



OFFICE OF **SMALL BUSINESS** PROGRAMS  
...Above and Beyond Goals

National Aeronautics and  
Space Administration



# **NASA OSBP ANNUAL TOWN HALL:** *Unlocking Small Business Competition for a New Space Economy*

*Guest Speakers*



**Mr. Dwight Deneal**

Assistant Administrator  
Office of Small Business Programs  
(OSBP) NASA

**WEDNESDAY**  
**JANUARY 21, 2026**  
1:00 p.m. to 2:30 p.m. ET



**Jason Kessler**

Program Executive  
NASA SBIR/STTR Program  
Management Office



**Holly Miller**

Federal Liaison  
Office of STEM Engagement

# Opening Remarks



**MR. DWIGHT D. DENEAL**  
*Assistant Administrator*  
Office of Small Business Programs  
NASA

**NASA OSBP TOWN HALL**  
*with NASA OSBP Assistant Administrator*



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...Above and Beyond Goals

# Housekeeping

- If you have any questions during the presentation, please enter them into the Q&A Box.
  - **NOTE:** If possible, include the speaker whom your question is directed if multiple speakers are presenting.
- Other comments, like technical difficulties, please input them in the Chat Box.
- We will have a formal Q&A after the final presenter concludes, using questions from the Q&A Box.
- Please keep your computers on mute when not speaking.
- The presentation **WILL** be recorded. Attendees will receive an email once those materials are made available online.
- Please fill out the survey that will be available in the Q&A box during the presentation.

# Poll Questions

1. How did you learn about this webinar?
2. Is this the first webinar hosted by the NASA Office of Small Business Programs that you have attended?
3. Which of the following classifications applies to your institution/organization/company?
4. Select the industry(ies) below that applies to your company. Multiple industries may be selected if applicable.
5. Have you done business with NASA? (More than one answer can be applicable)
6. What are some of the barriers to entry when doing business with NASA?



# Unlocking Small Business Competition for a New Space Economy

Mr. Dwight D. Deneal, SES

Assistant Administrator  
Office of Small Business Programs

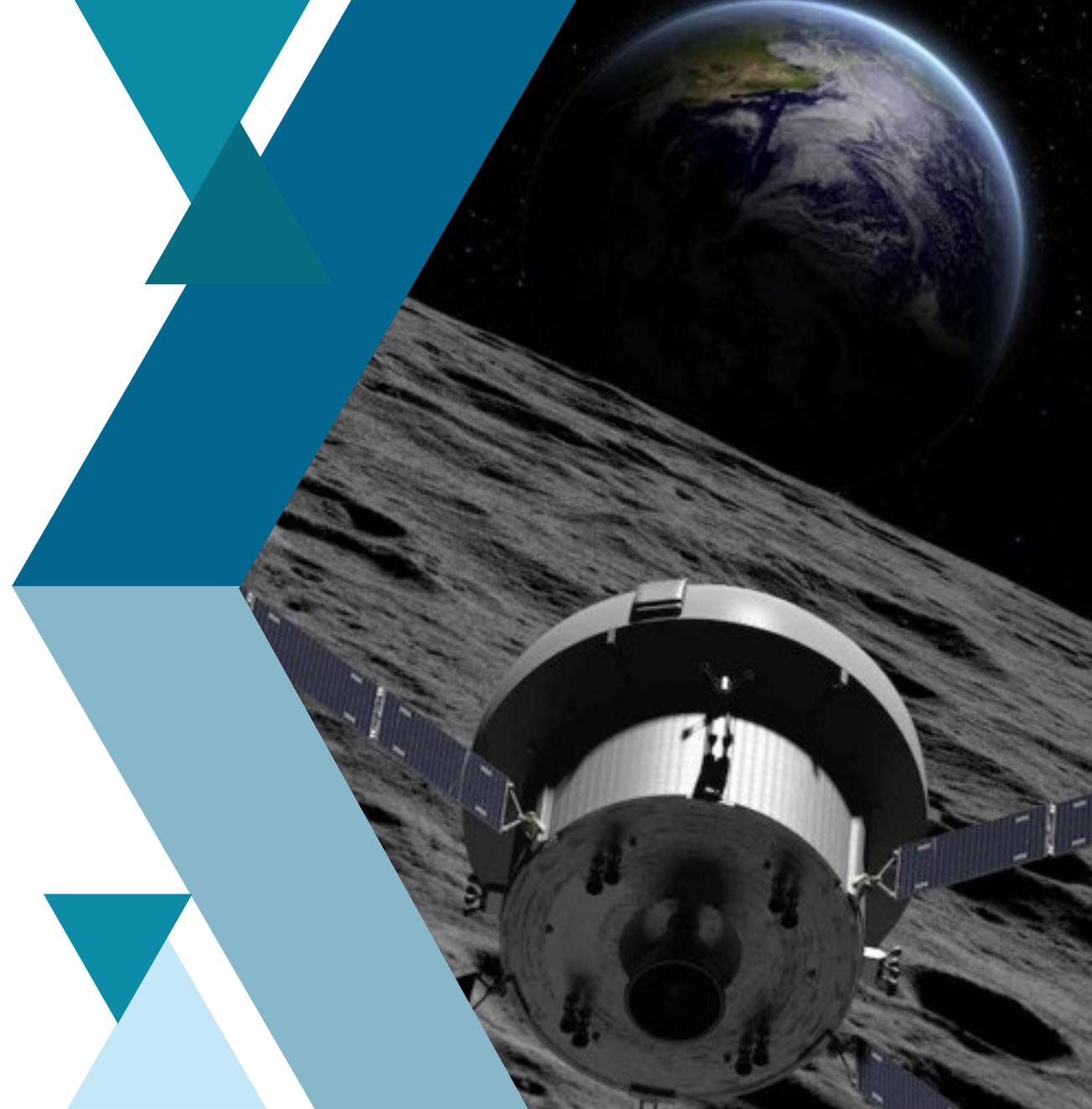


# Agenda

Space Policy Update	.....	01
Business Of Space Update	.....	02
OSBP Update	.....	03



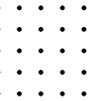
# Space Policy Update





## Ensuring American Space Superiority

Executive Order 14369



### *National Space Policy Priorities:*

Lead global space exploration — return to Moon by 2028; lunar outpost by 2030.

Sustain US presence to enable Mars exploration.

Strengthen national & economic security space operations.

Grow a vibrant commercial space economy, including private investment targets and new markets.

Develop next-generation capabilities & robust space industrial base.



**NASA is reinvesting in human spaceflight through Artemis lunar missions and advancing accelerated plans to send Americans to Mars.**



ROBOTIC  
EXPLORERS

Commitment to  
Human Exploration

- Returning humans to the Moon as the next step toward Mars.
- Renewed focus on Artemis and sustained lunar operations.

Strategic National  
Imperative

- Competing to lead at the lunar South Pole.
- A national mandate requiring strong government–industry partnerships.

Artemis II &  
Mission Progress

- Crewed mission around the Moon to test deep-space systems.
- Enables Artemis III lunar landing and long-term presence.



ARTEMIS II  
CREW

COMMERCIAL  
LANDERS

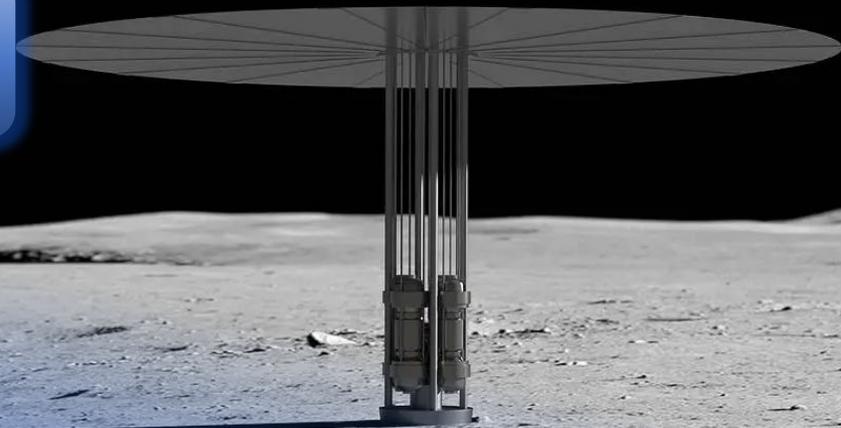
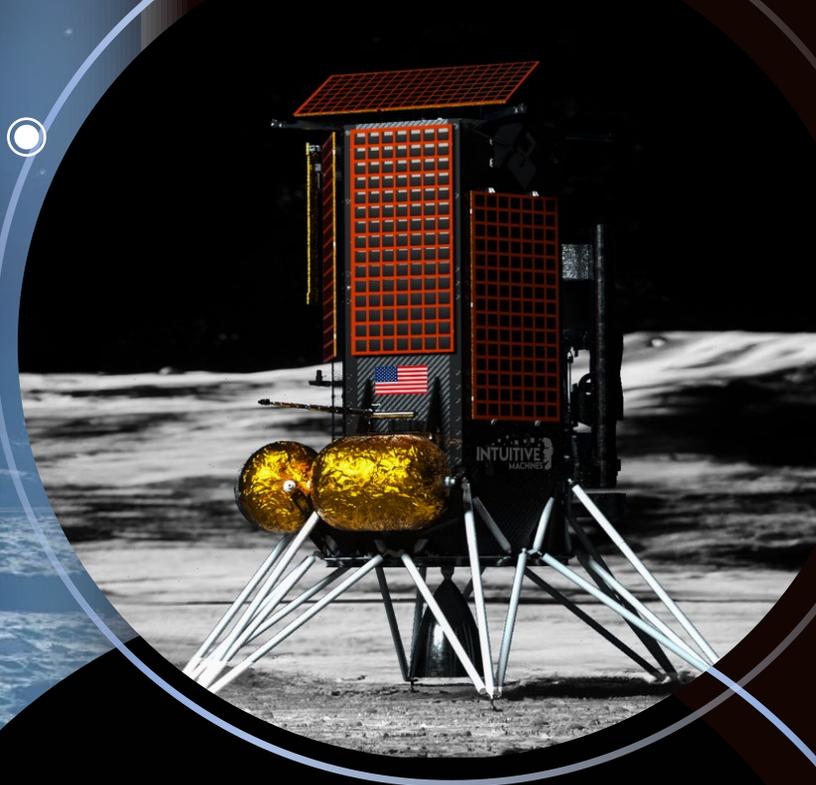
# Artemis II on the Horizon

First mission to carry astronauts around the Moon since Apollo.

Demonstrates NASA's commitment to lunar exploration and expanding human presence.

Catalyst for small business engagement in mission-critical systems.

FISSION  
SURFACE POWER



# Strengthening the Moon to Mars Supply Chain

## Our Challenge = Our Opportunity

NASA is working to increase production capacity across the entire enterprise to support Moon to Mars mission goals.

### *Immediate Supply Chain Needs*



#### **Upstream Supply Flow**

Raw materials, components, and subsystems must reach OEMs faster and more efficiently



#### **Production Capacity Growth**

Doubling output requires scaling materials, components, subsystems, and systems



#### **Key Focus Areas**

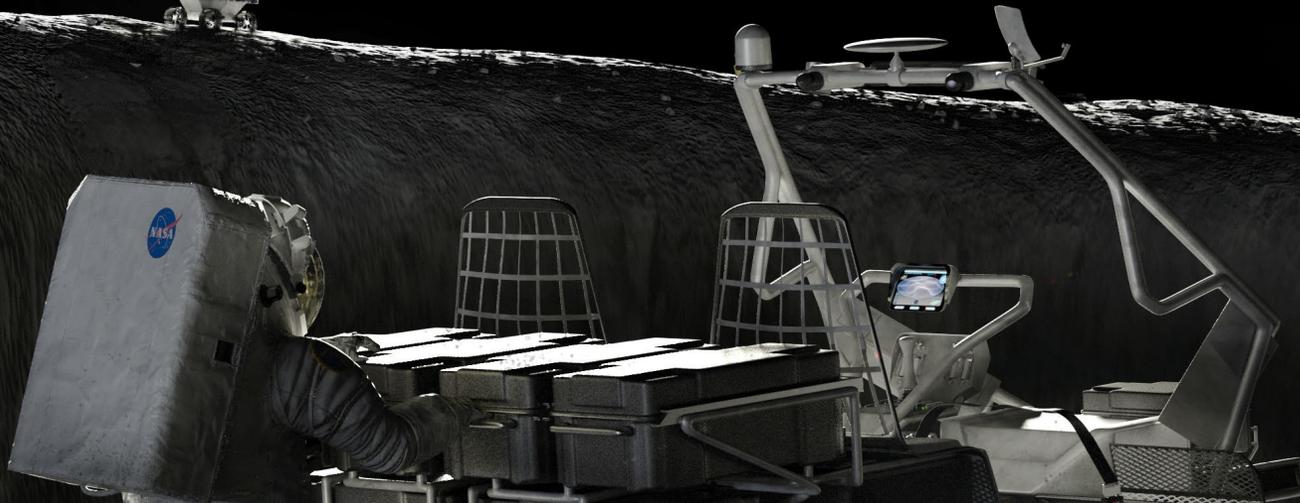
Structural & electrical systems, Propulsion components, and Machines & Mechanisms





MOON TO MARS  
ARCHITECTURE

SPACE TECHNOLOGY  
SHORTFALLS



# Optimized and Enable Scientific Discovery: Long-term science and technology leadership



## Targeted Investments in Science & Research for America's Future



NASA's science and aeronautics programs deliver transformative knowledge, technologies, and innovations that protect our planet, improve lives, and inspire exploration to create a legacy of discovery that serves humanity while advancing America's leadership in space and aviation.

Exploring the cosmos to unveil cosmic mysteries, answer questions about the solar system, understand space weather, and detect asteroids.



Developing next-generation air traffic management systems for safer and more efficient flight.



Providing decision makers with critical Earth data on severe weather challenges and changing agricultural conditions.



Advancing supersonic and hypersonic flight technologies for the future of air transportation.



Leveraging commercial partnerships to efficiently acquire data and develop tools that directly address science community and public user needs.



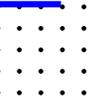
# Business Of Space Update





# Restoring Common Sense to Federal Procurement

Executive Order 14275



## *Common Sense Federal Procurement Priorities:*

Simplify &  
Streamline the  
Federal Acquisition  
Regulation (FAR)

Remove  
Undue  
Regulatory  
Barriers

Promote  
Efficient & Agile  
Federal  
Procurement

Promote Efficient  
& Agile Federal  
Procurement

Consider  
Regulatory Sunset  
for Non-Statutory  
Rules

# Revolutionary FAR Overhaul Overview (RFO)

The RFO was initiated under Executive Order 14275, “Restoring Common Sense to Federal Procurement.”



The goal: rewrite FAR in plain language, strip out non-statutory or overly prescriptive requirements, and lean on non-regulatory “buying guides” (outside the official FAR) for practical guidance.



The overhaul aims to make federal procurement faster, simpler, and more accessible, especially to smaller, newer, and nontraditional contractors.

# Federal Policy Reinforcing Small Business Access

*OFPP & SBA Reinforce Small Business Participation in  
Federal Contracting (Sep 26, 2025)*

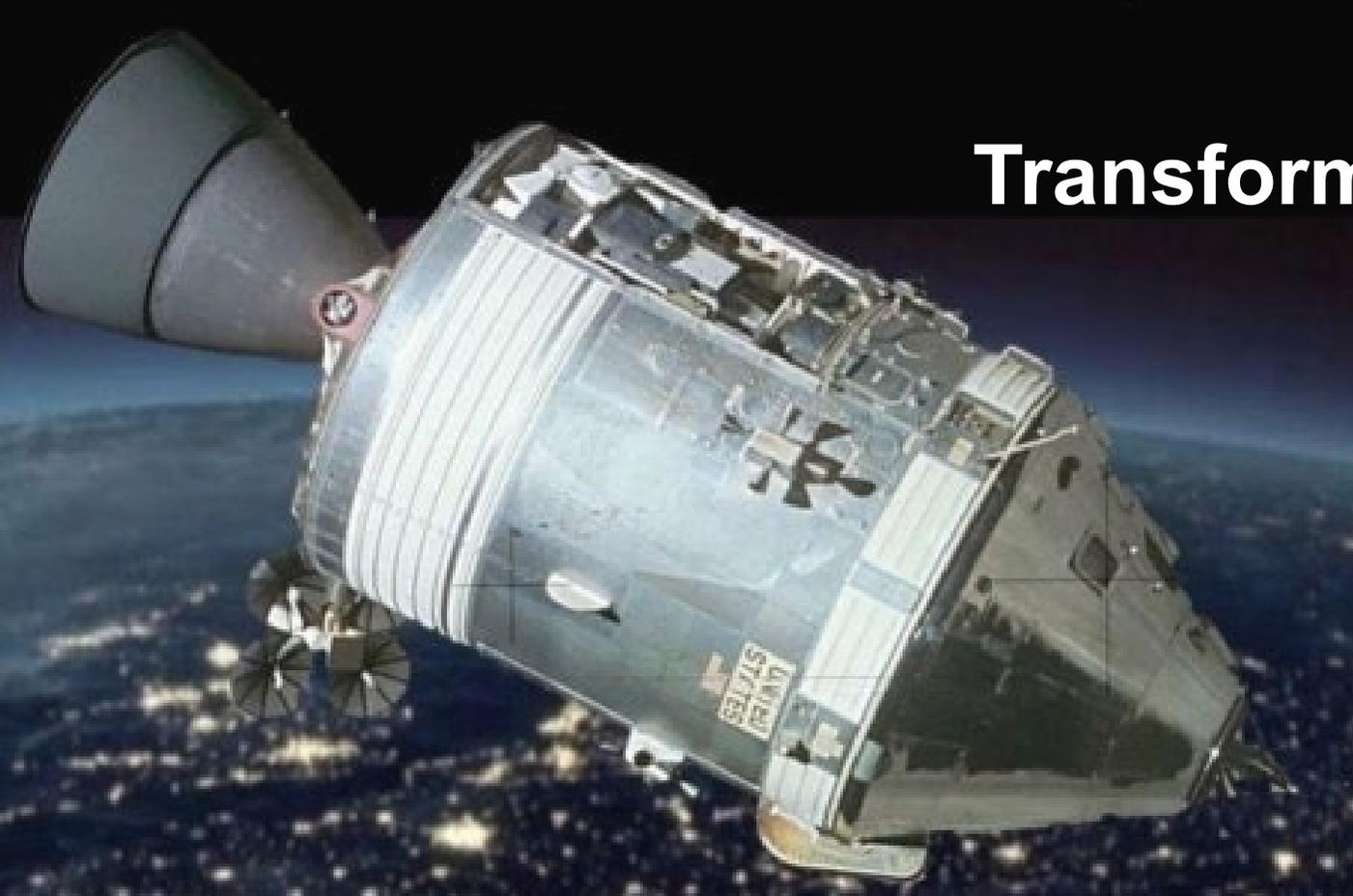
Small business contracting made more accessible via streamlined regulations.

Reinforces use of small business set-asides where two or more capable small firms exist.

Promotes competition in 8(a) and other socio-economic programs.

Reduces administrative burden for small business entrants.





# Transforming Federal Acquisition to Expand Competition

Most significant change to the FAR in decades, focused on plain language & efficiency.

Removes non-statutory requirements and reduces barriers to entry.

Encourages simplified acquisition and commercial buying procedures.

Emphasis on competition, innovation, and commercial solutions.

# Summary Highlights of FAR Overhaul on Small Business

## What RFO Means for Small Business Competitiveness?

- Lower barriers, faster access to opportunities.
- Streamlined SAM and acquisition processes.
- Enhanced debriefing practices for competitive improvement and Early Engagement/Communications
- Better access to government wide contracts & “on-ramps.”



# OSBP Update



# Small Businesses Power NASA's Missions

Small businesses play a vital role across NASA, providing:



**Specialty components and materials.**



**Subcontracting support and large prime contracting.**



**Staff and services to support our field centers.**



**Technical expertise that meets critical NASA needs.**

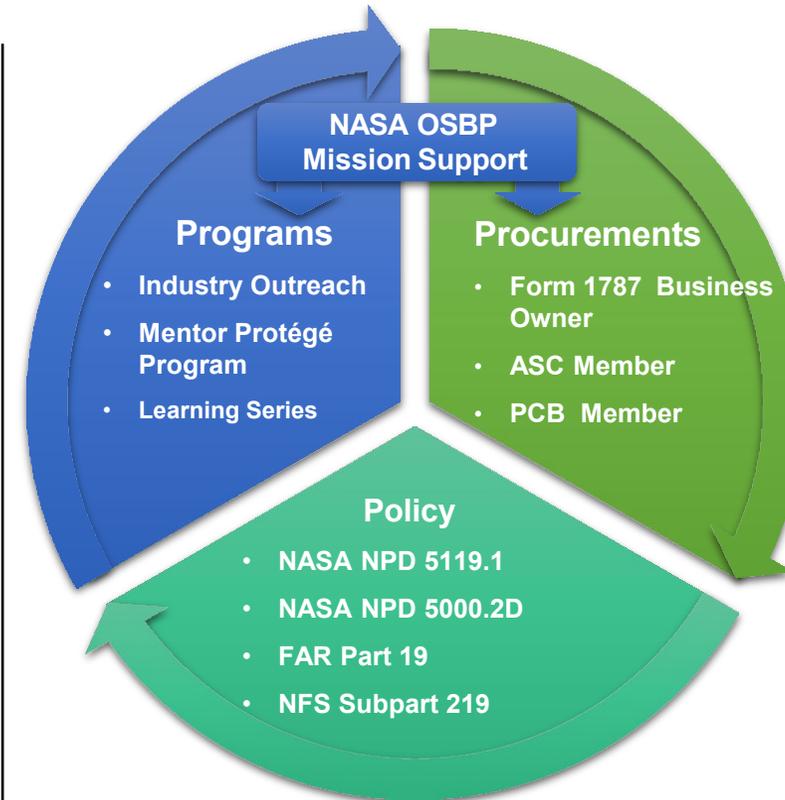
# NASA Office of Small Business Programs Core and Functional Competencies

## Core Competencies

- Principal Advisor on SB Matters-Policy, Programs, Procurements
- Enterprise SB Outreach
- Enterprise Small Business Training (internal/external)

## Functional Competencies

- Small Business Utilization
- SB Contracting/Procurement
- Smalls Business Advocacy
- SB Industry Domain Expertise
- SB Technical Assistance on Contracting w/ NASA



# Office of Small Business Programs

## VISION

Improvement, Intensification and Sustainment of all small business concerns within NASA supply chains.

## MISSION

Promote and integrate small businesses into the industrial base of contractors and subcontractors that support the future of space exploration, scientific discovery, and aeronautics research.

R4oward



01

**RESHAPE**

RESHAPE AND STANDARDIZE SMALL BUSINESS INDUSTRY ENGAGEMENT



02

**REFOCUS**

REFOCUS THE SMALL BUSINESS PROGRAM TO ESTABLISH A CENTER FOR SMALL BUSINESS SUPPLY CHAIN ANALYTICS AND INDUSTRIAL BASE ADVANCEMENT (SBIBX)



03

**REDEPLOY**

REDEPLOY SMALL BUSINESS SUBCONTRACTING TACTICS TO EXPAND THE AMERICAN SPACE SMALL BUSINESS INDUSTRIAL BASE



04

**REDESIGN**

REDESIGN AND MAINTAIN STRONG AGENCY-WIDE SMALL BUSINESS PROGRAMS STATUTORY PERFORMANCE



**STRATEGIC PRIORITIES: FY26-FY28**

# STRATEGIC PRIORITIES: FY26-FY28 SUMMARY CHART



**R4oward**



Strategic Priority	Objective	Key Actions
1. Reshape and Standardize Small Business Industry Engagement	Develop a mission-aligned, cost-effective, targeted industries engagement model	Reshape the OSBP Learning Series while establishing formal OSBP-to-Industry Office Hours and a signature annual industry engagement event that strengthens industry partnerships, provides a standard forum of contracting training to industry and the Agency Acquisition Workforce.
2. Refocus the small business program to establish a Center for Small Business Supply Chain Analytics and Industrial Base Advancement (SBIBx)	Enable a data-driven and small business metrics hub for stakeholders with modern data visualization dashboard to enhance acquisition/procurement planning and mission outcomes.	Refocus the Small Business Program to leverage data visualization dashboards and Artificial-Intelligence (A.I.) for NASA OSBP Vendor Database and Mobile Application to create predictive analytics, regarding small business capabilities and enhance the Agency's market research acquisition process by creating a NASA small business market intelligence hub.
3. Redeploy Small Business Subcontracting tactics to expand the American Space Small Business Industrial Base	Spur a modern and resilient domestic space small business supply chain with more opportunities for all small businesses and non-traditional contractors	Redeploy the NASA Mentor-Protégé Program to enhance the Small Business Subcontracting Program and partner with the NASA SBIR/STTR Program to deepen supply chain insights, target gaps, reduce reliance on single sources, and spur domestic manufacturing capabilities.
4. Redesign and maintain strong Agency-Wide Small Business Programs statutory performance	Maintain an optimal small business program that promotes competition, reduces regulatory barriers and enhances procurement lead times within the revolutionary federal acquisition overhaul environment	Redesign the NASA Small Business Program on all elements under 15 U.S.C. 644k and the small business equities under to 51 U.S.C. §20113(e), 51 U.S.C. §30304 and 51 U.S.C. §30306 to intensify and sustain small business contracting opportunities in support of the Agency's mission.

# OSBP Strategy Lab Data Analytical Tool

### Industry (NAICS) Analysis

### Supplier Illumination

### Contract Opportunities

SDVOSB

HUBZone

SDVOSB

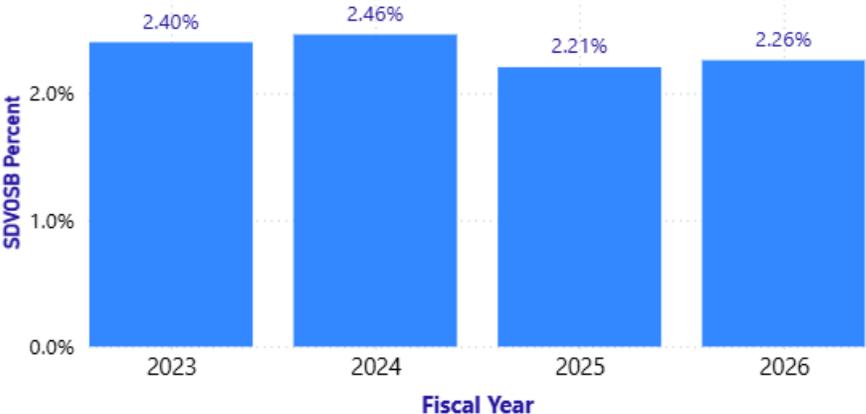
HUBZone

SDVOSB

HUBZone

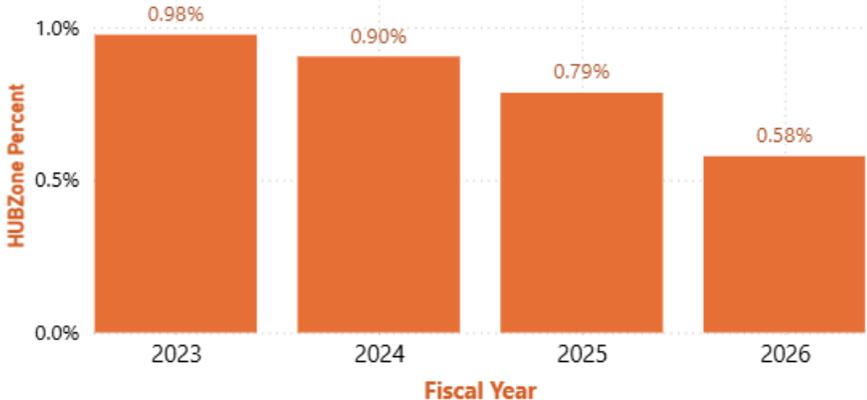
### Service-Disabled Veteran-Owned Program

The statutorily mandated goal for contracts with SDVOSBs is **5 percent** (15 U.S.C. §644(g)(1)(A)(ii)).



### Historically Underutilized Business Zone Program

The statutorily mandated goal for contracts with HUBZone concerns is **3 percent** (15 U.S.C. §644(g)(1)(A)(iii)).

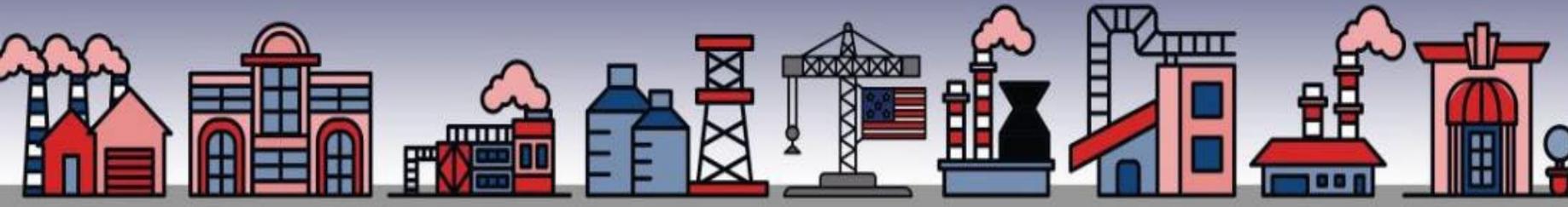


- The **OSBP Strategy Lab** is designed to identify opportunities for increased participation by **Service-Disabled Veteran-Owned** and **HUBZone** small business concerns in NASA contracts.
- Highlight industries where NASA can expand utilization of SDVOSB and HUBZone concerns.
- Identify SDVOSB and HUBZone concerns performing similar work for other agencies.



# MADE IN *AMERICA*

RESTORING U.S. MANUFACTURING



U.S. Small Business  
Administration

[Make Onshoring Great Again portal:](#)

- [sba.gov/onshoring](https://sba.gov/onshoring)

[Cutting Red Tape for Small Manufactures:](#)

- [advocacy.sba.gov/hotline](https://advocacy.sba.gov/hotline)
- **800-827-5722**

[Empower to Grow:](#)

- [sba.gov/e2g](https://sba.gov/e2g)

[sba.gov/manufacturing](https://sba.gov/manufacturing)

# NASA Mentor Protégé Program

# LIFT-OFF!

## NASA Mentor-Protégé Program *Relaunch*

**PEOPLE • PROCESSES • PERFORMANCE**

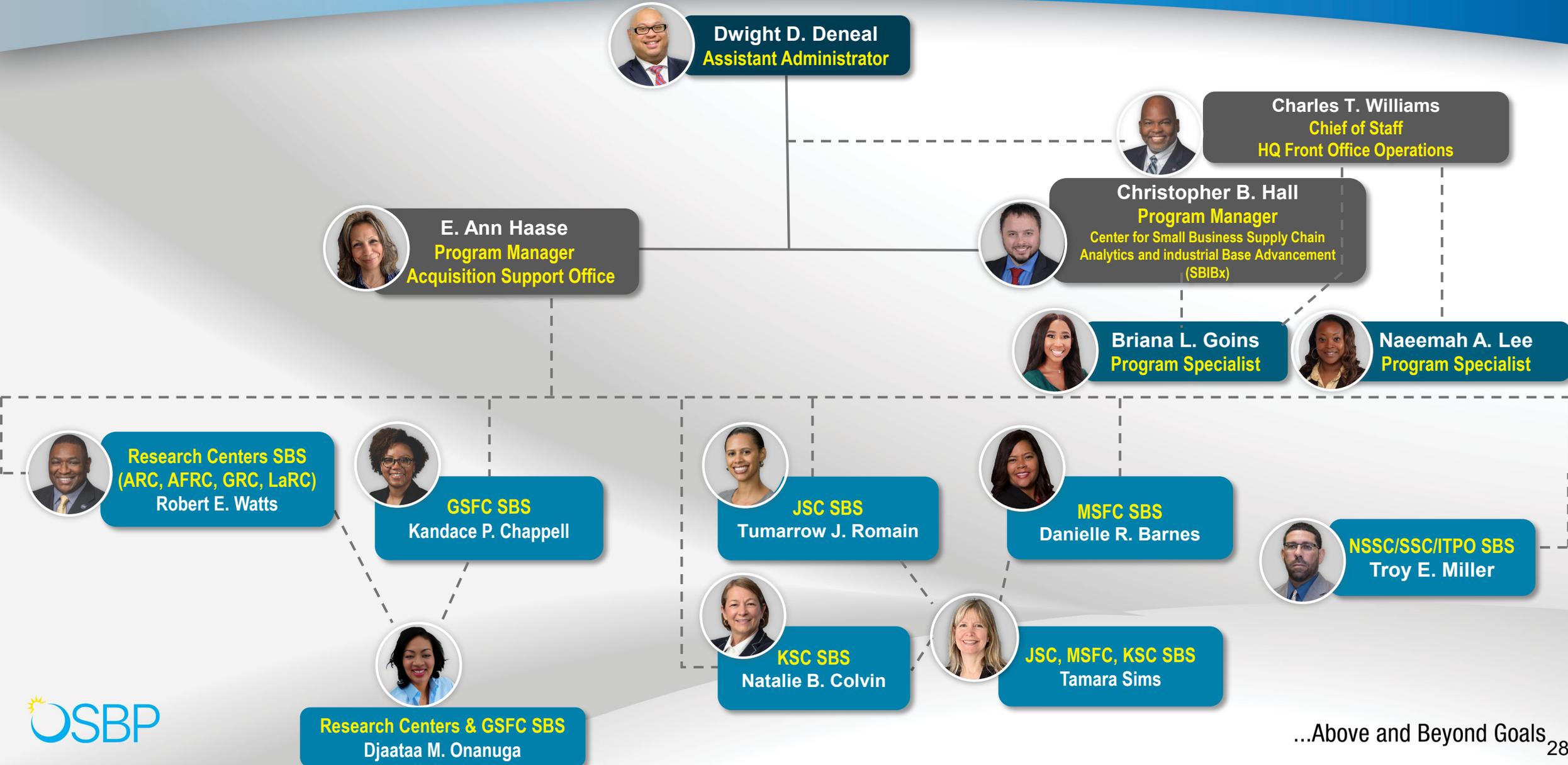
**Needs-Based Program:** The revamped MPP will now be more needs-based, that targets NASA supply chain gaps.

**Contracts Under Strategic NAICS Codes:** The program will prioritize subcontracts to proteges under specific NAICS codes that align with the Space Technology Mission Directorate (STMD) technology taxonomies, ensuring a direct connection to mission-critical needs and supply chain gaps.

**All small businesses are now eligible to participate as protégés,** as well as AbilityOne, Historically Black Colleges and Universities (HBCUs), and Minority Serving Institutions (MSIs). This expansion is aimed at fostering a more inclusive environment for a diverse range of small businesses to collaborate with NASA and its prime contractors. These updates ensure that more small businesses can contribute to NASA's mission and benefit from this impactful program.



# NASA Office of Small Business Programs Organizational Chart



# NASA OFFICE OF PROCUREMENT ASSIGNMENTS



# Call to Action

A detailed image of an astronaut in a white spacesuit floating in space. The astronaut is wearing a helmet with a dark visor and has various equipment attached to their suit. The background is a deep blue space with a bright light source on the left, creating a lens flare effect.

## For Industry (Large and Small Businesses):

- Focus on core capabilities and contract performance that delivers on NASA's current and future needs
- Engage early in NASA planning cycles.
- Leverage commercial capabilities for simplified acquisition pathways.
- Seek partnerships and teaming arrangements for scalability and competitiveness

Competitive SB Industrial Base +  
Resilient Supply Chains =  
Stronger NASA.

Unlocking SB Competition =  
Advancing NASA

## For NASA Leaders:

- Sustain commitment to small business contracting competition and utilization .
- Foster open communication & industry engagement throughout the acquisition lifecycle

# Questions and Answers Session

Thank You For Your Attention



# NASA SBIR/STTR Update



**MR. JASON KESSLER**

*Program Executive*

NASA Small Business Innovation  
Research and Small Business Technology  
Transfer Program Management  
Office

**NASA OSBP TOWN HALL**  
*with NASA OSBP Assistant Administrator*



OFFICE OF SMALL BUSINESS PROGRAMS  
...Above and Beyond Goals



## Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Program Overview

Jason Kessler | Program Executive | Jan. 21, 2026

## NASA SBIR/STTR Program

[sbir.nasa.gov](https://sbir.nasa.gov)



## MISSION

Empowering all small business communities to imagine, build, and utilize revolutionary technologies to drive NASA and the national economy to reach new heights

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## VISION

A world where any entrepreneur can benefit humanity

# Who can join?



- The SBIR/STTR program's **focus is on R&D**, funding ideas that have the potential to solve some of NASA and the nation's most pressing challenges
- You **must be a Small Business Concern (SBC)** with 500 employees or less and legally established in the U.S. (visit [sbir.gov](https://sbir.gov) for the full criteria)
- **For STTR**, the partnering research institution must be in the U.S. and be a nonprofit college or university, domestic nonprofit research organization, or a federally funded R&D Center (FFRDC)
- **If NASA is not the right fit**, there are 10 other government agencies that have SBIR/STTR programs that you may want to explore: [sbir.gov/agencies-landing](https://sbir.gov/agencies-landing)

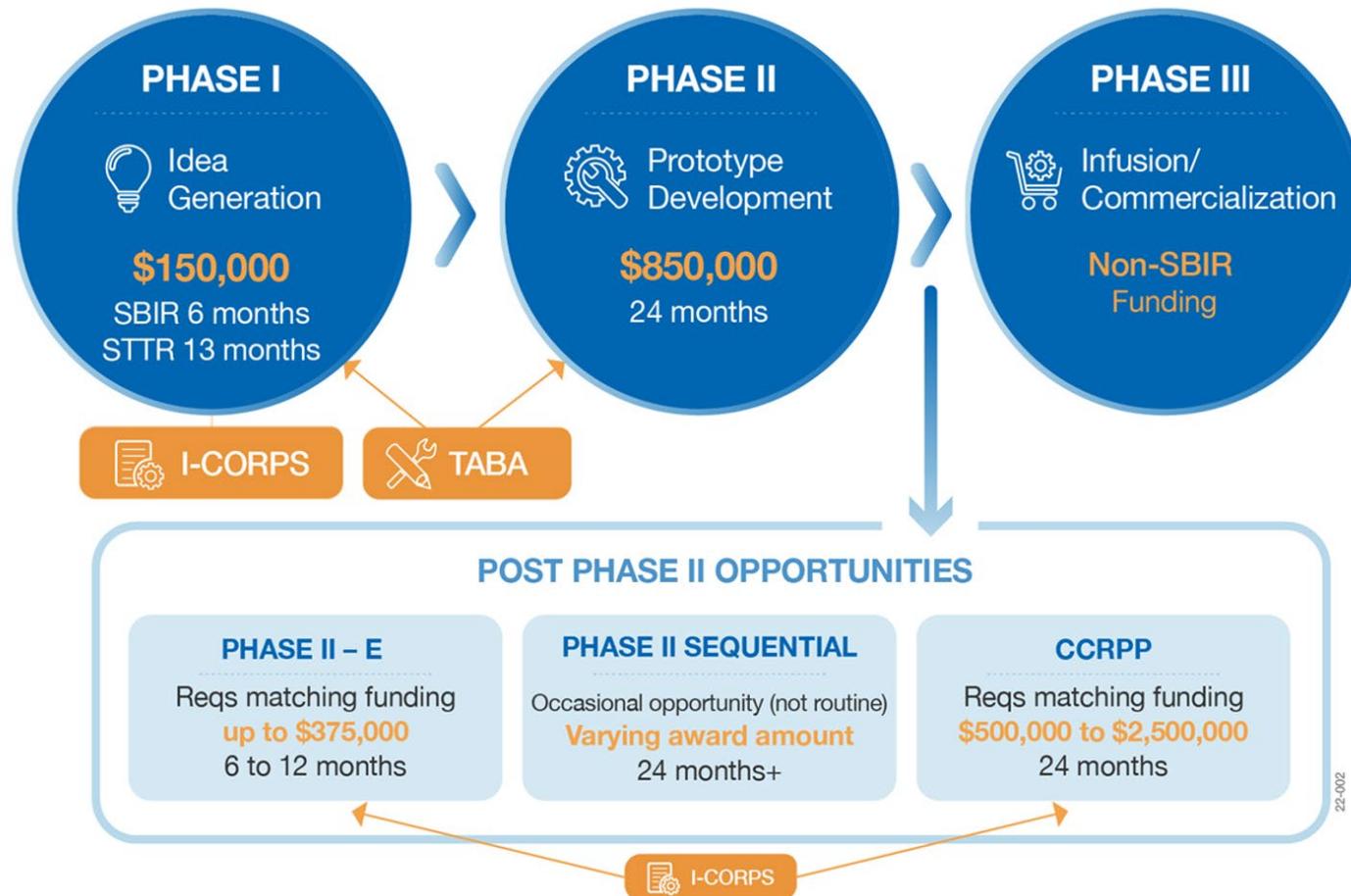
Approximately 80% of the small businesses we fund have less than 50 employees

# What exactly do you get?



Up to \$1 million for Phase I and II and \$3 million or more for Post Phase II opportunities!

## NASA SBIR/STTR PHASES (Mainline and Ignite)



# What's New: Reauthorization and Transitioning to BAA



- **Reauthorization:** We are awaiting congressional reauthorization of the SBIR and STTR programs; new solicitations and awards are on hold during the lapse.
  - **Awards made prior to Sept. 30, 2025, are not impacted by reauthorization**
  - Schedule adjustments will be clarified and announced once the program is reauthorized
  - Currently preparing for future solicitations and some exciting changes!
- **Move to a BAA:** Beginning in 2026, NASA will be utilizing a Broad Agency Announcement (BAA), which empowers us to solicit technology development over multiple appendices throughout the year.
  - **Appendix A and B**
    - Targeted for release in **early 2026 after reauthorization**
    - Check the **Program Year 2026 Information Hub** on our website ([www.nasa.gov/sbir\\_sttr](http://www.nasa.gov/sbir_sttr)) for updates

# Definition and Benefits of the BAA

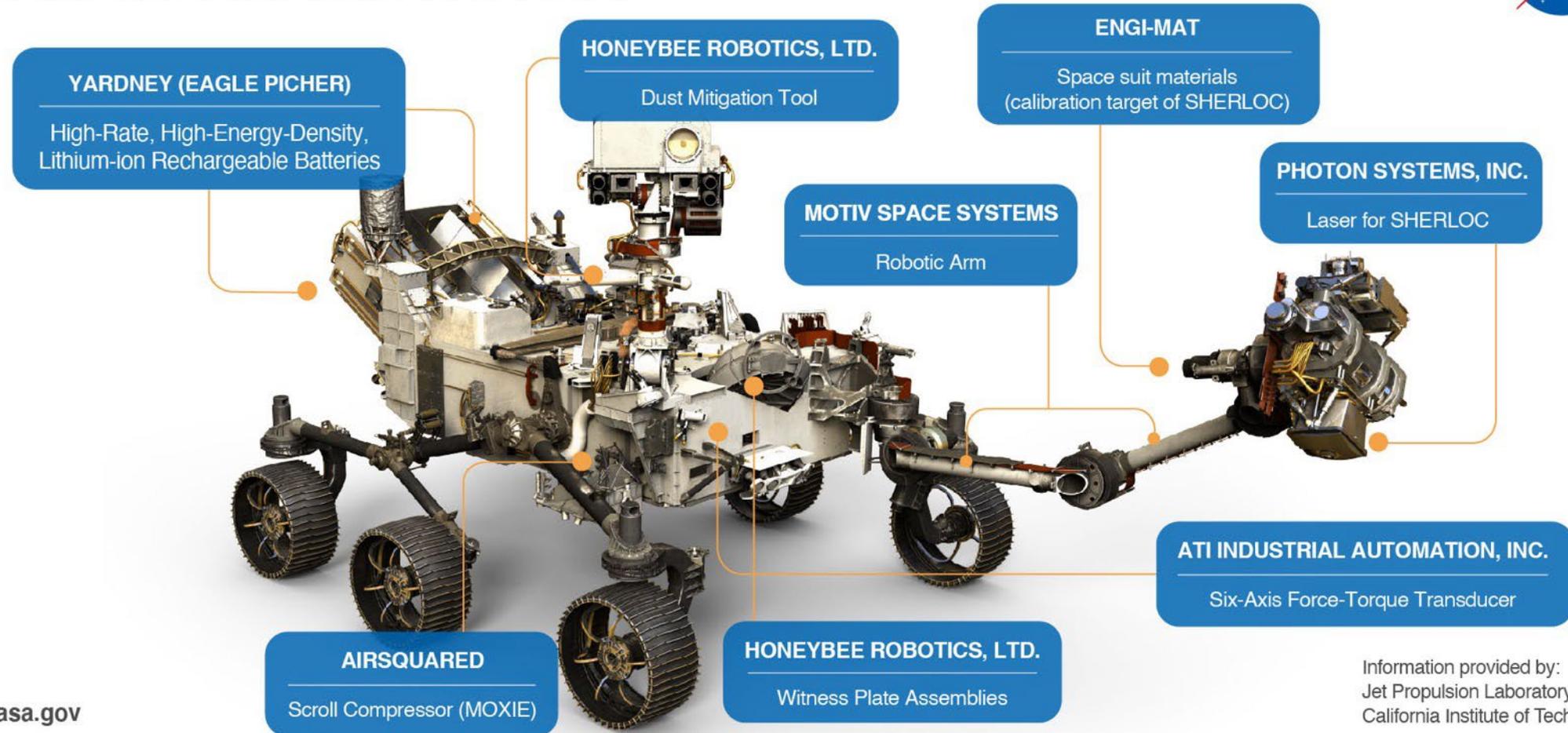


- **What is a Broad Agency Announcement (BAA)?**
  - A BAA is a **funding mechanism** used to procure basic and applied research.
  - Agencies use the BAA to fulfill requirements for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution
- **Why is the NASA SBIR/STTR program moving to a BAA?**
  - Opens up a world of opportunity for our community of innovators and for the Agency
  - Allows the NASA SBIR/STTR program to be more flexible and responsive
  - Through **phased appendix releases**, we can solicit proposals for both known and emergent technology needs in a way that can better adapt to changes in mission priorities and developments in the commercial marketplace
  - Additionally, the phased release schedule creates more opportunities for small businesses to propose and **participate throughout the year**

# Infusion into NASA's missions



## SBIR TECH ON-BOARD MARS 2020 PERSEVERANCE ROVER





# Commercialization and Innovation Initiatives

# What is SBIR Ignite?



- NASA SBIR Ignite offers an additional SBIR funding opportunity that:
  - Encourages participation from **product-driven companies** not looking at NASA as their primary customer
  - Places a heavy emphasis on **commercial viability** during review and scoring
  - **Features the same three phases and funding levels** as the main NASA SBIR/STTR solicitations



## Awardee Highlights

- ✓ 12 companies selected for Phase I awards in 2022; all selected for Phase II awards in 2023
- ✓ 10 companies selected for Phase I awards in 2023; all selected for Phase II awards in 2024
- ✓ 9 companies selected for Phase I awards in 2024; 7 selected for Phase II awards in 2025

**2026 NASA SBIR Ignite Phase I appendix is expected to release in early summer 2026**



Photo credit: H3X Technologies/NASA

H3X Technologies' Inverter helped NASA conceptualize the future of airflight.

## Integrated Electric Motor and Inverter

**LOCATION:** Louisville, Colorado

### **FOLLOW-ON SUCCESS:**

\$375K Phase II funding through Infinite Capital, LLC

### **SNAPSHOT:**

To conceptualize less fuel-dependent aircraft, NASA's **SUSAN project** needed a lighter, more powerful engine. With the help of funding provided through **SBIR Ignite** Phase I, Phase II, and Phase II-Extended, H3X Technologies created and delivered two cutting-edge integrated motor drives (combining the electric motor and power electronics): the High Power Density Machine (HPDM)-30 and -140. These innovations have opened new possibilities in aerospace and marine industries. The technology is used by **Sail Grand Prix (SailGP)**, an international sports championship for high-speed hydrofoil sailboats.

# What is NASA CCRPP?



- Enables **near-term infusion and/or commercialization** of SBIR/STTR-developed technologies.
  - Not intended for technology maturation without infusion and/or commercialization
- For NASA awardees from approximately the last 10 years
  - Completed NASA Phase II contracts
  - Ongoing or completed NASA Sequential Phase II contracts
  - Ongoing or completed NASA II-E contracts by NASA and/or markets outside of NASA beyond the CCRPP investment
- \$500K minimum investor funding, with 1:1 matching to a **maximum of \$2.5M**
- 24-month awards



Photo credit: Mango Materials



Photo credit: Black Swift Technologies

## Rugged Unmanned Aerial Systems for Harsh Environment Research

**LOCATION:** Boulder, Colorado

### **FOLLOW-ON SUCCESS:**

Phase IIE, CCRPP, and multiple Phase IIIs with funding from NASA, Murray State University, NOAA, and USGS

### **SNAPSHOT:**

What if you could fly an Unmanned Aircraft System (UAS) into the plume of a smoking volcano, through the eye of a Category 4 hurricane, or over the frontline of a raging wildfire? Black Swift Technologies has made these challenges a reality, specializing in a ruggedized, purpose-built, UAS designed for environmental research and data collection in austere environments. Their advanced technology provides crucial scientific advancements in aerospace technology that allow us to better understand, and ultimately help protect residents in the paths of, some of the most destructive natural forces on Earth.

Black Swift Technologies UASs enable advanced volcanic and hurricane research.

# Success Story | Black Swift Technologies | CCRPP



To better understand hurricanes, NOAA needs data that is conventionally hard to access, and while crewed planes can fly through a storm, they cannot fly across the surface of an ocean in the middle of a hurricane. For this, NOAA required an Unmanned Aircraft System (UAS) capable of handling extreme weather conditions.

NOAA and NASA supported the CCRPP where the avionics in Black Swift Technologies' S2 would be applied to the "S0," **a fixed-wing UAS that can handle the intensity of a hurricane at 10 meters above the surface of the water.** The S0 was designed to drop from a tube in a crewed NOAA plane and collect crucial information about the intensification of hurricanes.

Since its first launch, the S0 has **finished three hurricane seasons** providing data analysis. The S0 is targeted for operational capability feeding directly into National Weather Service (NWS) models and forecasts by 2027.



Photo credit: Mango Materials

# What is Phase III?



Phase III is the **commercialization** of innovative technologies, products, and services resulting from either a Phase I or Phase II contract.

- Further development of technologies for **transition**
  - NASA programs
  - Other Government agencies
  - Private sector
- Funded from sources other than the SBIR and STTR programs
- May be awarded without further competition



**TRAC Labs  
PRIDE**  
Procedure-writing  
software Phase  
IIIs for VIPER and  
Valkyrie robot

Photo credit: TRAC Labs

**Aurora Flight Sciences  
Corp. Universal Bus  
Charger**  
Phase III through NASA  
recharges batteries on  
space station

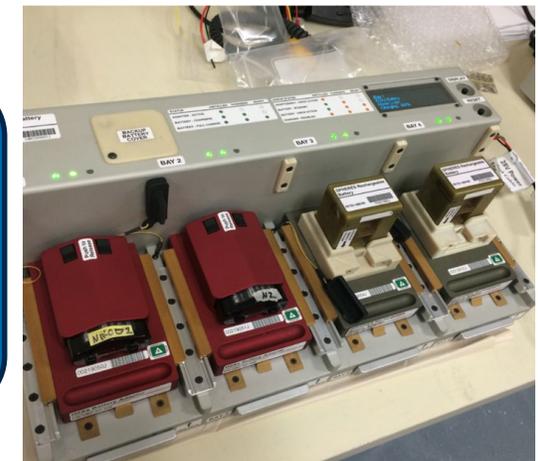


Photo credit: Aurora Flight Sciences Corporation

# Where do you start?



- Sign up to receive our **emails**: [nasa.gov/sbir\\_sttr/program-contact/](https://nasa.gov/sbir_sttr/program-contact/)
- Monitor for SBIR/STTR and other NASA STMD **solicitations**:
  - [nasa.gov/stmd-solicitations-and-opportunities/](https://nasa.gov/stmd-solicitations-and-opportunities/)
  - Official SBIR/STTR solicitation postings are on [sam.gov](https://sam.gov)
- Find **local assistance** in your state through the SBA's website: [sbir.gov/local-assistance](https://sbir.gov/local-assistance)
- Explore another path for working with NASA through **Office of Small Business Programs (OSBP)**; ideal for small businesses without an R&D focus: [nasa.gov/osbp](https://nasa.gov/osbp)

# Questions?

Visit our website:  
[www.sbir.nasa.gov](http://www.sbir.nasa.gov)





# Backup Slides

# Who Issues a BAA?



## Who Issues a Broad Agency Announcement (BAA)?

**To date, a wide array of government entities deploy BAAs, such as:**

- Department of War (DoW) (Including the Dept. of the Air Force, Dept. of the Navy, Dept. of the Army, etc.)
- Department of Homeland Security
- Department of Commerce
- Department of Health and Human Services
- Department of the Interior
- Department of Transportation
- National Aeronautics and Space Administration (NASA)

# What is the SBIR/STTR Program?



- Highly competitive program that encourages domestic small businesses to engage in Federal Research/Research and Development (R/R&D) with the potential for commercialization
- **Small Business Technology Transfer (STTR)**
  - Established in the 1990s; created to facilitate cooperative R&D between small businesses and U.S. research institutions (RIs)
  - NASA is 1 of 6 participating agencies
- **Small Business Innovation Research (SBIR)**
  - Has been around since 1980s
  - NASA is 1 of 11 participating agencies

Approximately \$3 billion invested per year by participating agencies

## SBIR + STTR Programs



Department of Defense (DOD)



Department of Health and Human Services (HHS)



Department of Energy (DOE)



National Aeronautics and Space Administration (NASA)



National Science Foundation (NSF)



Department of Agriculture (USDA)

## SBIR Program Only



Department of Education (ED)



Department of Transportation (DOT)



Environmental Protection Agency (EPA)



Department of Homeland Security (DHS)



Department of Commerce (DOC)

# NASA Aerospace State Hubs Initiative

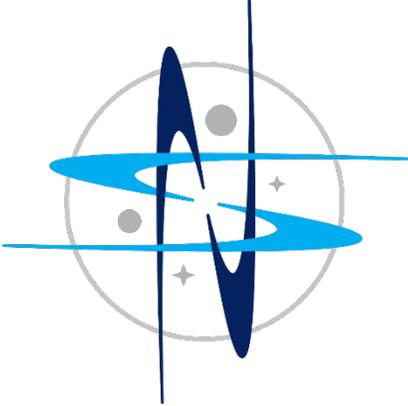


**DR. HOLLY MILLER, Ph.D.**  
*OSTEM Federal Liaison*  
Office of STEM Engagement

**NASA OSBP TOWN HALL**  
*with NASA OSBP Assistant Administrator*



OFFICE OF SMALL BUSINESS PROGRAMS  
...Above and Beyond Goals



# NASA STEM

Launching Tomorrow's Aerospace Workforce

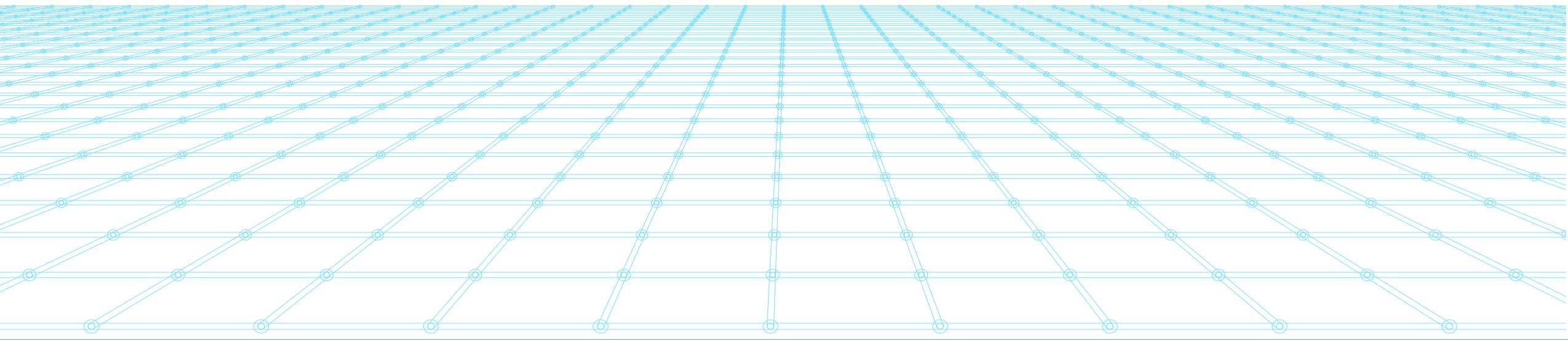
NASA OSBP Town Hall: Unlocking Small Business Competition for a New Space Economy

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OSTEM Federal Liaison

January 21, 2026



# Pressing Issues in America's Aerospace and Defense Workforce



# Addressing Aerospace Workforce Issues Now is Critical to America and the Mission



**The Growing Space Economy**



**Administration Priority on Human Space Exploration**



**Global Leadership in Space & National Security**



**Administration Priority on More Manufacturing Jobs**

# Focusing on Aerospace Manufacturing Jobs Directly Aligns to Presidential Priorities



PRESIDENTIAL ACTIONS

## Career and Technical Education Month, 2025

The White House | February 3, 2025

Hardworking Americans are the backbone of our great Nation, and my Administration is dedicated to giving our people the tools they need to succeed in a time where emerging technologies are advancing at an unprecedented pace. During Career and Technical Education Month, I am committed to promoting excellence by putting America first and investing in the best programs and opportunities that will result in a stronger workforce and a better future for all.

Under my leadership, America will once again champion a culture of innovation, and I will reward and equip our people with real skills for real careers. I am committed to addressing the desperate need to fill. During my first term, I proudly signed the Career and Technical Education for the 21st Century Act, which provides



PRESIDENTIAL ACTIONS

## PREPARING AMERICANS FOR HIGH-PAYING SKILLED TRADE JOBS OF THE FUTURE

Executive Orders | April 23, 2025

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered:

To maximize my Administration's historic investments in America's workforce and economic growth, my Administration will fully equip the American workforce with world-class products and implement world-leading technologies. My Administration will also consolidate and streamline fragmented Federal workforce programs that are too disconnected from propelling workers into secure, well-paying American jobs.



PRESIDENTIAL ACTIONS

## ENSURING AMERICAN SPACE SUPERIORITY

Executive Orders | December 18, 2025

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered:

**Section 1. Purpose.** Superiority in space is a measure of national vision and willpower, and the technologies Americans develop to achieve it contribute substantially to the Nation's strength, security, and prosperity. The United States must therefore pursue a space policy that will extend the reach of human discovery, secure the Nation's vital economic and security interests, unleash commercial development, and lay the foundation for a new space age.

# Pressing Issues in America's Aerospace and Defense Workforce



A continuously growing engineering and skilled technical workforce is needed to support the expanding aerospace economy and the nation's renewed focus on human space exploration.



Demand for STEM professionals and skilled technical workers is rapidly increasing, while the labor pool is shrinking due to:

- Aging workforce
- Educational barriers to entry (cost of a four-year degree)
- Lack of awareness of career pathways

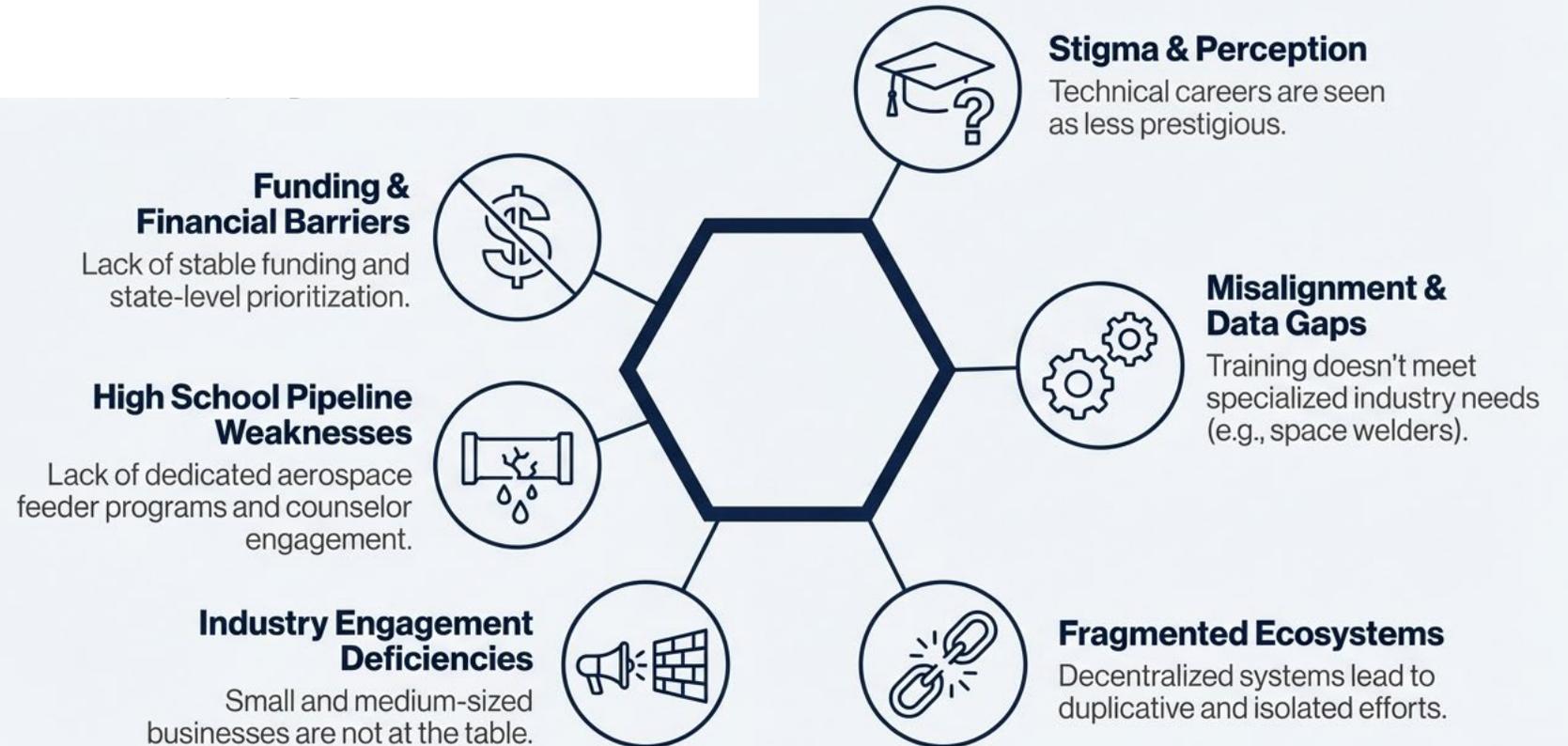
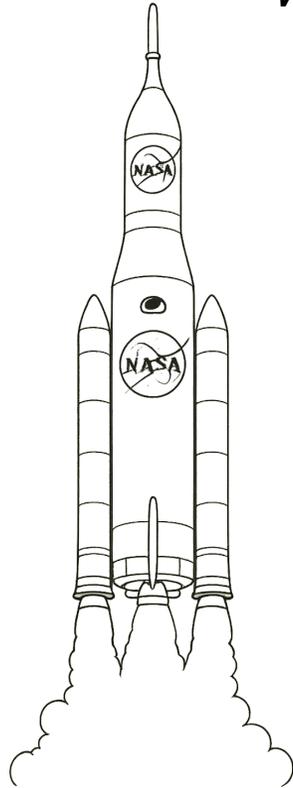
# Persistent Problems with Skilled Technical Workforce Development in Aerospace

- National “one-size-fits all” approach is ineffective
- Shrinking labor pool and unsustainable culture of poaching
- Unclear or inconsistent “demand signal” from aerospace industry sector
- Difficulty in scaling individual programs (typically with one company and one community college)
- Lack of coordination between industry, community college, and state economic development entities
- Persistent misperceptions about manufacturing jobs hamper efforts to attract students, convince parents, and educate high school counselors

These issues can only be addressed through **collective**, **intentional**, and **coordinated** action.

# Systemic Barriers in STW Development

*What the state concept teams shared:*



# America's Aerospace Industry Needs Skilled Technical Workers

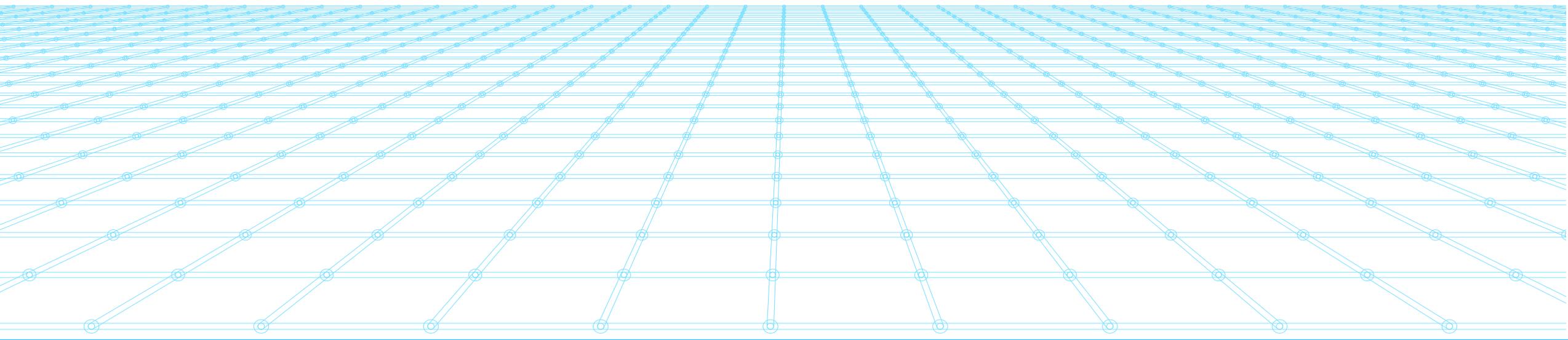


## Projected Annual Attrition (Next Decade)

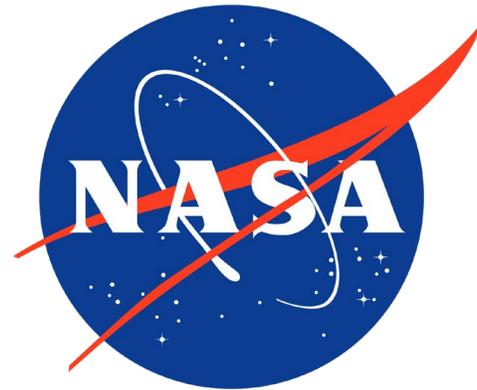
	Assemblers & fabricators	11%
	Welders, cutters, solderers	10%
	Engineers (for comparison)	6%

“Executives report attrition rates reaching over 40% for skilled trades in some geographies.”

# NASA: Taking Action to Address Workforce Shortages in the Aerospace Industry



NASA is **uniquely positioned to be the catalyst and convener** that **ignites and accelerates** America's aerospace workforce development essential to expanding U.S. manufacturing capability, securing U.S. global leadership in space, and enhancing national security.



# NASA is in Every State

## FY 2023

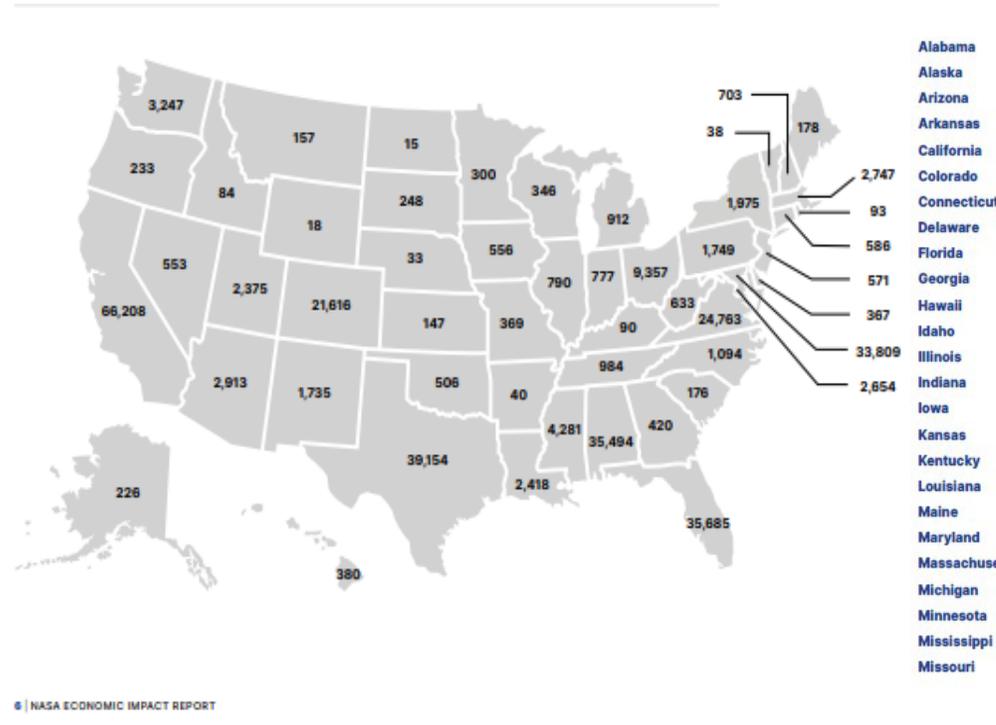
NASA's efforts impacted all 50 states and the District of Columbia.

**\$75.6B** generated in economic output

**304,803** jobs supported

Resulted in **\$9.5B** in federal, state, and local revenues.

NASA Employment Impact by State



NASA Output Map Impact by State

State	Jobs	Output
Alabama	35,494	\$8,072,239,000
Alaska	226	\$47,913,000
Arizona	2913	\$649,920,000
Arkansas	40	\$8,656,000
California	66,208	\$18,593,591,000
Colorado	21,616	\$5,104,580,000
Connecticut	586	\$138,456,000
Delaware	367	\$70,221,000
Florida	35,685	\$8,297,298,000
Georgia	420	\$100,744,000
Hawaii	380	\$78,958,000
Idaho	84	\$17,818,000
Illinois	790	\$196,349,000
Indiana	777	\$195,005,000
Iowa	556	\$121,798,000
Kansas	147	\$33,234,000
Kentucky	90	\$21,288,000
Louisiana	2,418	\$507,376,000
Maine	178	\$39,977,000
Maryland	33,809	\$8,266,465,000
Massachusetts	2,747	\$718,366,000
Michigan	912	\$204,269,000
Minnesota	300	\$70,482,000
Mississippi	4,281	\$854,438,000
Missouri	369	\$83,271,000
Montana	157	\$31,828,000
Nebraska	33	\$7,403,000
Nevada	553	\$105,606,000
New Hampshire	703	\$162,026,000
New Jersey	571	\$145,074,000
New Mexico	1,735	\$362,404,000
New York	1,975	\$517,343,000
North Carolina	1,094	\$204,181,000
North Dakota	15	\$3,239,000
Ohio	9,357	\$2,412,465,000
Oklahoma	506	\$109,423,000
Oregon	233	\$53,974,000
Pennsylvania	1,749	\$409,048,000
Rhode Island	93	\$20,450,000
South Carolina	176	\$40,392,000
South Dakota	248	\$46,373,000
Tennessee	984	\$224,263,000
Texas	39,154	\$9,855,142,000
Utah	2,375	\$486,640,000
Vermont	38	\$9,159,000
Virginia	24,763	\$6,106,081,000
Washington	3,247	\$884,031,000
Washington, DC	2,654	\$712,426,000
West Virginia	633	\$140,873,000
Wisconsin	346	\$75,221,000
Wyoming	18	\$4,255,000

Source: NASA FY23 Economic Impact Report, October 2024

# NASA OSTEM's State-Based Strategy: State Hubs

## NASA Aerospace State Hubs for Skilled Technical Workforce

### Goal

To increase and accelerate the number of students entering the aerospace industry's skilled technical workforce that will enable and advance NASA's critical missions.

### Concept

Building upon NASA led regional pilots to grow the skilled technical workforce, NASA OSTEM will:

- Strengthen collaboration between industry, education (community colleges/CTE), workforce development, and economic development stakeholders to create clear career pathways to skilled technical jobs.
- Accelerate state's capacity to equip students to earn industry-recognized credentials and gain relevant work-based experiences



# NASA State Aerospace Hub Development

In 2022-2023, established a framework for pilot programs in Florida, New Orleans, and Southern California.

Convened discussions with additional states to build upon success to scale and accelerate outcomes; in-person convening at NASA HQ in June 2025.

In September 2025, NASA funded 15 state teams to develop concept papers outlining three-year strategy

## Next Steps

In FY 2026, selection of State Hub Leads and implementation of State Hubs

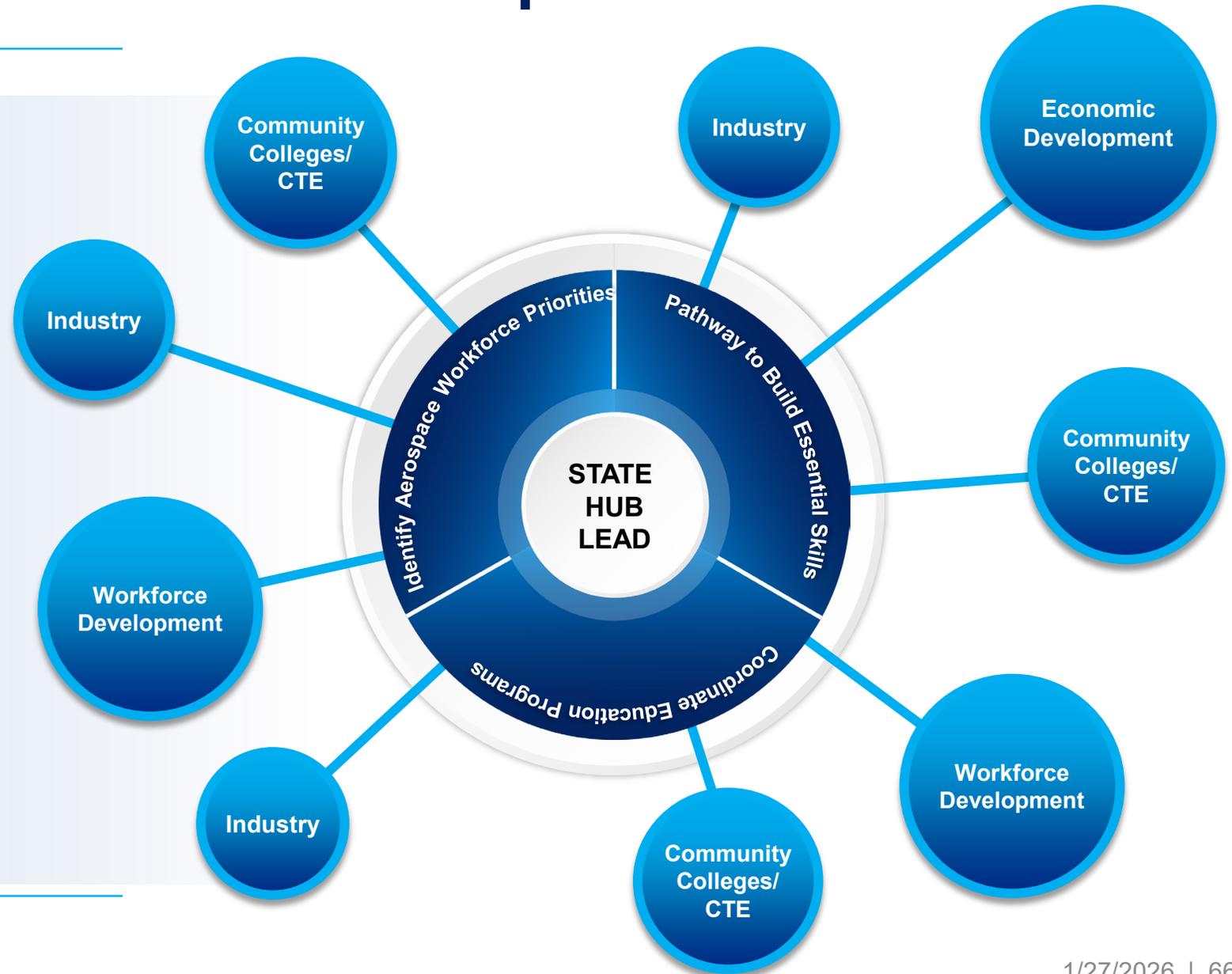
### 2025 State Participants:

- Alabama
- California
- Colorado
- Florida
- Kentucky
- Louisiana/Mississippi
- Ohio/Pennsylvania/West Virginia
- Missouri
- Virginia
- Maryland
- Idaho/Washington
- Texas

# The Role of NASA Aerospace Hubs

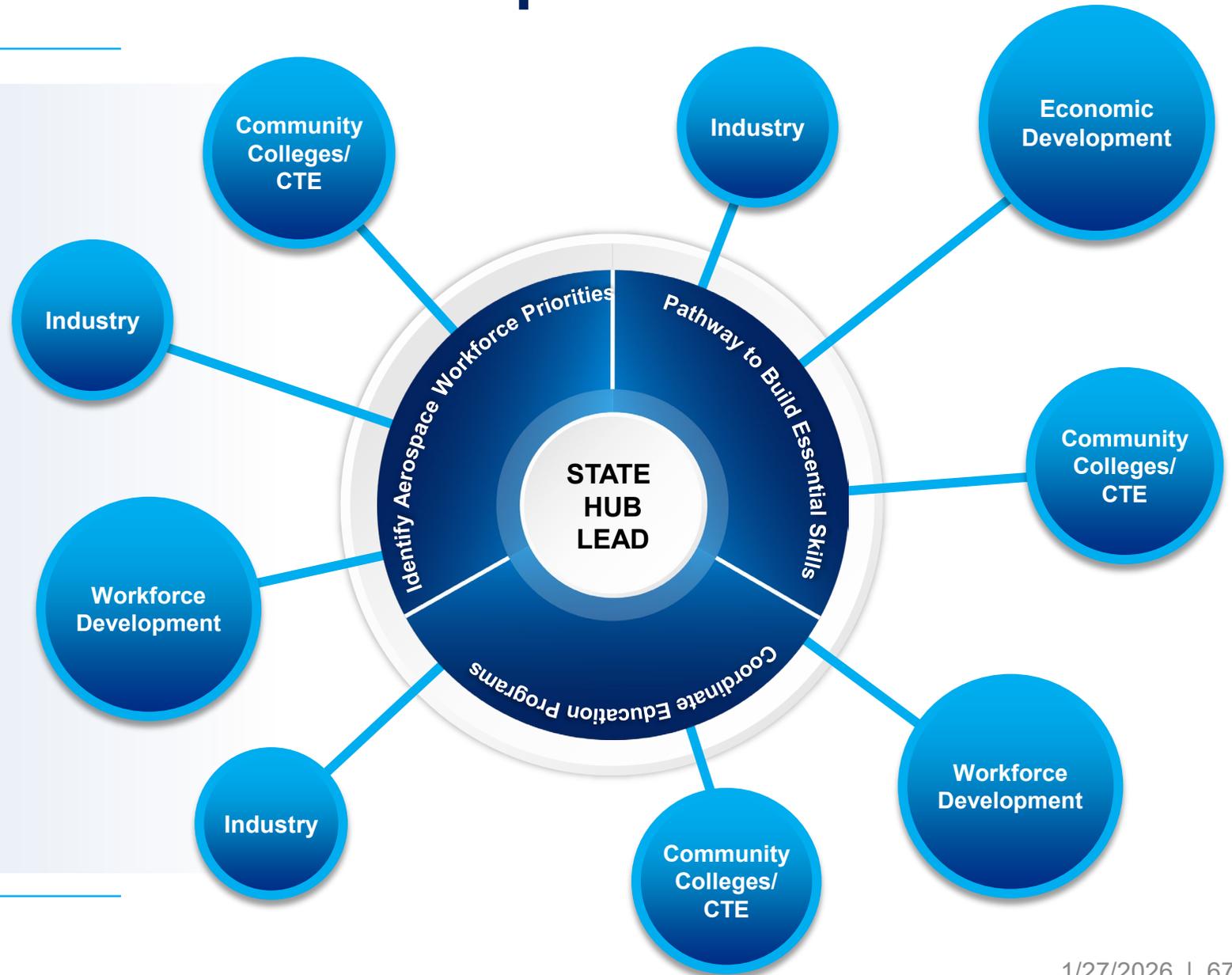
## The Approach:

Serving as a focal point for NASA, a state's Hub facilitates coordination between NASA industry partners, education providers, and state/regional economic development agencies to accelerate workforce readiness efforts by creating clear pathways for students to pursue high-needs skilled technical workforce careers.



# The Role of NASA Aerospace Hubs

Small Business



# NASA as Catalyst



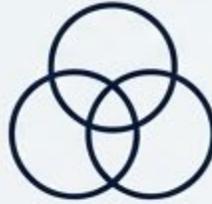
## Mission-Driven Vision

Providing overarching strategic direction that connects tactical activities to national aerospace priorities.



## Unparalleled Expertise

Access to NASA's subject matter experts for curriculum guidance and technical insight.



## Federal Agency Relationships

A cross-agency working group focused on collective impact and breaking down federal silos.



## Inspirational Student Opportunities

Award-winning internships, student challenges, career videos, and CTE days that leverage the power of the NASA brand.



## Targeted Technical Assistance

Hands-on support to help hubs develop and scale effective programs.

# “Collaborate-to-Compete” Model



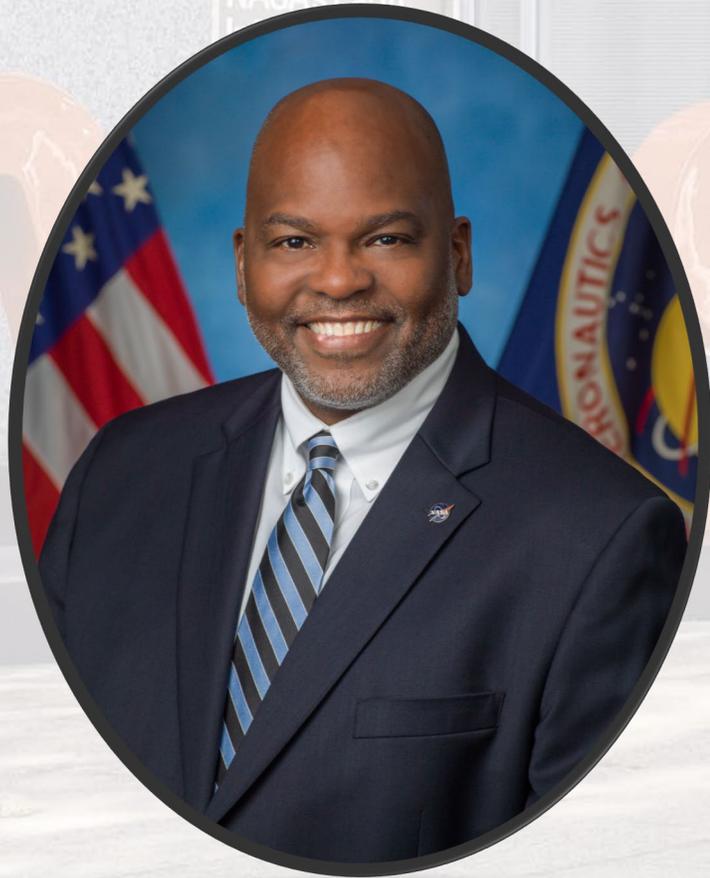
To widen the talent pool in the aerospace industry, collective action is required. Strong engagement from both primes and suppliers is critical to hub success.

# Key Takeaway

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In the NASA Aerospace State Hub model, **industry, including small-to-medium-sized businesses serve as critical, though currently underutilized, partners in the localized workforce ecosystem.** They can provide specific demand signals and practical training opportunities that ensure the talent pipeline meets real-world industrial need

# Q&A Segment



**MR. CHARLES T. WILLIAMS**  
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# Closing Remarks



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