Pursuant to Executive Order 14091 (February 16, 2023) on "Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government"

2023 Equity Action Plan Summary

National Aeronautics and Space Administration

Delivering equity through NASA

The foundation of the National Aeronautics and Space Administration's (NASA's) work is found in our Mission Statement: "NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery." From hidden figures to today's trailblazers, NASA embraces all who desire to participate in ongoing discovery and exploration. Equity is essential to applying that principle today and is critical to achieving success in our missions of tomorrow. When we enable individuals to inclusively participate and intentionally reduce systemic barriers that hinder equity, we provide space for all possible talent, skills, and ideas. As NASA looks ahead to new missions and making space for everyone, we are actively expanding our reach across all communities, including those who are underserved. To chart America's course in space tomorrow, NASA will empower the whole of our Nation with opportunity here at home today.

NASA has identified five areas of focus for its 2023 Equity Action Plan through internal assessments, feedback from program offices, engagement with local communities via outreach events, existing evidence, and more. NASA will continue to engage the public on these action areas, its progress, and next steps throughout the year and beyond.

- 1. Ensure equity in procurement and contracts by increasing utilization and integration of contractors and businesses from underserved communities. NASA issued three requests for information (RFIs) (June 2021, April 2023, and June 2023) seeking input from business within underserved communities on advancing equity in NASA programs, contracts, and grants and the identification of barriers limiting or preventing them from seeking NASA opportunities. Overall, there was an inability of businesses within underserved communities to identify solicitation opportunities aligned to their capability and / or opportunities to partner with large businesses for access to subcontracting opportunities; businesses indicated that there is a lack of understanding with how to engage with NASA acquisition points of contacts; and a lack of access to capital to cover the costs for outreach to Agency acquisition personnel and for proposal development by businesses within underserved communities. To address these barriers and others, NASA will:
 - Implement recommendations from NASA's Small Disadvantaged Business (SDB) "tiger team" to meet and exceed SDB goals and promote equity in procurement awards.
 - Increase focused outreach, training, and community engagement in underserved communities (SDBs, Women-Owned and Service-Disabled Veteran-Owned Small Businesses, Historically Underutilized Business Zone (HUBZone) Businesses, Historically-

- Black Colleges and Universities (HBCUs), and Minority Serving Institutions (MSIs)) to meet federally mandated small business goals.
- Develop a Small Business Training Program to expand training for the acquisition workforce to increase knowledge of underserved communities and small business programs, and the specific procurement-related challenges they face.
- Set aside Product Service Line (PSL) requirements for small businesses, AbilityOne contractors, and the U.S. Small Business Administration (SBA) 8(a) Business Development Program.
- 2. Enhance grants and cooperative agreements to advance opportunities, access, and representation for underserved communities. The three RFIs NASA released seeking feedback from the community on barriers to accessing grant programs and resources identified misperceptions by underserved communities about aligning with NASA's mission, and a lack of engagement with NASA due to lack of awareness of and access to information about NASA's grant programs and policies. Community input received through NASA workshops also highlighted that Under-resourced Institutions (URIs) face a unique barrier in establishing entirely new partnerships with NASA where no previous partnerships exist. More broadly, unconscious and hidden bias present a barrier to equitable evaluation of research proposals across NASA's portfolio. To address these barriers and others, NASA will:
 - Participate in various targeted community engagement and outreach events for underserved communities, continuing its commitment to a minimum of four grant-related outreach events to underserved communities per calendar year.

- Address and dismantle identified barriers to underserved communities in the award application and administration process by collecting feedback through its two-way outreach and training sessions and evaluate post-event survey feedback.
- Train and educate grant applicants and recipients on required policies when administering NASA's grants and cooperative agreement awards by holding six training and education sessions in 2023.
- Expand Dual Anonymous Peer Review (DAPR) of grant proposals, which increases equity in NASA's solicitation process by decreasing barriers caused by hidden bias. By 2026, DAPR will be the default review methodology for most NASA Research Opportunities in Space and Earth Science (ROSES) grants.
- Award <u>Bridge Program</u> Seed Funding (BPSF). The SMD Bridge Program's primary goal is to promote participation of traditionally underrepresented groups in NASA's workforce and science, technology, engineering, and mathematics (STEM) disciplines through investment in science and engineering research at URIs. In response to community input and to enable future participation in the Bridge Program, the BPSF awards will fund partnership-development projects with NASA Centers.

- 3. Increase accessibility and use of Earth science data in underserved and disadvantaged communities to inform decision-making. Underserved communities face unequal access to Earth information needed to inform decision-making in their communities. For example, lack of technical skills hardware, and internet requirements were shown to impose constraints on who can access and use NASA data. Underserved communities also face a barrier to inquiry-based Earth system science education, which is heightened by disparities in environmental literacy, STEM identity, as well as confidence, skills, and interest in STEM. To address these barriers and others, NASA will:
 - Continue to contribute to the Justice40 Initiative through the Community Action and Climate & Resilience programs to reach disadvantaged communities disproportionately impacted by underinvestment. Community Action includes <u>Equity and</u> <u>Environmental Justice</u>, <u>Indigenous Peoples Initiative</u>, and <u>Prizes & Challenges</u>.
 - Provide trainings to increase awareness, accessibility, and use of NASA Earth information, particularly for underserved or overburdened groups who face unequal access to scientific data and education needed to address environmental challenges within their communities.
 - Continue Transform to Open Science (TOPS), NASA's ambitious five-year plan to accelerate adoption of open science, unrestricted sharing of software, data, and knowledge as early as possible in the scientific process. NASA will release a new curriculum to increase adoption of open science.

- Advance Visualization, Exploration, and Data Analysis (<u>VEDA</u>), an open-source, cloud-based Earth science platform that promotes more inclusive, accessible, and reproducible NASA science. VEDA will broaden user engagement with students, researchers, policymakers, and the general public.
- Reach new audiences with the <u>Earth Information Center (EIC)</u>. Specifically, support additional installations and continue to raise awareness of virtual EIC resources that allow users to see how our planet is changing and provide easy-to-use resources to support decision makers in developing the tools they need to mitigate, adapt, and respond to climate change. The EIC will also produce two stories that highlight environmental and climate issues that impact underserved communities.
- 4. Improve language access policies to expand access for limited English proficient (LEP) populations to NASA programs and activities. Although NASA has increased its materials available in languages other than English, most materials NASA prepares for the public are available solely in English. Materials in languages other than English are dispersed across many platforms and may not be easy for all users to find. To address this barrier and others, NASA will:
 - Complete the integration of updated Center Language Access
 Plans into the Agency Language Access Plan, highlighting recent
 changes to language service acquisition processes for employees,
 eliminating conflicts between the Agency plans and Center plans,
 and ensuring the crucial role of NASA's Centers in implementing
 the plan is understood by employees.

- Develop and implement a communications plan to increase employee awareness of responsibilities under the Language Access Plan.
- Expand Spanish-language communications, including publishing a Spanish translation of the second part of the First Woman graphic novel, completing a pilot season for the podcast in Spanish Universo curioso de la NASA, and conducting a Spanish live show during the return of OSIRIS-REx in September 2023. NASA will provide Spanish language translation of new products for educators and students created within the Next Gen STEM project.
- Launch a centralized website for all of NASA's Spanish-language web content by 2026. This website will assist LEP individuals in locating existing Spanish content.
- Assess Spanish-language communications resources and prioritize the addition of members to our Spanish-language communications teams to support the growing program.

5. Engage students to build a diverse future STEM workforce.

Although the number of women, minorities, and persons with disabilities who participate in and earn degrees in STEM fields has grown over the past several decades, these populations are still underrepresented in STEM careers. That is, their representation in the STEM workforce is smaller than their representation in the national population. The reasons for this are numerous, complex, and systemic. They include factors such as disparate access to high-quality STEM education and a lack of diverse role models. To address this barrier and others, NASA will:

- Continue to collaborate with the National Science Foundation
 (NSF) on the Minority University Research and Education Program
 (MUREP) and Inclusion Across the Nation of Communities of
 Learners of Underrepresented Discoverers in Engineering and
 Science (INCLUDES) initiatives; identify and implement successful
 approaches to broaden participation, document lessons learned,
 and conduct evaluations to inform the establishment of a new
 cohort in 2025.
- Collaborate with NSF on the MUREP and INCLUDES initiatives.
- Implement findings strategically from the Internship Process
 Evaluation regarding barriers in the registration and application
 system for NASA STEM <u>Internships.</u>
- Spark and sustain K-12 student engagement in STEM via missiondriven educational resources and learning opportunities (e.g., collaborate with the U.S. Department of Education on its 21st Century Community Learning Centers (21CCLC) program.

What NASA accomplished

Below is a sampling of NASA's progress delivering on equity and racial justice since its first Equity Action Plan in 2022.

- Obligated \$1.9 billion in contracts from FY 2021 through FY 2022 under the product service line set-asides for small business categories and AbilityOne programs.
 - NASA's Office of Small Business Programs increased outreach events in FY 2022 by 80 percent from FY 2021, surpassing the goal of 50 percent by 2029, and saw an increase in participation from businesses in underserved communities by ten percent.
- Reduced administrative burden on grant applicants and ensured consistency and compliance with federal regulations by standardizing NASA's Notice of Funding Opportunity (NOFO) template.
 - NASA also increased the grant award amount to HBCUs between FY 2021 and FY 2022 by 39.9 percent, or \$1.36 million.
- Developed and updated Language Access Plans at all ten Centers to establish a more equitable communication strategy for reaching LEP populations.

Additionally, NASA completed one Title VI compliance review focused on limited English proficiency. It also completed two Title IX reviews and initiated two additional Title IX reviews. Together, these actions strengthened NASA's work on civil rights compliance and accessibility to LEP populations.

What NASA accomplished

- Increased accessibility in NASA facilities.
 - Among NASA's efforts to increase accessibility are initiatives at NASA Goddard Space Flight Center and Space Center Houston for Sensory Friendly Hours at visitor centers and numerous STEM materials and programs for students with disabilities. In July 2023, the Kennedy Space Center Visitor Complex was named a Certified Autism Center.
- Awarded eight proposals totaling \$11 million over three years to HBCUs to build data science networks with Earth science data, as part of NASA's MUREP program.