNEGIE MELLON UNIVERSITY 10,366 .7 ⁻
26. PENNSYLVANIA STATE UNIVERSITY UP 10,156 .70
27. UNIVERSITY OF HAWAII 10,141 .70
28. WHEELING JESUIT UNIVERSITY 9,794 .68
29. CALIFORNIA ASSN RESEARCH ASTRONOMY (N) 9,764 .67
30. UNIVERSITY OF CALIFORNIA LOS ANGELES 9,333 .64
31. UNIVERSITY OF TEXAS AUSTIN 9,188 .63
32. UNIVERSITY OF ALASKA FAIRBANKS 8,965 .62
33. UNIVERSITY OF NEW HAMPSHIRE 8,927 .62
34. MISSISSIPPI STATE UNIVERSITY 8,716 .60
35. UNIVERSITY OF WASHINGTON 8,159 .56
36. AEROSPACE CORPORATION (N) 8,047 .55
37. UNIVERSITY OF MICHIGAN ANN ARBOR 7,885 .54
38. OHIO AEROSPACE INSTITUTE (N) 7,752 .53
39. UNIVERSITY CALIFORNIA SANTA 7,713 .53 BARBARA
40. UNIVERSITY OF VIRGINIA 7,019 .48
41. HARVARD UNIVERSITY 6,716 .46
42. CORNELL UNIVERSITY 6,639 .46
43. UNIVERSITY OF NEW MEXICO6,595.45

44. SAN JOSE STATE UNIVERSITY 6,563 .45 45. OKLAHOMA STATE UNIVERSITY 6,511 .45 46. OREGON STATE UNIVERSITY 6,432 .44 47. UNIVERSITY OF MARYLAND BALTIMORE 6,103 .42 48. WASHINGTON UNIVERSITY ST. LOUIS 5,880 .41 49. CHARLES STARK DRAPER LABS (N) 5,865 .40 50. UNIVERSITY OF HOUSTON CLEAR LAKE 5,807 .40 51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5,772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5,739 .40 HISTORY 5,611 .39 .35 54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,580 .38 56. HAMPTON UNIVERSITY 5,664 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,295 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,201 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 61. FLORIDA && MUNIVERSITY	10/3/2018 INTRODUCTION	l - 1999 Annua	Procurement Report	
46. OREGON STATE UNIVERSITY 6,432 .44 47. UNIVERSITY OF MARYLAND BALTIMORE 6,103 .42 48. WASHINGTON UNIVERSITY ST. LOUIS 5,880 .41 49. CHARLES STARK DRAPER LABS (N) 5,865 .40 50. UNIVERSITY OF HOUSTON CLEAR LAKE 5,807 .40 51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5,772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5,629 .39 54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,580 .38 56. HAMPTON UNIVERSITY 5,564 .38 57. UNIVERSITY OF FALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 61. FLORIDA & MUNIVERSITY 4,797 .33 .30 61. FLORIDA & MM UNIVERSITY 4,797 .33 .32 .33 .34 CONSORTIUM G.NIVERSITY OF IOWA 4,689<	44. SAN JOSE STATE UNIVERSITY		6,563	.45
47. UNIVERSITY OF MARYLAND BALTIMORE 6,103 .42 48. WASHINGTON UNIVERSITY ST. LOUIS 5,860 .41 49. CHARLES STARK DRAPER LABS (N) 5,865 .40 50. UNIVERSITY OF HOUSTON CLEAR LAKE 5,807 .40 51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5,772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5,739 .40 HISTORY .611 .39 .53 S E T I INSTITUTE (N) 5,629 .39 54. MONTANA STATE UNIVERSITY .5,611 .39 .55 .56CORGIA INSTITUTE OF TECHNOLOGY .5,580 .38 56. HAMPTON UNIVERSITY .5,264 .38 .37 .58 .37 59. UTAH STATE UNIVERSITY .5,220 .36 .37 58. UNIVERSITY OF FLORIDA .5,220 .36 60. ASTROPHYSICAL RESEARCH (N) .998 .34 CONSORTIUM .4089 .32 .33 61. FLORIDA A&M UNIVERSITY .4,284 .30 .30 62. UNIVERSITY OF IOWA .4,689 .32 .33 63. CASE WESTERN RESERVE UNIVERSITY .4,512 .31 <td>45. OKLAHOMA STATE UNIVERSITY</td> <td></td> <td>6,511</td> <td>.45</td>	45. OKLAHOMA STATE UNIVERSITY		6,511	.45
48. WASHINGTON UNIVERSITY ST. LOUIS 5,880 .41 49. CHARLES STARK DRAPER LABS (N) 5,865 .40 50. UNIVERSITY OF HOUSTON CLEAR LAKE 5,807 .40 51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5,772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5,739 .40 HISTORY	46. OREGON STATE UNIVERSITY		6,432	.44
49. CHARLES STARK DRAPER LABS (N) 5,865 .40 50. UNIVERSITY OF HOUSTON CLEAR LAKE 5,807 .40 51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5,772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5,739 .40 historry 5,611 .39 .56 53. S E T I INSTITUTE (N) 5,629 .39 54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,564 .38 56. HAMPTON UNIVERSITY 5,564 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,2295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 cONSORTIUM 4,797 .33 61. FLORIDA & A&M UNIVERSITY 4,797 .33 62. UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,326 .30 cTr. 0F UNIVERSITY OF NORTH DAKOTA 4	47. UNIVERSITY OF MARYLAND BALTIMORE		6,103	.42
50. UNIVERSITY OF HOUSTON CLEAR LAKE 5,807 .40 51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5,772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5,739 .40 HISTORY (N) 5,739 .40 53. S E T I INSTITUTE (N) 5,629 .39 54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,580 .38 56. HAMPTON UNIVERSITY 5,564 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 4.797 .33 62 UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 CTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 .30 GTR. 65. UNIVERSITY OF CHICAGO	48. WASHINGTON UNIVERSITY ST. LOUIS		5,880	.41
51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL 5.772 .40 52. AMERICAN MUSEUM OF NATURAL (N) 5.739 .40 HISTORY 5.3. S E T I INSTITUTE (N) 5.629 .39 53. S E T I INSTITUTE (N) 5.629 .39 54. MONTANA STATE UNIVERSITY 5.611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5.580 .38 56. HAMPTON UNIVERSITY 5.564 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5.360 .37 58. UNIVERSITY OF FLORIDA 5.295 .37 59. UTAH STATE UNIVERSITY 5.220 .36 60. ASTROPHYSICAL RESEARCH (N) 4.998 CONSORTIUM 4.797 .33 61. FLORIDA A&M UNIVERSITY 4.797 .33 62. UNIVERSITY OF IOWA 4.689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4.512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4.336 .30 CTR. 65. UNIVERSITY OF NORTH DAKOTA 4.316 .30 66. UNIVERSITY OF NORTH DAKOTA 4.284 .30 67. UNIVERSITY OF MONTANA 4.027	49. CHARLES STARK DRAPER LABS	(N)	5,865	.40
52. AMERICAN MUSEUM OF NATURAL (N) 5,739 40 HISTORY (N) 5,629 .39 54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,580 .38 56. HAMPTON UNIVERSITY 5,664 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 4,797 .33 61. FLORIDA & 4,689 .32 .31 .40 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 CTR. .51 .10 .32 .32 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 .30 66. UNIVERSITY OF NORTH DAKOTA 4,316 .30 .32 67. UNIVERSITY OF HILINOIS URBANA 4,224 .30 .33 .38 70. UNIVERSITY OF MIAMI 4,027 .28 .28 .	50. UNIVERSITY OF HOUSTON CLEAR LAKE	. ,	5,807	.40
HISTORY (N) 5,629 .39 53. S E T I INSTITUTE (N) 5,629 .39 54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,564 .38 56. HAMPTON UNIVERSITY 5,564 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 4,797 .33 62 UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64 MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 cTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 .21 .229 68. RESEARCH TRIANGLE INSTITUTE (N) 4,021 .29 .29 .22 .26 70. UNIVERSITY OF MIAMI 4,038 .28 .22 .22 .28 71. UNIVERSITY OF MONTANA 4,027 .28 .22 .26 72. BOSTON UNIVERSITY 3,95	51. UNIV. MINNESOTA MINNEAPOLIS ST. PAUL		5,772	.40
54. MONTANA STATE UNIVERSITY 5,611 .39 55. GEORGIA INSTITUTE OF TECHNOLOGY 5,580 .38 56. HAMPTON UNIVERSITY 5,564 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 41. FLORIDA & 4,689 .32 61. FLORIDA & MUNIVERSITY 4,797 .33 62. UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 CTR.		(N)	5,739	.40
55. GEORGIA INSTITUTE OF TECHNOLOGY 5,580 38 56. HAMPTON UNIVERSITY 5,564 38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 37 58. UNIVERSITY OF FLORIDA 5,295 37 59. UTAH STATE UNIVERSITY 5,220 36 60. ASTROPHYSICAL RESEARCH (N) 4,998 34 CONSORTIUM 4,797 33 61. FLORIDA A&M UNIVERSITY 4,797 33 62. UNIVERSITY OF IOWA 4,689 32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 30 CTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 30 66. UNIVERSITY OF FLILINOIS URBANA 4,284 30 67. UNIVERSITY OF CHICAGO 4,215 29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,020 29 69. SPELMAN COLLEGE 4,052 28 70. UNIVERSITY OF MONTANA 4,027 28 71. UNIVERSITY OF MONTANA 4,025 28 73. COLORADO STATE UNIVERSITY 3,742<	53. S E T I INSTITUTE	(N)	5,629	.39
56. HAMPTON UNIVERSITY 5,564 .38 57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 4,797 .33 61. FLORIDA A&M UNIVERSITY 4,797 .33 62. UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 cTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 66. UNIVERSITY OF NORTH DAKOTA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 .28 70. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 3,777 .26 73. COLORADO STATE UNIVERSITY 3,742 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 <	54. MONTANA STATE UNIVERSITY		5,611	.39
57. UNIVERSITY OF CALIFORNIA IRVINE 5,360 .37 58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 4,797 .33 61. FLORIDA A&M UNIVERSITY 4,797 .33 62. UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 CTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 66. UNIVERSITY OF NORTH DAKOTA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 .28 70. UNIVERSITY OF MONTANA 4,027 .28 71. UNIVERSITY OF MONTANA 4,025 .28 73. COLORADO STATE UNIVERSITY 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720	55. GEORGIA INSTITUTE OF TECHNOLOGY		5,580	.38
58. UNIVERSITY OF FLORIDA 5,295 .37 59. UTAH STATE UNIVERSITY 5,220 .36 60. ASTROPHYSICAL RESEARCH (N) 4,998 .34 CONSORTIUM 4,797 .33 61. FLORIDA A&M UNIVERSITY 4,797 .33 62. UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 CTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 66. UNIVERSITY OF NORTH DAKOTA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N)	56. HAMPTON UNIVERSITY		5,564	.38
59. UTAH STATE UNIVERSITY 5,220 36 60. ASTROPHYSICAL RESEARCH (N) 4,998 34 CONSORTIUM 4,797 33 61. FLORIDA A&M UNIVERSITY 4,797 33 62. UNIVERSITY OF IOWA 4,689 32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 30 CTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 30 66. UNIVERSITY OF CHICAGO 4,215 29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 29 69. SPELMAN COLLEGE 4,052 28 70. UNIVERSITY OF MIAMI 4,027 28 71. UNIVERSITY OF MONTANA 4,027 28 72. BOSTON UNIVERSITY 3,952 27 74. TEXAS A&M UNIVERSITY 3,742 26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 26 78. HOWARD UNIVERSITY 3,668 25 25 80. RUTGERS STATE UNIVERSITY 3,533 24	57. UNIVERSITY OF CALIFORNIA IRVINE		5,360	.37
60. ASTROPHYSICAL RESEARCH CONSORTIUM(N)4,998.3461. FLORIDA A&M UNIVERSITY4,797.3362. UNIVERSITY OF IOWA4,689.3263. CASE WESTERN RESERVE UNIVERSITY4,512.3164. MELWOOD HORTICULTURE TRAINING CTR.(N)4,356.3065. UNIVERSITY OF NORTH DAKOTA4,316.3066. UNIVERSITY OF CHICAGO4,215.2968. RESEARCH TRIANGLE INSTITUTE OF MARIA4,052.2870. UNIVERSITY OF MIAMI4,038.2871. UNIVERSITY OF MONTANA4,027.2872. BOSTON UNIVERSITY3,952.2774. TEXAS A&M UNIVERSITY3,777.2675. AUBURN UNIVERSITY3,742.2676. CITY UNIV. NEW YORK CITY COLLEGE.3,734.2677. UNIV CORP. ATMOSPHERIC RESEARCH(N).3,720.2678. HOWARD UNIVERSITY.3,668.2579. PRINCETON UNIVERSITY.3,596.2580. RUTGERS STATE UNIVERSITY.3,533.2481. OLD DOMINION UNIVERSITY.3,445.24	58. UNIVERSITY OF FLORIDA		5,295	.37
CONSORTIUM61. FLORIDA A&M UNIVERSITY4,797.3362. UNIVERSITY OF IOWA4,689.3263. CASE WESTERN RESERVE UNIVERSITY4,512.3164. MELWOOD HORTICULTURE TRAINING(N)4,356.30cTR.cTR65. UNIVERSITY OF NORTH DAKOTA4,31666. UNIVERSITY OF ILLINOIS URBANA4,28467. UNIVERSITY OF CHICAGO4,21568. RESEARCH TRIANGLE INSTITUTE(N)4,20069. SPELMAN COLLEGE4,05270. UNIVERSITY OF MONTANA4,02771. UNIVERSITY OF MONTANA4,02772. BOSTON UNIVERSITY3,95273. COLORADO STATE UNIVERSITY3,95274. TEXAS A&M UNIVERSITY3,77775. AUBURN UNIVERSITY AUBURN76. CITY UNIV. NEW YORK CITY COLLEGE77. UNIV CORP. ATMOSPHERIC RESEARCH(N)78. HOWARD UNIVERSITY79. PRINCETON UNIVERSITY79. PRINCETON UNIVERSITY79. PRINCETON UNIVERSITY79. PRINCETON UNIVERSITY79. PRINCETON UNIVERSITY70. DOMINION UNIVERSITY71. OLD DOMINION UNIVERSITY72. 80. RUTGERS STATE UNIVERSITY PISCATAWAY73. COLD DOMINION UNIVERSITY74. 1000 DOMINION	59. UTAH STATE UNIVERSITY		5,220	.36
62. UNIVERSITY OF IOWA 4,689 .32 63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 cTR.		(N)	4,998	.34
63. CASE WESTERN RESERVE UNIVERSITY 4,512 .31 64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 cTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 65. UNIVERSITY OF ILLINOIS URBANA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,027 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY AUBURN 3,742 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 <t< td=""><td>61. FLORIDA A&M UNIVERSITY</td><td></td><td>4,797</td><td>.33</td></t<>	61. FLORIDA A&M UNIVERSITY		4,797	.33
64. MELWOOD HORTICULTURE TRAINING (N) 4,356 .30 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 66. UNIVERSITY OF ILLINOIS URBANA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,445 .24	62. UNIVERSITY OF IOWA		4,689	.32
CTR. 65. UNIVERSITY OF NORTH DAKOTA 4,316 .30 66. UNIVERSITY OF ILLINOIS URBANA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 .25 80. RUTGERS STATE UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	63. CASE WESTERN RESERVE UNIVERSITY		4,512	.31
66. UNIVERSITY OF ILLINOIS URBANA 4,284 .30 67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24		(N)	4,356	.30
67. UNIVERSITY OF CHICAGO 4,215 .29 68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 80. RUTGERS STATE UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	65. UNIVERSITY OF NORTH DAKOTA		4,316	.30
68. RESEARCH TRIANGLE INSTITUTE (N) 4,200 .29 69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	66. UNIVERSITY OF ILLINOIS URBANA		4,284	.30
69. SPELMAN COLLEGE 4,052 .28 70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	67. UNIVERSITY OF CHICAGO		4,215	.29
70. UNIVERSITY OF MIAMI 4,038 .28 71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	68. RESEARCH TRIANGLE INSTITUTE	(N)	4,200	.29
71. UNIVERSITY OF MONTANA 4,027 .28 72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	69. SPELMAN COLLEGE		4,052	.28
72. BOSTON UNIVERSITY 4,025 .28 73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	70. UNIVERSITY OF MIAMI		4,038	.28
73. COLORADO STATE UNIVERSITY 3,952 .27 74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	71. UNIVERSITY OF MONTANA		4,027	.28
74. TEXAS A&M UNIVERSITY 3,777 .26 75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	72. BOSTON UNIVERSITY		4,025	.28
75. AUBURN UNIVERSITY AUBURN 3,742 .26 76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	73. COLORADO STATE UNIVERSITY		3,952	.27
76. CITY UNIV. NEW YORK CITY COLLEGE 3,734 .26 77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	74. TEXAS A&M UNIVERSITY		3,777	.26
77. UNIV CORP. ATMOSPHERIC RESEARCH (N) 3,720 .26 78. HOWARD UNIVERSITY 3,668 .25 79. PRINCETON UNIVERSITY 3,596 .25 80. RUTGERS STATE UNIVERSITY PISCATAWAY 3,533 .24 81. OLD DOMINION UNIVERSITY 3,482 .24 82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	75. AUBURN UNIVERSITY AUBURN		3,742	.26
78. HOWARD UNIVERSITY3,668.2579. PRINCETON UNIVERSITY3,596.2580. RUTGERS STATE UNIVERSITY PISCATAWAY3,533.2481. OLD DOMINION UNIVERSITY3,482.2482. UNIVERSITY OF SOUTHERN CALIFORNIA3,445.24	76. CITY UNIV. NEW YORK CITY COLLEGE		3,734	.26
79. PRINCETON UNIVERSITY3,596.2580. RUTGERS STATE UNIVERSITY PISCATAWAY3,533.2481. OLD DOMINION UNIVERSITY3,482.2482. UNIVERSITY OF SOUTHERN CALIFORNIA3,445.24	77. UNIV CORP. ATMOSPHERIC RESEARCH	(N)	3,720	.26
80. RUTGERS STATE UNIVERSITY PISCATAWAY3,533.2481. OLD DOMINION UNIVERSITY3,482.2482. UNIVERSITY OF SOUTHERN CALIFORNIA3,445.24	78. HOWARD UNIVERSITY		3,668	.25
81. OLD DOMINION UNIVERSITY3,482.2482. UNIVERSITY OF SOUTHERN CALIFORNIA3,445.24	79. PRINCETON UNIVERSITY		3,596	.25
82. UNIVERSITY OF SOUTHERN CALIFORNIA 3,445 .24	80. RUTGERS STATE UNIVERSITY PISCATAW	AY	3,533	.24
	81. OLD DOMINION UNIVERSITY		3,482	.24
83. GEORGE MASON UNIVERSITY 3,407 .23			3,445	
	83. GEORGE MASON UNIVERSITY		3,407	.23

10/3/2018 INTRODUCTION - 1	999 Annua	al Procurement Report	
84. WEST VIRGINIA UNIVERSITY		3,399	.23
85. MORGAN STATE UNIVERSITY		3,398	.23
86. COLORADO SCHOOL OF MINES		3,362	.23
87. CITY OF HAMPTON	(N)	3,299	.23
88. RICE UNIVERSITY		3,299	.23
89. ALABAMA A & M UNIVERSITY		3,210	.22
90. OHIO STATE UNIVERSITY		3,184	.22
91. ARIZONA STATE UNIVERSITY		3,179	.22
92. NORTH CAROLINA STATE UNIVERSITY		3,121	.22
93. UNIVERSITY OF KANSAS		3,117	.21
94. U S SPACE & ROCKET CENTER	(N)	3,052	.21
95. CAYUGA COMMUNITY COLLEGE		3,000	.21
96. NORTH CAROLINA A&T STATE UNIVERSITY		2,907	.20
97. MISSISSIPPI RESEARCH CONSORTIUM	(N)	2,882	.20
98. QUALITY EDUCATION MINORITIES	(N)	2,838	.20
99. TUSKEGEE UNIVERSITY		2,763	.19
100. CATHOLIC UNIVERSITY		2,753	.19
**OTHER		253,772	17.50

* Excludes JPL.

** Includes other awards over \$25,000 and smaller procurements of \$25,000 or less.

VI. CONTRACT FOR OPERATION OF JET PROPULSION LABORATORY

The Jet Propulsion Laboratory (JPL) is a Government-owned research and development facility, operated for NASA by the California Institute of Technology. The Laboratory carries out research programs and flight projects and conceives and executes advanced development and experimental engineering investigations to further the technology required for the Nation's space program. The primary emphasis of the Laboratory's effort is on the carrying out of unmanned lunar, planetary and deep-space scientific missions.

Net awards during Fiscal Year 1999 totaled \$1,294.6 million. Of this amount, JPL awarded \$673.3 million as subcontracts or purchases with business firms.

VII. AWARDS THROUGH OTHER GOVERNMENT AGENCIES

During Fiscal Year 1999, \$389.5 million was awarded through other Government agencies. The following table shows the distribution of these awards by agency.

AWARDS THROUGH OTHER GOVERNMENT AGENCIES FISCAL YEAR 1999

AGENCY	MILLIONS	TOTAL
	\$389.5	100.0

TOTAL

% OF

<u>OVER \$25,000</u>	<u>363.0</u>	<u>93.2</u>
Air Force	107.9	27.7
Navy	78.3	20.1
Energy Department	58.3	15.0
Army	32.8	8.4
National Science Foundation	23.4	6.0
Commerce Department	20.3	5.2
Interior Department	10.5	2.7
Defense Department	6.3	1.6
Other Government Agencies	25.2	6.5
<u>\$25,000 AND UNDER</u>	<u>26.5</u>	<u>6.8</u>

VIII. U.S. GEOGRAPHICAL DISTRIBUTION OF AWARDS

In Fiscal Year 1999, 50 states and the District of Columbia participated in NASA's direct awards over \$25,000. These larger awards were distributed among 13,697 contracts and went to 3,066 different organizations in 1,056 different cities. Of the 3,066 organizations, 2,341 are business firms located in 823 cities in 47 states and the District of Columbia; 725 are educational and nonprofit institutions located in 417 cities in 50 states and the District of Columbia (See Page 31). The distribution of awards are also shown by region (See Page 32).

The categorization of NASA procurements by state is based on the location where the items are to be produced or supplied from stock; where the services will be performed; or with respect to construction contracts, the construction site.

STATE	TOTAL (THOUSANDS) (BUSINESS (THOUSANDS)	EDUCATIONAL & NONPROFIT (THOUSANDS)
TOTAL	10,619,949	9,177,298	1,442,651
ALABAMA	482,545	431,321	51,224
ALASKA	9,140	130	9,010
ARIZONA	80,221	49,332	30,889
ARKANSAS	1,613	210	1,403
CALIFORNIA	1,910,831	1,573,889	336,942
COLORADO	206,243	131,888	74,355
CONNECTICUT	116,250	111,561	4,689
DELAWARE	3,971	1,370	2,601
DIST COLUMBIA	90,374	50,820	39,554

https://prod.nais.nasa.gov/pub/pub_library/Annual99_A.html

10/3/2018		INTRODUCTION - 199	99 Annual Procurement Report
FLORIDA	570,032	544,461	25,571
GEORGIA	23,684	7,594	16,090
HAWAII	23,647	1,745	21,902
IDAHO	1,075	372	703
ILLINOIS	20,719	6,833	13,886
INDIANA	58,416	54,490	3,926
IOWA	8,130	1,737	6,393
KANSAS	6,372	1,058	5,314
KENTUCKY	3,181	201	2,980
LOUISIANA	378,189	370,341	7,848
MAINE	1,669	65	1,604
MARYLAND	1,081,833	818,009	263,824
MASSACHUSETTS	136,157	33,688	102,469
MICHIGAN	26,011	15,316	10,695
MINNESOTA	10,130	4,414	5,716
MISSISSIPPI	169,231	148,461	20,770
MISSOURI	25,954	17,430	8,524
MONTANA	11,573	818	10,755
NEBRASKA	2,822	79	2,743
NEVADA	3,088	1,876	1,212
NEW HAMPSHIRE	17,174	6,487	10,687
NEW JERSEY	100,307	90,034	10,273
NEW MEXICO	40,931	28,518	12,413
NEW YORK	62,208	20,481	41,727
NORTH CAROLINA	14,453	2,870	11,583
NORTH DAKOTA	4,389	0	4,389
OHIO	287,694	252,518	35,176
OKLAHOMA	8,347	504	7,843
OREGON	11,448	4,362	7,086
PENNSYLVANIA	51,041	25,069	25,972
RHODE ISLAND	5,183	432	4,751
SOUTH CAROLINA	3,710	0	3,710
SOUTH DAKOTA	1,078	204	874
TENNESSEE	28,886	22,089	6,797
TEXAS	3,561,533	3,476,711	84,822
UTAH	402,731	396,236	6,495
VERMONT	1,241	539	702
VIRGINIA	424,348	382,792	41,556
WASHINGTON	73,708	59,087	14,621
WEST VIRGINIA	35,357	21,140	14,217
WISCONSIN	20,460	7,716	12,744
WYOMING	621	0	621

U.S. GEOGRAPHICAL DISTRIBUTION OF NASA PRIME CONTRACT AWARDS FISCAL YEAR 1999



also excludes awards placed through other Government agencies, awards outside the U.S., and awards on the JPL contracts.

IX. AWARDS PLACED OUTSIDE THE UNITED STATES

During Fiscal Year 1999, NASA placed \$153.7 million in awards that are being performed outside the United States.

As indicated in the following tabulation, \$126.6 million represented direct NASA awards and \$801 thousand constituted awards placed through other Government agencies. The awards are being performed in eighteen countries and one U.S. territory.

Place of Performance	<u>(Thousands)</u>
Total	<u>\$152,670</u>
Direct NASA Awards	<u>\$151,162</u>
Australia	10,177
Bermuda	-25
Canada	36,981
Chile	569
France	174

INTRODUCTION - 1999 Annual Procurement	Report
Germany	313
Israel	69
Italy	130
Japan	151
Mexico	2,000
Netherlands	273
Norway	2,274
Peru	154
Puerto Rico	3,939
Russia	73,878
Slovakia	10
Spain	14,146
Sweden	-78
United Kingdom	6,026
Ukraine	1
Awards Place Through	
Other Government Agencies	<u>\$1,508</u>
Canada	48
Costa Rica	1
Guam	137
Puerto Rico	-5
St. Helena	733
United Kingdom	594

*Excludes smaller procurements, generally those of \$25,000 or less.

X. PROCUREMENT ACTIVITY BY INSTALLATION

Most of NASA's purchases and contracts are made by the procurement offices of its field installations. During Fiscal Year 1999, these offices accounted for 99 percent of the total procurement dollars.

	AWARD	
INSTALLATION	(MILLIONS)	PERCENT
TOTAL	<u>\$12,674.6</u>	<u>100.0</u>
Johnson Space Center	3,876.9	30.6
Goddard Space Flight Center	2,329.7	18.4
Marshall Space Flight	2,119.8	16.7

NASA Management Office/JPL	1,324.1	10.5
Kennedy Space Center	1,120.3	8.8
Ames Research Center	518.6	4.1
Langley Research Center	446.8	3.5
Glenn Research Center	404.7	3.2
Stennis Space Center	205.9	1.6
Headquarters	193.6	1.5
Dryden Flight Research Center	134.2	1.1

GLOSSARY

The data contained in this publication were compiled on the basis of the definitions given below:

1. <u>Sealed Bids</u> - Procurement actions resulting from acceptance of bids made by contractors in response to invitations for bid.

2. Award - See procurement action.

3. Coverage

a. Summary data are provided in terms of obligations on all procurement actions (see item8). The obligation data are obtained from the agency's fiscal records.

b. Detailed data - Information on procurements includes all contracts, grants, agreements and all other procurements over \$25,000. Wherever exclusions apply, a generalized footnote is provided, e.g., "excludes smaller procurements, generally those of \$25,000 or less".

4. <u>Intragovernmental</u> - Procurement actions placed through other Government agencies; except orders placed under Federal Supply Schedule contracts and awards to small disadvantaged business through the Small Business Administration under Section 8(a) of the Small Business Act.

5. <u>Modifications</u> - Any written alteration in the specifications, delivery point, contract period, price, quantity, or other contract requirement of an existing contract, whether accomplished by unilateral action in accordance with a contract clause or by mutual agreement of the parties to the contract. It includes (a) bilateral actions, such as supplemental agreements, and (b) unilateral actions, such as change orders, notices of termination, and notices of the exercise of an option.

6. <u>Competitive</u> - Procurements where offers are solicited from more than one responsible offeror capable of satisfying the Government's requirements wholly or partially, and the award or awards were made on the basis of price, design, or technical competition.

7. <u>Other Than Competitive</u> - Procurements where an offer was solicited and received from only one responsible offeror capable of satisfying the Government's requirements wholly or partially. (Includes contracts resulting from unsolicited proposals.)

8. <u>Procurement Action (Award)</u> - Any contractual action to obtain supplies, services or construction that increases or decreases funds, including:

a. Letter contracts or other preliminary notices of negotiated awards.

b. Definitive contracts, including purchase orders.

c. Orders under GSA Federal Supply Schedule contracts, basic ordering agreements, and against indefinite delivery type contracts.

d. Intragovernmental orders.

e. Grants.

f. Cooperative and Space Act Agreements.

g. Supplemental agreements, change orders, administrative changes and termination's to existing procurements.

9. <u>Small Business</u> - For purposes of Government procurement, is a profit making concern, including its affiliates, which is independently owned and operated, is not dominant in its field and further qualifies under the size standards criteria of the Small Business Administration (SBA). These criteria are published under Title 13 of the Code of Federal Regulations, Section 121.3-8, and in the Federal Acquisition Regulation, Part 19, Subpart 19.1. For service industries, the size standard generally is based on average annual receipts over a three-year period, depending on the service to be procured. Generally, in the case of agricultural or manufactured products, the size standards are determined on the basis of number of employees. The applicable size standard is prescribed in each NASA solicitation.



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