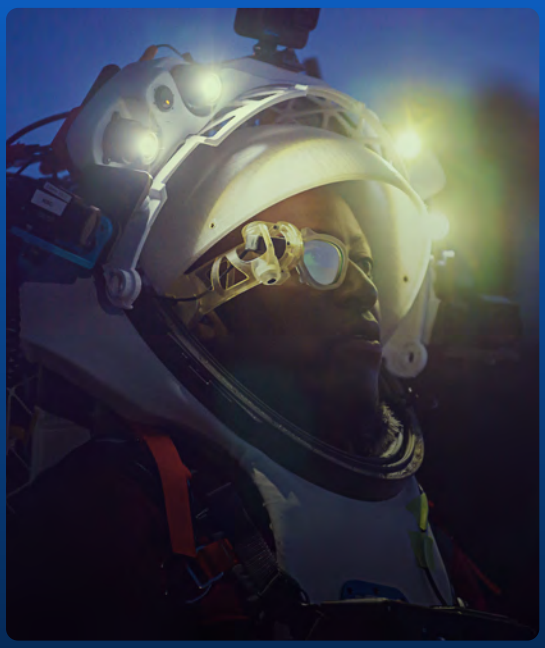
National Aeronautics and
Space Administration

FY 2024

AGENCY FINANCIAL REPORT

The Artemis II crew, NASA astronauts Reid Wiseman, left, Victor Glover, Christina Koch, and Canadian Space Agency (CSA) astronaut Jeremy Hansen, right, pose for a group photograph with White House staff after a briefing, Thursday, June 6, 2024, at the Eisenhower Executive Office Building in Washington.

PHOTO CREDIT – **Bill Ingalls**



COVER IMAGE

Caption and credits

NASA astronaut Andre Douglas wears AR (Augmented Reality) display technology during a nighttime advanced technology run in the San Francisco Volcanic Field in Northern Arizona on May 21, 2024. The monocular lens consists of a pico-projector and waveguide optical element to focus an image for crew to see their real world overlaid with digital information. These unique near-eye form factors may be used to improve the usability and minimally impact the complex biomechanics of working in a pressurized suit environment.

PHOTO CREDIT – **NASA/Josh Valcarcel**

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National Aeronautics and Space Administration

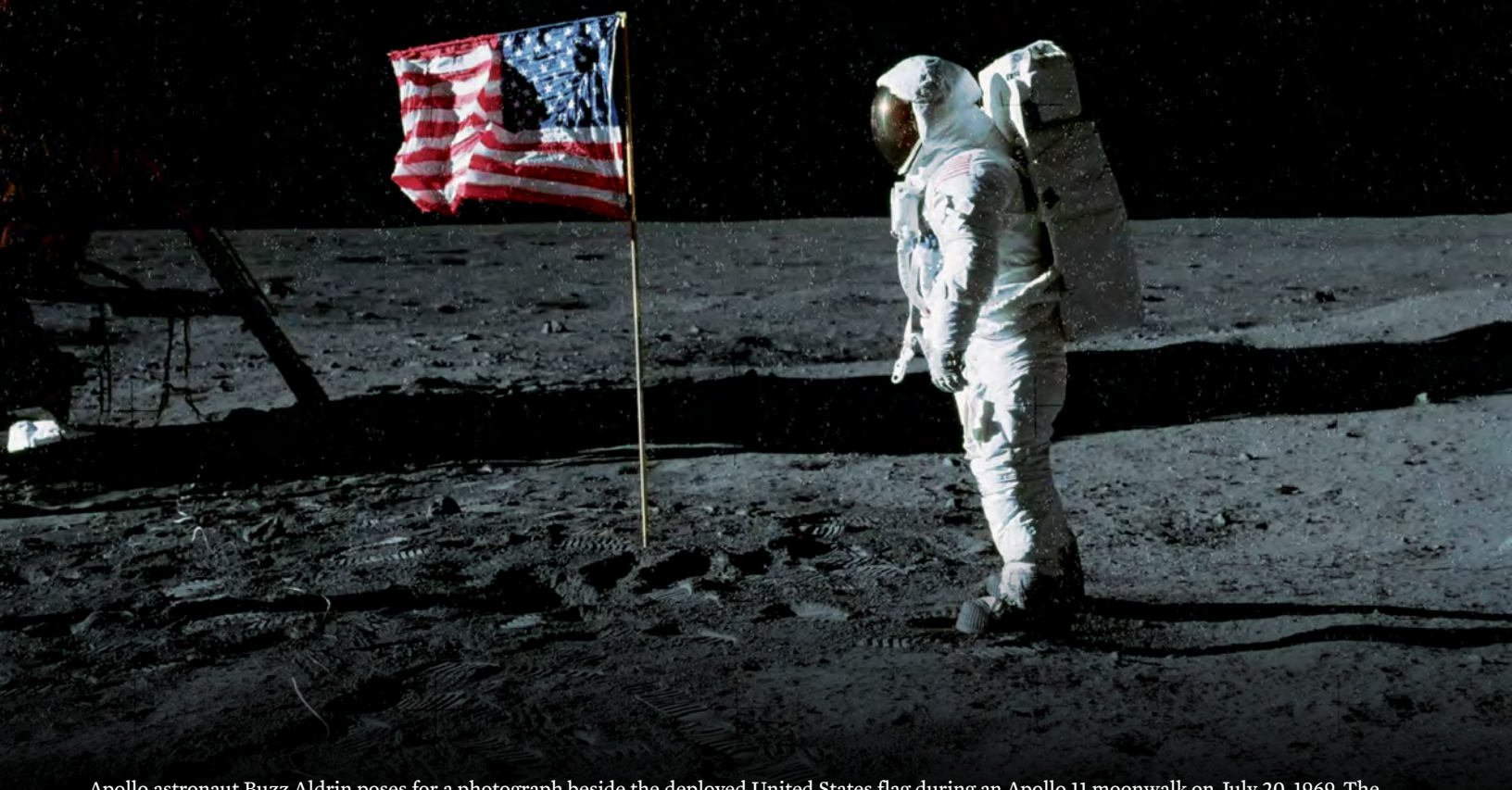
NASA COMMEMORATES

55TH ANNIVERSARY OF APOLLO 11 MOON LANDING

As the agency explored more of the Moon than ever before under the Artemis campaign, NASA celebrated the 55th anniversary of the first astronauts landing on the Moon with a variety of in-person, virtual, and engagement activities nationwide between Monday, July 15, and Thursday, July 25.

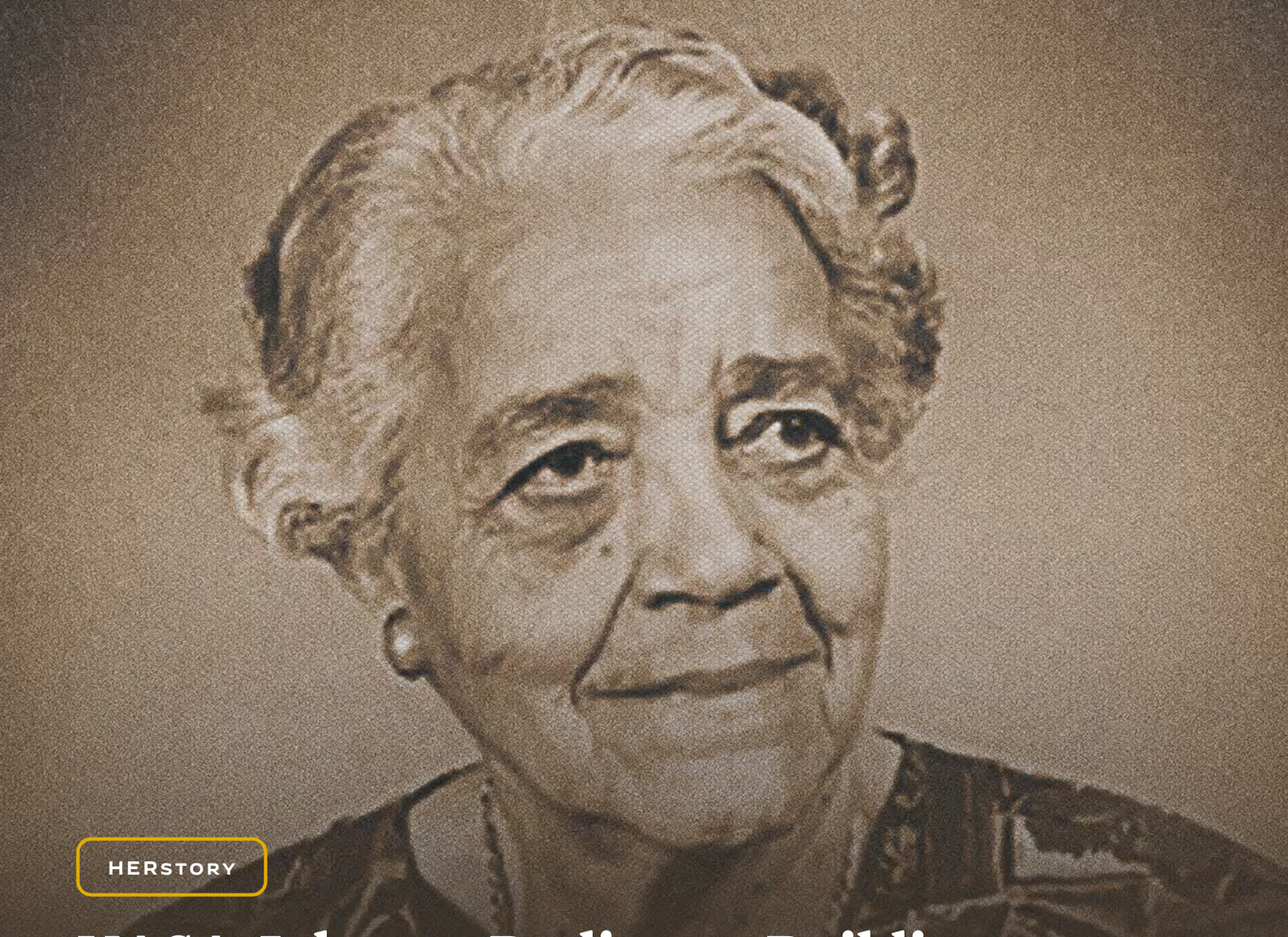
Events honored America's vision and technology that enabled the Apollo 11 crewed lunar landing on July 20, 1969, as well as Apollo-era inventions and techniques that spread into public life, many of which are still in use today. Activities also highlighted NASA's Artemis campaign, which includes landing the first woman, first person of color, and first international astronaut on the Moon, inspiring great achievements, exploration, and scientific discovery for the benefit of all.

During the week of July 15, the agency also shared the iconic bootprint image and the significance of Apollo 11 to NASA's mission, as well as used the **#Apollo11** hashtag across its digital platforms online.



Apollo astronaut Buzz Aldrin poses for a photograph beside the deployed United States flag during an Apollo 11 moonwalk on July 20, 1969. The Lunar Module is on the left, and the footprints of the astronauts are clearly visible in the soil of the moon.

PHOTO CREDIT – NASA



HERSTORY

NASA Johnson Dedicates Building to Dorothy Vaughan, Women of Apollo

NASA's Johnson Space Center in Houston recognized legendary human computer Dorothy Vaughan and the women of Apollo with activities celebrating their achievements. The event included a renaming and ribbon-cutting ceremony at the center's "Building 12" on Friday, July 19, the eve of the 55th anniversary of the Apollo 11 Moon landing.

NASA Johnson Director Vanessa Wyche began with a discussion about the importance of Vaughan and the women of Apollo's contributions to the agency's lunar landing program and their significance to today's Artemis campaign. Other highlights included a poetry reading, a recital by Texas Southern University's Dr. Thomas F. Freeman Debate Team, and a "Women in Human Spaceflight" panel discussion.

SCAN TO LEARN MORE

Following the program, the ribbon-cutting ceremony took place at Building 12, which was renamed the "Dorothy Vaughan Center in Honor of the Women of Apollo." The dedication honored the people who made humanity's first steps on the Moon possible.

"On behalf of NASA's Johnson Space Center, we are proud to host this historic event as the agency honors the significant contributions women have made to the space industry, particularly trailblazers who persevered against many challenges of their era," Wyche said. "As we prepare to return to the Moon for long-term science and exploration, NASA's Artemis missions will land the first woman and first person of color on the Moon. It's a privilege to dedicate Johnson's Building 12 to the innovative women who laid the foundation for our nation's space program."

NOVEMBER 15, 2024

Message from the Administrator

I am pleased to present the Fiscal Year (FY) 2024 Agency Financial Report (AFR) for the National Aeronautics and Space Administration (NASA). This report provides key financial and performance information and demonstrates the Agency's commitment to transparency in the use of American taxpayers' dollars. NASA is committed to delivering reliable, accurate, transparent, and comprehensive financial data in support of the Agency's fiscal operations and in accordance with Generally Accepted Accounting Principles.

We follow high-quality financial reporting practices, ensuring appropriate controls with efficient and effective management of Agency funds. Under the leadership of the Office of the Chief Financial Officer, NASA has once again received an unmodified "clean" audit opinion on its 2024 financial statements for the 14th consecutive year. However, our independent auditors identified one material weakness related to financial controls that were designed appropriately but did not operate effectively. We are implementing procedures to mitigate this weakness. The financial and performance data presented in this report are complete and reliable.

NASA's Major Themes and Strategic Goals

DISCOVER

Expand human knowledge through new scientific discoveries.

EXPLORE

Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization.

INNOVATE

Catalyze economic growth and drive innovation to address national challenges.

ADVANCE

Enhance capabilities and operations to catalyze current and future mission success.

NASA has set a bold vision for the future, one defined by innovation and exploration. NASA pursues that vision through investing in, among other things, sending humanity into the cosmos, performing science across our solar system and the universe, studying the Earth, developing groundbreaking technology, building the next generation of air travel, and educating our Nation's future explorers. In pursuing these missions, we at NASA continue to leverage our partnerships with the private sector and with countries around the world. We also strive to refine our internal processes to ensure our Agency operates efficiently and effectively, making the most of the resources with which we have been entrusted. By maximizing the value of every dollar invested into our mission and our work, NASA continues to lead at the forefront of aeronautics, science, and space exploration.

In FY 2024, NASA broke barriers and made the seemingly impossible, possible. We continued to make giant leaps to explore new cosmic shores, advance space exploration, enhance air travel safety and efficiency through innovation, and safeguard our planet through monitoring and scientific progress.

Through the Artemis campaign, we are leading humanity to return to the Moon for the first time in over half a century. We are going to explore more of the Moon than ever before, for longer periods of time, using a new generation of science and technology. We are going in partnership with a broad coalition of commercial and international partners. We are going, further, to unlock new capabilities in the quest to live, learn, invent, and create on another world. Our lunar exploration through Artemis will enable us to look onward to send the first astronauts to Mars. In FY 2024, we continued to prepare for Artemis II, when we will send four astronauts around the Moon. This mission will pave the way for Artemis III, when we will leave footprints on a part of the Moon no person has visited before: the lunar South pole region. Further, in FY 2024, we made new strides through NASA's Commercial Lunar Payload Services initiative, such as by partnering with Intuitive Machines to achieve the first successful soft landing on the Moon performed by a private company.

In FY 2024, alongside our international partners, we continued to operate the world's orbiting space laboratory, the International Space Station (ISS). Up on the ISS, we carried on our work to unlock new insights in research and innovation while working with our international and commercial partners. NASA will continue to operate the ISS through 2030 while also working to enable a transition to commercially owned and operated platforms in low Earth

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Message from the Administrator (CONTINUED)

orbit. Additionally, in FY 2024, we marked the launches of NASA's SpaceX Crew-8 and SpaceX Crew-9 to the ISS. These launches represent just some of our latest steps to advance our Commercial Crew Program — our program to transport astronauts to and from the ISS in a safe, reliable, and cost-effective way, through partnerships with American private industry.

In FY 2024, NASA built upon our longstanding work to study our Earth as a system. Most of what we know about our changing planet comes from our fleet of more than two dozen satellites and instruments, and over 60 years of climate observations. We share the data from our observations freely and fully with all of humanity — and that helps the world take action, including in the face of climate change. In FY 2024, among other things, we advanced our work on the NASA-Indian Space Research Organisation (ISRO) Synthetic Aperture Radar (NISAR) satellite. This joint mission between NASA and ISRO will be the first radar of its kind in space to systematically map the Earth. NISAR will use two different radar frequencies to measure changes of our planet's surface, and it will deepen our understanding of deforestation, natural hazards, and climate change, among other global vital signs.

The first "A" in NASA is for aeronautics. NASA continues to drive research to improve air travel and make it more sustainable. For example, in January 2024, NASA publicly unveiled the X-59 quiet supersonic aircraft — which will transform the way we travel. For 50 years, the United States (U.S.) and other nations have prohibited commercial supersonic flights over land due to the disturbance caused by sonic booms. The X-59 aircraft seeks to demonstrate the ability to achieve supersonic speeds while generating a much quieter sonic thump, revolutionizing the aviation industry, and paving an approach for commercial flights in the future. Further, in FY 2024, we also advanced progress on the X-66 Sustainable Flight Demonstrator, the first experimental plane specifically focused on helping the U.S. achieve net-zero aviation emissions by 2050.

NASA is dedicated to engaging, inspiring, and attracting future generations of explorers. We also are committed to promoting science, technology, engineering, and mathematics (STEM) engagement to students from diverse backgrounds to pursue an interest and a career in STEM and space industries. To support this goal, NASA launched its 2024-2026 STEM Engagement Strategic Implementation Plan. The plan supports NASA's STEM strategy and outlines systemic efforts that support the coordination and execution of our STEM engagement work. By continuing to engage students, support educators and educational institutions, and support diversity, equity, inclusion, and accessibility in the STEM fields, NASA strives to help support the next generation of pioneers and adventurers. Further, NASA provides access to opportunities for underserved communities, providing crucial and diverse perspectives needed to take us to the Moon, Mars, and beyond.

I am deeply moved by the NASA workforce, whom I call the NASA wizards. They do remarkable things each and every day on behalf of the American people and for the benefit of all humanity. We excel in breaking down barriers that obstruct fairness, ensuring access to opportunities for underserved communities to engage the important and diverse perspectives needed to take us to the Moon, Mars, and beyond.

Our pioneering spirit makes NASA consistently the best place to work in the Federal Government. I am excited for all the giant leaps to come — and to celebrate historic successes for our Nation — as we continue to explore the unknown in air and space, innovate for the benefit of humanity, and inspire the world through discovery.

Sincerely,

Bill Nelson

Spanish Translation Available

Click here or view page 117 to read the Spanish version. Haga clic aquí o vea la página 117 para leer la versión en español.

SECTION 1

Management's Discussion and Analysis

NASA's investment in a breakthrough superalloy developed for the extreme temperatures and harsh conditions of air and spaceflight is on the threshold of paying commercial dividends. The agency is licensing its invention, dubbed "GRX-810," to four American companies, a practice that benefits the United States economy as a return on investment of taxpayer dollars.

GRX-810 is a 3D-printable high-temperature material that will lead to stronger, more durable airplane and spacecraft parts that can withstand more punishment before reaching their breaking point. In this image, the NASA insignia is 3D printed using the GRX-810 superalloy.

PHOTO CREDIT

NASA/Jordan Salkin, May 11, 2024

Welcome to NASA

The FY 2024 AFR presents NASA's audited FY 2024 and FY 2023 financial statements and disclosures; the related independent auditors' opinion; required supplemental information; preliminary, top-level performance results for FY 2024; and other information. The FY 2024 AFR can be found on NASA's website (www.nasa.gov) at Agency Financial Reports.

NASA inspires the world through exploration and discovery, leading scientific and technological advancements that benefit Americans and all humanity. Our efforts in space help to further the national economy, including through innovative commercial partnerships with American businesses. With the increasing threat of climate change, NASA's efforts to study and understand the Earth are of critical global significance. In addition, NASA's partnerships with academic institutions support a robust science, technology, engineering, and mathematics (STEM) workforce and promote diversity, equity, inclusion, and accessibility (DEIA) in the fields of science and technology.

NASA's achievements of tomorrow are being built on a solid foundation of fiscal operations and performance management. Through the rigorous application of controls and standards, we ensure that our programs and projects have the resources they need to continue this forward momentum. We use credible, quality data to drive Agency decision-making and planning. NASA is transparent in these efforts, complying fully with requirements on accountability and performance management.

NASA demonstrates stewardship of its resources and accountability for results through compliance with the *Chief Financial Officers Act of 1990 (CFO Act)*[1] and the *Government Performance and Results Act Modernization Act of 2010 (GPRAMA)*[2]. Financial aspects of the Agency's business operations are accounted for according to U.S. Generally Accepted Accounting Principles (GAAP). GAAP, for Federal entities, are the standards prescribed by the Federal Accounting Standards Advisory Board (FASAB).

In this report, NASA presents both performance and financial results of operations by Strategic Goals as identified in NASA's 2022 Strategic Plan[3]. Highlights of key program activities contributing to each Strategic Goal are provided in the Mission Performance section (starting on page 13). A high-level summary of the linkage between program results and the cost of operations is available in the Statement of Net Cost (SNC), found in the Financial section (starting on page 45). The SNC presents comparative net cost of operations during FY 2023 and FY 2024 by Strategic Goal and for the Agency as a whole. In addition, the Financial Highlights found in the Financial Performance section explain any significant changes in NASA's financial condition from FY 2023 to FY 2024.

Did You Know?

Administrator Bill Nelson and Snoopy view the eclipse just before totality. NASA Glenn Research Center and the Great Lakes Science Center hosted a three-day celestial celebration in downtown Cleveland, OH. This free, outdoor, family-friendly science and arts festival featured free concerts, performances, speakers, and hands-on science activities with community partners. A total solar eclipse swept across a narrow portion of the North American continent from Mexico's Pacific coast to the Atlantic coast of Newfoundland, Canada. A partial solar eclipse was visible across the entire North American continent along with parts of Central America and Europe. *Photo credit — NASA/GRC/Sara Lowthian-Hanna, April 8, 2024*

[1] Chief Financial Officers Act of 1990 (CFO Act) https://govinfo.library.unt.edu/npr/library/misc/cfo.html
[2] Government Performance and Results Act Modernization Act of 2010 (GPRAMA) https://www.congress.gov/111/plaws/publ352/PLAW-111publ352.pdf
[3] NASA's 2022 Strategic Plan https://smd-cms.nasa.gov/wp-content/uploads/2023/04/fy_22_strategic_plan-1.pdf

Achieving our Vision and Mission

The Moon's shadow, or umbra, is pictured covering portions of the Canadian provinces of Quebec and New Brunswick and the American state of Maine in this photograph from the International Space Station as it soared into the solar eclipse from 261 miles above.

PHOTO CREDIT – **NASA Johnson, April 8, 2024**

NASA embraces the challenge of furthering global scientific and technological achievement and expands the realm of what is possible in aeronautics and space exploration. This challenge is our passion and our purpose, and is reflected in the Vision and Mission described in our 2022 Strategic Plan[4].

NASA's long-term success will be largely determined by the strategic decisions and investments we make today, as well as constant adherence to our five guiding Core Values, shown below.

NASA's Core Values

NASA's existing Core Values of Safety, Integrity, Inclusion, Teamwork, and Excellence mandate individual and organizational behavior across the Agency at all levels:

SAFETY

NASA's constant attention to safety is the cornerstone upon which we build mission success.

INTEGRITY

NASA is committed to maintaining an environment of trust, built upon honesty, ethical behavior, respect, and candor.

INCLUSION

NASA is committed to a culture of diversity, inclusion, and equity, where all employees feel welcome, respected, and engaged.

TEAMWORK

NASA's most powerful asset for achieving mission success is a multidisciplinary team of diverse, talented people across all NASA Centers.

EXCELLENCE

To achieve the highest standards in engineering, research, operations, and management in support of mission success, NASA is committed to nurturing an organizational culture in which individuals make full use of their time, talent, and opportunities to pursue excellence in conducting all Agency efforts.

VISION

Exploring the secrets of the universe for the benefit of all.

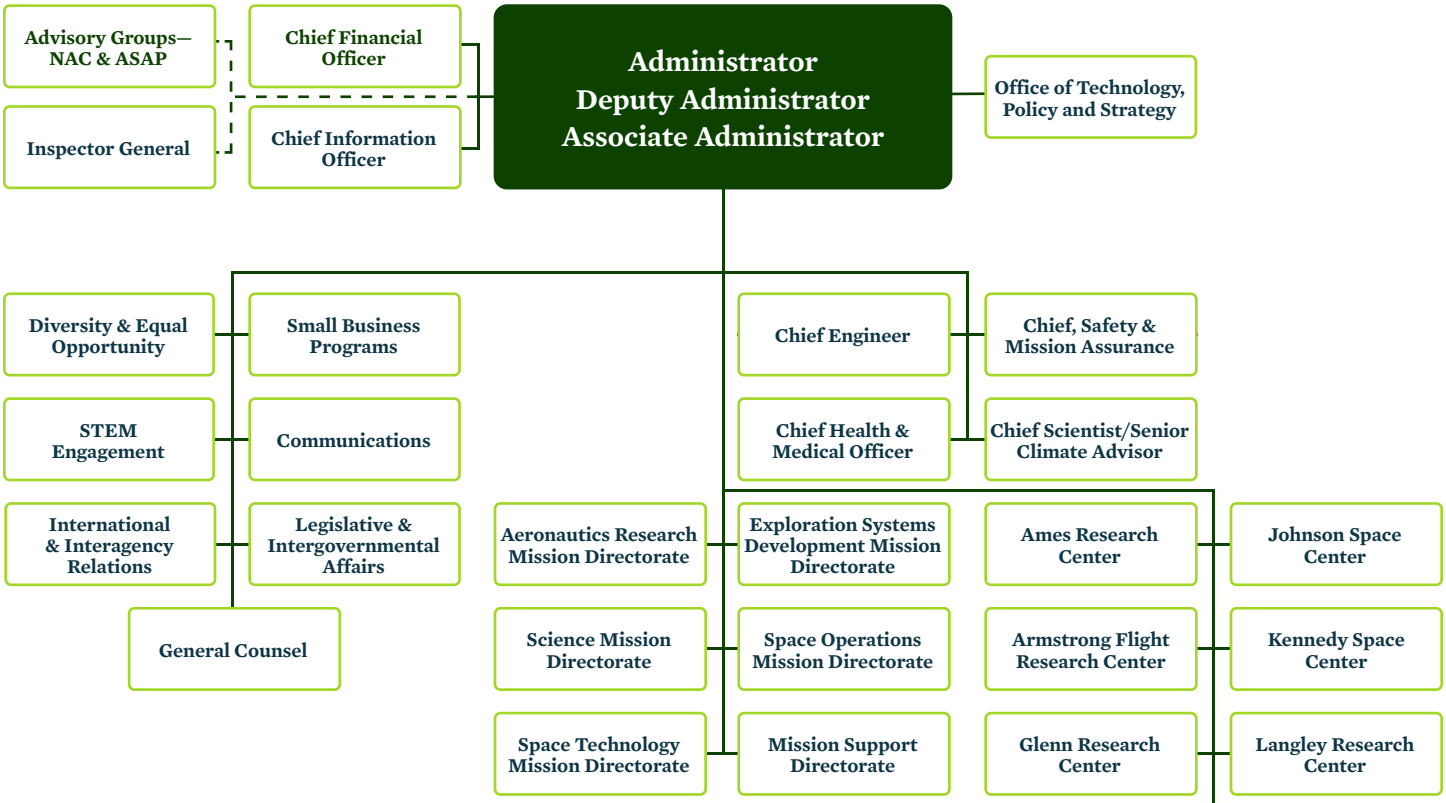
MISSION

NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

[4] NASA produces a Strategic Plan every four years in accordance with GPRAMA. NASA published the *2022 Strategic Plan* on March 28, 2022, concurrent with publication of our *FY 2023 Congressional Justification*. The Strategic Plan is available at https://www.nasa.gov/wp-content/uploads/2018/01/2022_nasa_strategic_plan_0.pdf

Organizational Structure

NASA's Headquarters, located in Washington, DC, provides the overall guidance and direction to the Agency under the leadership of the Administrator. A skilled and diverse group of technical and business professionals conduct day-to-day activities throughout our nine Centers and multiple unique facilities.

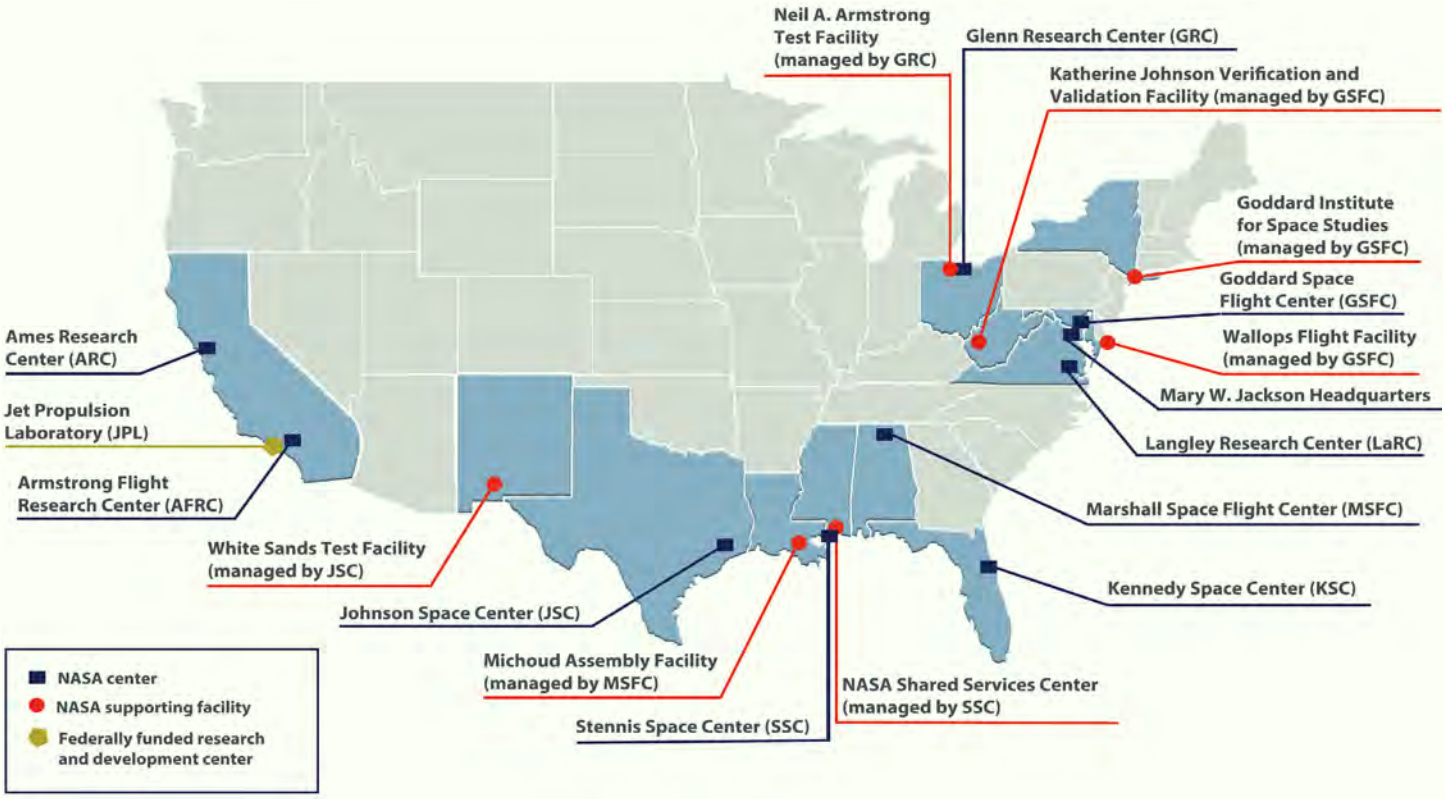


The innovative, responsive, and dynamic nature of NASA's work benefits from our highly leveraged relationships with and between Mission Directorates, Mission Support Offices, and Centers. This organizational model ensures that our leaders can take both a holistic and more narrowly focused approach to programmatic, operational, business, and safety management.[5]

The Administrator and senior officials lead NASA by providing top-level strategy, policy, and direction. NASA's Office of the Chief Financial Officer leads the Agency's budget, financial, and performance management processes. Mission Directorates and Mission Support Offices at Headquarters manage decisions on programmatic investments and guide operations of the Centers.

[5] The Agency's organization structure, roles, and responsibilities are described in NASA Policy Directive 1000.3E, NASA Organization https://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPD&c=1000&s=3E

NASA Centers and Facilities



Testing Capabilities Support Future Mission Success

NASA maintains a wide collection of testing capabilities for aircraft, spacecraft, and exploration vehicles. These capabilities allow us to simulate real environmental stresses, physiological reactions, and other conditions that can affect mission success. Below is a sample of some of our testing capabilities.

Dragonfly team members review the half-scale lander model after it underwent wind tunnel testing at NASA Langley Research Center in Hampton, Virginia. Team members Art Azarbarzin, Juan Cruz, Wayne Dellinger, Zibi Turtle, Chuck Hebert, Ken Hibbard, Bernadine Juliano and Bruce Owens are utilizing unique NASA facilities to shape innovative Titan-bound Rotorcraft.
Photo Credit — Johns Hopkins APL/Ed Whitman, October 23, 2023

Technicians and engineers inside the Payload Hazardous Servicing Facility at NASA's Kennedy Space Center in Florida inspect the Agency's largest planetary mission spacecraft, Europa Clipper, as part of prelaunch processing on Tuesday, May 28, 2024. Slated to launch aboard a SpaceX Falcon Heavy rocket later this year from Launch Complex 39A at Kennedy, Europa Clipper will help determine if conditions exist below the surface Jupiter's fourth largest moon, Europa that could support life.
Photo Credit — NASA/Kim Shiflett

Technicians at NASA's Michoud Assembly Facility in New Orleans, lift a Liquid Oxygen Tank intended for Space Launch System (SLS) into Cell D. This tank will be crucial for the astronauts participating in the Artemis missions. NASA is working to land the first woman and first person of color on the Moon under Artemis. SLS is part of NASA's backbone for deep space exploration, along with Orion and the Gateway in orbit around the Moon. SLS is the only rocket in operation that can send Orion, astronauts, and supplies to the Moon in a single mission. *Photo Credit — NASA/Evan Deroche, February 01, 2024*

NASA by the Numbers

FY 2024 BUDGET

$24.9 Billion

$13.3B (54%)	**Research, Engineering, & Development**
$9.0B (36%)	**Operations**
$1.3B (5%)	**Grants**
$1.3B (5%)	**Facilities and Equipment**

NOTE:
The $24.9 billion includes $4.5 million of funds transferred from General Services Administration (GSA) for Technology Modernization Fund (TMF) investment award.

NASA'S CIVIL SERVICE WORKFORCE BY CENTER

18,475 Employees

3,229 (18%) Johnson Space Center (JSC)	**3,180** (17%) Goddard Space Flight Center (GSFC)
2,345 (13%) Marshall Space Flight Center (MSFC)	**2,104** (11%) Kennedy Space Center (KSC)
1,848 (10%) Langley Research Center (LaRC)	**1,744** (9%) NASA Headquarters (HQ)
1,471 (8%) Glenn Research Center (GRC)	**1,327** (7%) Ames Research Center (ARC)
675 (4%) Other	**552** (3%) Armstrong Flight Research Center (AFRC)

Did You Know?

Landing science on the Moon, demonstrating quiet supersonic aircraft, and launching two new Earth climate satellites, plus a mission to Europa, one of Jupiter's icy moons, are just a FEW of the milestones we have planned for 2024. **(December 27, 2023)**

LEARN MORE →

SCAN ME

Mission Performance

NASA astronaut Kate Rubins uses a hammer to get a drive tube into the ground to collect a pristine soil sample during a nighttime simulated moonwalk in the San Francisco Volcanic Field in Northern Arizona on May 16, 2024. The drive tube is the key piece of hardware for preserving the integrity of samples from the Moon.

PHOTO CREDIT

NASA/Josh Valcarcel

Strategic Plan Framework

NASA's 2022 *Strategic Plan* defines a framework that consists of Strategic Goals aligned to our Mission; Strategic Objectives describing our strategies for achieving the Strategic Goals; and multiyear, outcome-oriented Performance Goals with annual targets and milestones measuring and tracking incremental progress towards achieving the Performance Goals. The Performance Goals and annual targets are consistent with our fiscal year budget request and Agency priorities.

NASA'S PERFORMANCE FRAMEWORK BREAKDOWN				
04	Strategic Goals	12	Strategic Objectives	50	Performance Goals

NASA elevates a subset of performance goals — Agency Priority Goals — for additional attention and external reporting. Agency Priority Goals reflect both NASA and Administration priorities. In the 2022 Strategic Plan, NASA presented four Agency Priority Goals for the FY 2022-2023 performance cycle: Artemis, Climate Change Research, Space Technology Leadership, and James Webb Space Telescope. During FY 2023, we finalized Agency Priority Goals for the FY 2024-2025 cycle, continuing the Artemis, Climate Change Research, and Space Technology Leadership goals with updated milestones.

The Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act) established a framework for agencies to organize evidence building, data management, and data access functions to ensure an integrated connection to data and evidence. The 2022 Strategic Plan included NASA's first-ever Learning Agenda, a roadmap for NASA to systematically plan evidence-building activities that will allow the Agency to make evidence-based policy decisions. The Learning Agenda identifies a set of broad questions NASA sees as urgent to moving our operations and Mission forward over the next four years. As these questions are answered, they will help us work more effectively and efficiently, using evidence to make decisions relating to missions, programs, and investments.

Strategic Goals and Objectives

NASA has identified four Strategic Goals that define our Mission and contribute to maintaining American leadership in space, aeronautics, climate research, and innovation while driving economic growth in the civil space sector. The Strategic Goals, as well as their corresponding Strategic Objectives, are outlined below.

Four major themes, each characterized by a single word, reflect the focus of NASA's four Strategic Goals:

- **DISCOVER** references NASA's enduring purpose of scientific discovery
- **EXPLORE** references NASA's push to expand the boundaries of human presence and exploration in space
- **INNOVATE** references NASA's broad mandate to promote the technologies of tomorrow
- **ADVANCE** references the capabilities, workforce, and facilities that allow NASA to achieve our Mission

DISCOVER

Expand human knowledge through new scientific discoveries.

1.1 Understand the Earth system and its climate.

1.2 Understand the Sun, solar system, and universe.

1.3 Ensure NASA's science data are accessible to all and produce practical benefits to society.

EXPLORE

Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization.

2.1 Explore the surface of the Moon and deep space.

2.2 Develop a human space flight economy enabled by a commercial market.

2.3 Develop capabilities and perform research to safeguard explorers.

2.4 Enhance space access and services.

INNOVATE

Catalyze economic growth and drive innovation to address national challenges.

3.1 Innovate and advance transformational space technologies.

3.2 Drive efficient and sustainable aviation.

ADVANCE

Enhance capabilities and operations to catalyze current and future mission success.

4.1 Attract and develop a talented and diverse workforce.

4.2 Transform mission support capabilities for the next era of aerospace.

4.3 Build the next generation of explorers.

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Strategic Goals and Objectives (CONTINUED)

Below is a table detailing the FY 2024 budget broken out into the Strategic Goal and Strategic Objective level. Both the requested budget and Operating Plan (OP) are included.

STRATEGIC GOAL		STRATEGIC OBJECTIVE		*Millions* Requested FY 2024	*Millions* OP FY 2024
DISCOVER	**Expand human knowledge through new scientific discoveries.**	1.1	Understand the Earth system and its climate.	1,974	1,740
		1.2	Understand the Sun, solar system, and universe.	5,788	5,138
		1.3	Ensure NASA's science data are accessible to all and produce practical benefits to society.	499	447
EXPLORE	**Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization.**	2.1	Explore the surface of the Moon and deep space.	7,971	7,648
		2.2	Develop a human space flight economy enabled by a commercial market.	3,488	3,215
		2.3	Develop capabilities and perform research to safeguard explorers.	255	258
		2.4	Enhance space access and services.	791	747
INNOVATE	**Catalyze economic growth and drive innovation to address national challenges.**	3.1	Innovate and advance transformational space technologies.	1,392	1,100
		3.2	Drive efficient and sustainable aviation.	996	935
ADVANCE	**Enhance capabilities and operations to catalyze current and future mission success.**	4.1	Attract and develop a talented and diverse workforce.	112	102
		4.2	Transform mission support capabilities for the next era of aerospace.	3,711	3,356
		4.3	Build the next generation of explorers.	158	143

Inside the quiet room of the Acoustics Lab, Zach Jones of NASA's Human Health and Performance Directorate speaks with Northrop Grumman's Grant Cooper and Jay Boucher, Leah Honey, and Cooper Burleson of NASA's Commercial Low Earth Orbit Development Program. The quiet room provides a low acoustic noise environment used for audio recording and subjective audio performance testing.

PHOTO CREDIT – **James Blair, April 2, 2024**

Agency Priority Goals

Agency Priority Goals support improvements in near-term outcomes and advance progress toward longer-term, outcome-focused Strategic Objectives. They reflect a limited number of top priorities of Agency leadership and the Administration. Agency Priority Goals are selected for implementation over a two-year cycle.

For the FY 2024-2025 cycle, NASA continued the previous Agency Priority Goals on Artemis, Climate Change Research, and Space Technology Leadership with updated milestones. Below is the goal statement and an overview of each Agency Priority Goal. Action plans and quarterly updates are available at **www.performance.gov/agencies/nasa** and results for FY 2024 will be published in the FY 2026 Volume of Integrated Performance (VIPer).

Climate Change Research

SUPPORTING STRATEGIC GOAL 1

Use the global vantage point of space along with the significant scientific knowledge acquired, to advance our understanding of the Earth System and to curate actionable information to help the Nation understand, mitigate and adapt to climate change. By September 30, 2025, NASA will advance the understanding of the Earth System and its Climate by delivering three new observing systems, meeting development milestones for the Earth System Observatory (ESO), and maturing the interagency U.S. Government Greenhouse Gas Monitoring and Information Center.

The Polar Radiant Energy in the Far-InfraRed Experiment (PREFIRE) mission successfully launched CubeSat #2, the first of two CubeSats, on May 25, 2024 (NZT and ET) from Rocket Lab's Launch Complex 1 in Māhia, New Zealand. The launch of PREFIRE CubeSat #2 represents a key achievement for this Priority Goal, and it was followed by the successful launch of CubeSat #1 on June 4 (ET, June 5 NZT). PREFIRE entered into prime operations on July 1, with a prime mission of 10 months. The PREFIRE mission is designed to document, for the first time, the variability in spectral fluxes from 5-45 microns on hourly to seasonal timescales and reveal fluctuations in Earth's thermostat by capturing the full spectrum of Arctic radiant energy. This will fill a major gap in our knowledge of Arctic energy emissions and the role of far-infrared (FIR) radiation in Arctic warming, sea ice loss, ice sheet melt, and sea level rise. The use of two CubeSats in asynchronous, near-polar orbits will enable the study of how relatively short-lived phenomena like cloud formation, moisture changes, and ice sheet melt affect far-infrared emissions over time.

In May, NASA completed the Earth System Explorers (ESE) Step-1 selection by competitively selecting four proposals to proceed to Step-2 concept studies addressing one or more of the 2017 Decadal Survey Earth System Explorers Targeted Observables. The four proposals selected for concept studies are: The Stratosphere Troposphere Response using Infrared Vertically-Resolved Light Explorer (STRIVE), The Ocean Dynamics and Surface Exchange with the Atmosphere (ODYSEA), Earth Dynamics Geodetic Explorer (EDGE), and The Carbon Investigation (Carbon-I). The ESE Program is designed to accomplish high-quality Earth System science investigations addressing one or more Explorer Targeted Observables identified in the National Academies of Sciences, Engineering, and Medicine (NASEM) 2017 Decadal Survey for Earth Science and Applications from Space. NASA also continued to work with partner agencies, the Environmental Protection Agency (EPA), the National Institute of Standards and Technology (NIST), and the National Oceanic and Atmospheric Administration (NOAA), on the web-based Greenhouse Gas (GHG) Center portal and to prototype the initial demonstration areas. Examples of updates include improvements in data products corresponding to user feedback, as well as revisions in the Center's stakeholder engagement strategy to increase connections with states, cities, land managers, and other Federal agencies, and integrate user feedback to guide internal planning and for sharing with the GHG Measurement, Monitoring and Information System (GHGMMIS) community. Portal advances included improved guidance regarding the Center's hub use, adding state level diagnostics and analysis, as well as an added capability on dataset and data layer intercomparison.

Did You Know?

Rocket Lab's Electron rocket is vertical on the pad Saturday, May 25, 2024, at Launch Complex 1 in Mahia, New Zealand, loaded with the first of two identical 6U CubeSats for NASA's PREFIRE (Polar Radiant Energy in the Far-InfraRed Experiment) mission to help close a gap in our understanding of how much of Earth's heat is lost to space from the Arctic and Antarctica. *Photo credit — Rocket Lab*

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Agency Priority Goals (CONTINUED)

Artemis SUPPORTING STRATEGIC GOAL 2

Advance America's goal to land the first woman and first person of color on the Moon and pursue a sustainable program of exploration, support scientific discovery, and demonstrate capabilities that advance lunar exploration. By September 30, 2025, NASA will Launch Artemis II, the first crewed Artemis mission. Additionally, NASA will demonstrate a key enabling technology by completing an on-orbit propellant transfer test in preparation for Artemis III and it will deliver other key capabilities to enable deep space exploration.

In support of launching Artemis II, the first crewed Artemis mission, the Crew and Service Module (CSM) completed vehicle integrated electromagnetic interference/compatibility (EMI/EMC) testing, replacement and installation of the Environmental Control and Life Support Systems (ECLSS) digital motor controller hardware, began repair procedures for the flight Crew Module Batteries, and completed the CSM integrated vehicle vacuum chamber testing. Exploration Ground Systems (EGS) completed the Booster offline processing. The Artemis II core stage completed final outfitting and was delivered to Kennedy Space Center on July 24, 2024.

Did You Know?

In this aerial view, teams with Exploration Ground Systems (EGS) transport the Agency's powerful SLS (Space Launch System) core stage to the Vehicle Assembly Building at NASA's Kennedy Space Center in Florida on Wednesday, July 24, 2024, after it completed the journey from NASA's Michoud Assembly Facility in New Orleans aboard the Pegasus barge. In the coming months, SLS will be prepared for integration atop the mobile launcher ahead of the Artemis II launch. *Photo credit — NASA/Jamie Peer and Michael Downs*

Space Technology Leadership SUPPORTING STRATEGIC GOAL 3

Ensure American global leadership in space technology innovations through increased partnering with industry, broadening the base of innovation, and demonstrating key lunar surface and deep space technologies. By September 30, 2025, NASA will demonstrate leadership in space technology by: enhancing partnerships with industry through delivery or completion of milestones for at least three Tipping Point opportunities, and at least three critical small business technology transitions to develop capabilities that support NASA and commercial needs, advancing at least two new technologies that will be demonstrated on the lunar surface or in lunar orbit, and completing at least four major milestones for projects that increase the Nation's capabilities in deep space.

NASA will lay the groundwork for the aerospace breakthroughs of tomorrow through demonstration of new technologies on the lunar surface and in deep space. Achievement will require working closely with stakeholders, enlisting partnerships, utilizing evidence-based decision making, and promoting diversity, equity, inclusion, and accessibility.

NASA completed the FY 2024 Quarter 3 (Q3) milestone when the three Cooperative Autonomous Distributed Robotic Exploration (CADRE) rovers were completed and put in storage on February 15, 2024, for delivery to the Commercial Lunar Payload Services (CLPS) vendor for integration to their lander.

Did You Know?

Engineers prepare three small Moon-bound rovers for a drive test in a clean room at the Agency's Jet Propulsion Laboratory in Southern California in December 2023. Along with a base station that will be mounted on a lunar lander, the rovers make up the CADRE (Cooperative Autonomous Distributed Robotic Exploration) technology demonstration. This image was taken during a test of the rovers' ability to drive together as a team autonomously, without explicit commands from engineers. *Photo credit — NASA/JPL-Caltech*

Strategic Goals and Highlights

A SpaceX Falcon Heavy rocket with the Psyche spacecraft onboard is launched from Launch Complex 39A, Friday, Oct. 13, 2023, at NASA's Kennedy Space Center in Florida. NASA's Psyche spacecraft will travel to a metal-rich asteroid by the same name orbiting the Sun between Mars and Jupiter to study its' composition. The spacecraft also carries the Agency's Deep Space Optical Communications technology demonstration, which will test laser communications beyond the Moon.

PHOTO CREDIT

NASA/Aubrey Gemignani

Assessment Approach

Every Strategic Objective is supported by at least one Performance Goal. NASA's Performance Goals consist of an outcome-based statement, a measurement approach that describes how the Performance Goal will be measured throughout its lifespan, and an annual target consistent with the budget. To the right is an example of a Performance Goal supporting Strategic Objective 2.4: Enhance space access and services.

For NASA's 50 Performance Goals, we indicate the interim progress, based on the FY 2024 targets, by assigning a color rating of Green (complete or on target to complete), Yellow (below target), or Red (significantly below target/at risk). Internal success criteria defined during the planning phase establish the thresholds for a Yellow or Red rating. A Grey rating indicates that the Performance Goal could not be assessed in time for the AFR publication, but a final rating will be provided in the *FY 2026 Volume of Integrated Performance (VIPer)*.[6]

EXAMPLE

MEASUREMENTS STATEMENT:
Complete Launch Services Program (LSP) commercial non-crewed launch services objectives for NASA-Managed science, exploration, U.S. Government, and Government-sponsored missions.

MEASUREMENTS APPROACH:
Launch and complete launch services objectives for Psyche, PACE, and GOES-U

TARGET FOR FY 2024:
100 percent of launch services objectives completed

ANTICIPATED PERCENT USING AVAILABLE DATA:
100 percent of launch services objectives completed

ANTICIPATED RATING FY 2024:
Green

GREEN
Complete or On Target to Complete

NASA has completed or is on target to complete the Performance Goal/ Agency Priority Goal as planned.

YELLOW
Below Target

NASA is below target or behind schedule for the fiscal year but currently expects the work being measured to be completed as planned by the end of the Performance Goal's time frame.

RED
Significantly Below Target/At Risk

NASA is significantly below target or behind schedule for the fiscal year. The work being measured is at risk of not being completed within the Performance Goal's time frame.

GREY
Unrated

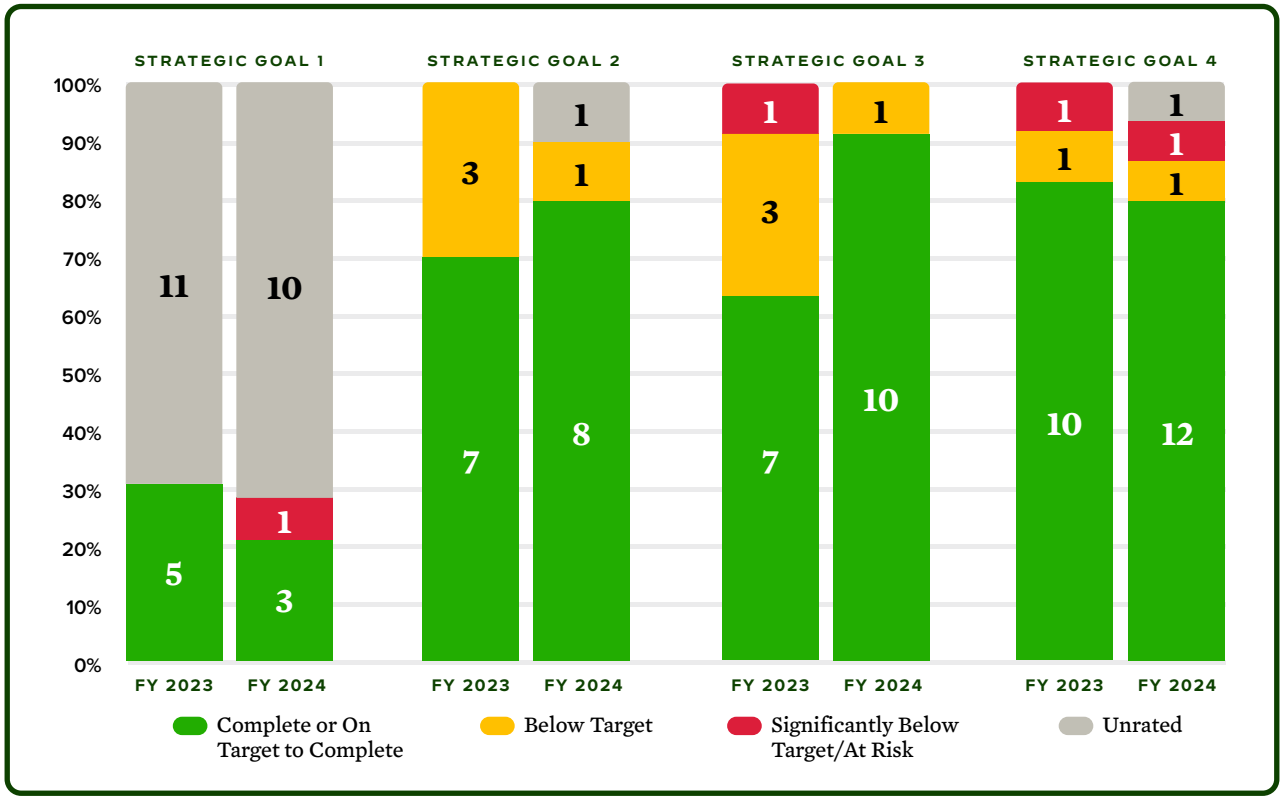
Information needed to evaluate performance was not available in time for AFR publication. A final rating will be provided in the FY 2026 VIPer.

[6] NASA's VIPer document is comprised of the Annual Performance Report of fiscal year performance results and the Agency Performance Plan, which lists the Performance Goals, annual targets consistent with the budget request, and adjusted targets consistent with the previous budget year's appropriations. The FY 2026 VIPer will publish concurrent with the FY 2026 President's Budget Request and can be found at nasa.gov/performance.

FY 2024 Performance Assessment

Throughout FY 2024, program officials assessed progress towards achieving NASA's 50 Performance Goals and determined whether the goals' annual targets were met and assigned one of the color ratings described above. The Performance Improvement Officer (PIO) confirmed the ratings.

The following graph shows the summary of preliminary FY 2024 ratings summarized by Strategic Goal compared to the FY 2023 ratings that were published in the FY 2025 VIPer. For each Strategic Goal, the graph shows how the Performance Goals were rated at the time of publication. The FY 2026 VIPer, which will be published concurrently with the FY 2026 President's Budget Request at https://www.nasa.gov/ocfo/performance-report, will provide the final performance results for each Performance Goal.



Twelve Performance Goals supporting Strategic Goals remained unrated at the time of the FY 2024 AFR's publication. Ten of those are awaiting ratings from the Science Advisory Committees, which recommends ratings (based on relevant published, peer-reviewed science findings and other criteria) for NASA's science-focused Performance Goals for Strategic Goal 1 at their Fall meetings. The Science Mission Directorate considers those recommendations when assigning the final fiscal year rating. Performance Goal 2.2.3 focuses on providing operational resources to enable the closure of capability gaps in support of deep space exploration and remains unrated due to milestones being initiated but not yet fully operational. Performance Goal 4.2.8 which focuses on increasing facility reliability for current and future mission needs through investments in preventative maintenance that reduce unscheduled maintenance is unrated due to a lag of data availability immediately after the quarter.

The table above shows a snapshot of the comparison of ratings for Q3 in FY 2023 and 2024, but it is worth noting that for both Strategic Goals 1 and 4, the total number of Performance Goals differs. For Strategic Goal 1 focusing on science, two Performance Goals were removed for FY 2024. One Performance Goal, formerly an Agency Priority Goal, was sunsetted when the James Webb Space Telescope became operational and no longer in development. Two Performance

FY 2024 Performance Assessment (CONTINUED)

Goals in Strategic Objective 1.1 were combined to create the 1.1.3 Agency Priority Goal detailing progress in Earth science. For Strategic Goal 4, three Performance Goals were added to FY 2024. Two Performance Goals were added in pursuit of NASA's goal toward a more inclusive workplace aligned with DEIA efforts. An additional Performance Goal was also added tracking NASA's progress towards saving time with data automation and increasing efficiency, reflecting a more automated world.

Two of NASA's Performance Goals were rated Red in FY 2024. Performance Goal 1.2.9 focuses on achieving critical milestones of Science Mission Directorate's heliophysics, planetary science, and astrophysics major projects. The Red rating is due to delays in several mission milestones. For the Dragonfly project, incorporating the new three-bladed rotor design into the overall lander is resulting in a delay to the mission Critical Design Review (CDR) and associated slips to the instrument CDRs, which are now scheduled for early FY 2025. The Interstellar Mapping and Acceleration Probe (IMAP) project's delivery of at least one instrument is now expected to be delayed beyond FY 2024. Assembly and testing of the Payloads and Research Investigations on the Surface of the Moon (PRISM)-1b will not be achieved in FY 2024, as completion of the Farside Seismic Suite has been delayed to FY 2025. Although multiple milestones are at risk, the other six are on track or complete including the Europa Clipper pre-ship review and the delivery of the Nancy Grace Roman Space Telescope's spacecraft to Outer Barrel Assembly.

Performance Goal 4.1.2, which focuses on decreasing the percentage of negative rating on NASA Federal Employee Viewpoint Survey (FEVS) DEIA index, was also rated Red. The goal to achieve a Green rating was to keep the index rating at 88 percent or above, and the FY 2024 data has shown an index rating of 84.1 percent.

Did You Know?

The New York-based artist team Geraluz, left, and WERC, right, and their son Amaru Alvarez, 5, pose for picture with the mural "To the Moon, and Back" by the artist team that was created as part of the reimagined NASA Art Program, Tuesday, September 24, 2024, at 350 Hudson Street in New York City. The murals use geometrical patterns to invite deeper reflection on the exploration, creativity, and connection with the cosmos. *Photo credit — Joel Kowsky*

01 STRATEGIC GOAL I. DISCOVER
Expand human knowledge through new scientific discoveries.

Strategic Goal 1 is supported by 14 Performance Goals. Of these, three were rated Green, one was rated Red, and 10 were unrated at the time of publication.

Overview

NASA's enduring purpose is scientific discovery and exploration for the benefit of the United States and all of humanity. NASA seeks to discover the secrets of the universe, search for life elsewhere, and protect and improve life on Earth and in space. Finding answers to these profound science questions requires support for national priorities in science and exploration, enhancing new opportunities for cross-disciplinary science, and expanding the societal benefits of our science programs.

NASA is undertaking new work that builds on our past successes in individual disciplines to enable a more collaborative environment at the forefront of science and science applications. We have an open data policy that makes our science data available to all. Current data systems are focused on disseminating data to the science community to support research in five science disciplines: Earth Science, Astrophysics, Planetary Science, Heliophysics, and Biological and Physical Sciences.

Highlights

Understand the Earth system and its climate

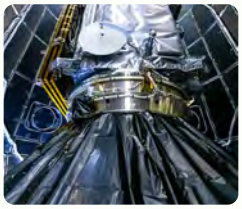
As climate change makes its impact felt across the United States and the globe, NASA is rising to meet the challenge. Central to NASA's achievement of its climate goals is the publication of the 2024-2034 Earth Science to Action Strategy, which documents the Strategic Objectives and results of the Earth Science Division (ESD). The Earth Science to Action Strategy aims to holistically observe, monitor, and understand the Earth system, as well as deliver trusted information to drive Earth resiliency activities. By launching the Plankton, Aerosol, Cloud, Ocean Ecosystem (PACE) mission in February 2024, NASA met all planned elements of the 2022-2023 Agency Priority Goal related to using the local vantage point of space to advance the understanding of the Earth system, its processes, and changing climate.

In May 2024 and June 2024, NASA also launched the first Polar Radiant Energy in the Far-InfraRed Experiment (PREFIRE) mission CubeSats looking for clues about sea ice loss, ice-sheet melting, and a warming Arctic. Both launches will ensure NASA is advancing our understanding of the Earth system and to curate actionable information to help the Nation understand, mitigate, and adapt to climate change.

Understanding the Sun, Solar System, and Universe

In October 2023, NASA launched Psyche, designed to visit a metal-rich asteroid that contains planetesimal, a building block of an early planet. The Mars Perseverance rover continues to seek signs of ancient life and has collected samples of rock and regolith for an eventual return to Earth. NASA continues development of Interstellar Mapping and Acceleration Probe, Europa Clipper, the Nancy Grace Roman Space Telescope (Roman), and Near-Earth Object (NEO) Surveyor.

Did You Know?



NASA and SpaceX technicians safely encapsulate NASA's PACE (Plankton, Aerosol, Cloud, ocean Ecosystem) spacecraft in SpaceX's Falcon 9 payload fairings on Tuesday, Jan. 30, 2024, at the Astrotech Space Operations Facility near the Agency's Kennedy Space Center in Florida. The fairing halves protect the spacecraft from aerodynamic pressure and heating during the ascent phase of launch. *Photo credit — NASA Goddard/Katie Mellos*

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STRATEGIC GOAL II. EXPLORE

02 Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization.

Strategic Goal 2 is supported by 10 Performance Goals. Of these, eight were rated Green, one was rated Yellow, and one was unrated at the time of publication.

Overview

NASA's rich history of human spaceflight provides the foundation for today's exploration vision: to maintain U.S. leadership in space, establish a lasting presence on and around the Moon, and pave the way forward to Mars and beyond. This strategy begins with the Artemis, a series of missions that will land the first woman and the first person of color on the lunar surface, marking the first time in nearly 50 years that humans have landed on the Moon.

We are building on more than two decades of operations in low Earth orbit (LEO) aboard the International Space Station (ISS) and leveraging our wealth of experience with groundbreaking exploration. This era of human exploration will require innovative technologies and systems — some of which have not yet been demonstrated — to explore new and more challenging locations, like the lunar South Pole.

Developing these capabilities will spur advancements in critical fields like medicine, energy, materials science, manufacturing, and climate science. Artemis mission success will require the continuation of existing partnerships and the development of new ones. Working with commercial partners enables NASA to focus its attention forward, while creating jobs and stimulating the economy.

Highlights

Exploring the Surface of the Moon and Deep Space

NASA's Artemis campaign has made progress on significant milestones over the last year. Earlier this year, the Artemis II Space Launch System (SLS) Booster Segments were delivered to KSC, and the Artemis II Crew Module (CM)/Service Module (SM) Vacuum Performance Testing completed in July 2024. Progress was made on capabilities for Artemis III including the April 2024 Preliminary Design Review (PDR)-informed Sync Review kickoff for the Exploration Extravehicular Activity Services (xEVAS) project, and the closure board met in August 2024. The Artemis III Booster Aft Skirts were ready for Acceptance Checkout (ACO) in July 2024. Multiple milestones have shifted or been delayed but continue to be in work, including Artemis III Integrated Sync Review #2 Kickoff, and the Gateway Habitation and Logistics Outpost (HALO) Habitable Element delivery.

Developing a Human Spaceflight Economy Enabled by a Commercial Market

NASA continues to maximize its use of the ISS and its capabilities to aid in the development of U.S. industry's ability to provide the necessary platforms and services in LEO. SpaceX Crew-8 successfully launched March 2024, where crew members conducted new scientific research to prepare for human exploration beyond LEO and benefit humanity on Earth. In FY 2024, NASA continued to conduct and sponsor in-space experiments and production for both in-house and industry development. These included Compartment Cartilage Tissue Construct (Tangolab Mission-35) investigating biological materials that mimic Deoxyribonucleic acid (DNA) to develop a scaffold for regenerating cartilage tissues and tests the effect of a specific Ribonucleic acid (RNA) on cartilage growth in space, and a study on Cancer in Low Earth Orbit - 2 (Ax-3) on the Axiom-3 (Ax-3) private astronaut mission (PAM) expanding on previous research to develop models that predict potential development of cancers. To compliment a growing commercial sector, the increased use of PAMs on commercial destinations aboard the ISS shows promise as a major step towards unfettered commercial research and services in space.

Did You Know?

The crew of NASA's SpaceX Crew-8 mission to the International Space Station poses for a photo during their Crew Equipment Interface Test at NASA's Kennedy Space Center in Florida. The goal of the training was to rehearse launch day activities and get a close look at the spacecraft that will take them to the International Space Station. *Photo credit — SpaceX, January 12, 2024*

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03 STRATEGIC GOAL III. INNOVATE
Catalyze economic growth and drive innovation to address national challenges.

Strategic Goal 3 is supported by 11 Performance Goals. Of these, 10 were rated Green and one was rated Yellow at the time of publication.

Overview

Originally tied to advancing U.S. leadership in aeronautics, communications satellites, and Earth remote sensing, NASA's mandate is broader today. NASA addresses gathering climate change data, driving American innovation through aerospace research and development, developing commercial and human space launch, transportation, and exploration capabilities, understanding cosmic phenomena as wide-ranging as space weather, asteroids, and exoplanets, supplying technological solutions that could also apply to terrestrial problems, and improving the Nation's innovation capacity.

Today, NASA invests in a broad portfolio of both space technology and aeronautics research, development, and demonstration. Where possible, the Agency leverages public-private partnerships, reducing development costs, accelerating infusion of new technologies, meeting national needs, and potentially enabling new markets. Each year, NASA creates over 1,000 new technologies, and the Agency works diligently to ensure that the American people receive maximum benefit from those advancements through patent licenses, software usage agreements, and other commercialization efforts.

Highlights

Innovating and Advancing Transformational Space Technologies

NASA investments continue to serve as a catalyst for the new technology required for the varied mission architecture needs of multiple stakeholders. The Agency has made significant progress by developing and delivering new technologies and capabilities. Examples include in November 2023, the Deep Space Optical Communications (DSOC) achieved first light by sending and receiving optical data from far beyond the Moon, multiple Cryogenic Fluid Management (CFM) maturity and design reviews at both Lockheed Martin and United Launch Alliance; and numerous significant technology transitions and infusions.

Driving Efficient and Sustainable Aviation

In FY 2024, the Low Boom Flight Demonstration (LBFD) X-59 completed its flight readiness review in March, preparing to demonstrate quieter sonic "thumps" during supersonic flight over land. The Electrified Powertrain Flight Demonstrations (EPFD) completed project Integrated Baseline Reviews at both partner organizations earlier in FY 2024, helping to enable electric aircraft propulsion. Furthermore, the Sustainable Flight Demonstration (SFD) project completed a system requirements review (SRR) in January 2024, which will mature innovative aeronautical designs into the future of commercial aircraft.

Did You Know?

Capable of receiving both radio frequency and optical signals, the DSN's hybrid antenna has tracked and decoded the downlink laser from DSOC, aboard NASA's Psyche mission. An experimental antenna has received both radio frequency and near-infrared laser signals from NASA's Psyche spacecraft as it travels through deep space. This shows it's possible for the giant dish antennas of NASA's Deep Space Network (DSN), which communicate with spacecraft via radio waves, to be retrofitted for optical, or laser, communications. By packing more data into transmissions, optical communication will enable new space exploration capabilities while supporting the DSN as demand on the network grows. *Photo credit — NASA/JPL-Caltech*

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04 STRATEGIC GOAL IV. ADVANCE
Enhance capabilities and operations to catalyze current and future mission success.

Strategic Goal 4 is supported by 15 Performance Goals. Of these, 12 were rated Green, one was rated Yellow, one was rated Red, and one was unrated at the time of publication.

Overview

NASA's complex and bold missions require modern, adaptable technical and professional support capabilities to enable mission readiness, resilience, and our continued leadership in science, exploration, discovery, and innovation. We pursue the goal of enhancing capabilities and operations to ensure that NASA has the right people, infrastructure, technology, and technical excellence and oversight needed to advance the Agency into the Artemis era and beyond.

Highlights

Attracting and Developing a Talented and Diverse Workforce

While NASA employees continue to rate it the best large Federal agency to work for, streamlining the hiring process to bring in top talent remains a priority for the Agency. Time to hire, for all hires excluding Senior Executive Service (SES) and Pathways, was reduced from 80 days in Q1 to 73 days in Q3 of FY 2024, and we are currently taking steps to gain efficiency through multiple initiatives, such as using existing certificates to reduce the time and resources required to acquire new hires.

In FY 2024, NASA began a six-phase multi-year Agencywide Full Workforce Barrier Analysis. The barrier analysis will address NASA's overall workforce across the Agency and will examine four key identities: 1) race/ethnicity, 2) gender, 3) disability status, 4) LGBTQIA+ and include a component addressing NASA's leadership pipeline. Thus far the Agency has completed two phases including personnel data analysis and shareholder interviewers, with a quantitative survey in phase three forthcoming.

Building the Next Generation of Explorers

NASA's STEM FY 2023-2024 Learning Agenda poses questions that will prepare the Agency for the future of its engagement initiatives. The Agency is making progress on two evaluations, including assessment of NASA internship outcomes regarding NASA/industry employment and Phase 2 of the K-12 Student Outcome Study.

Did You Know?

Members of the 2024 cohort of High School Aerospace Scholars work together at Johnson Space Center during the Engineering Design Challenge focusing on exercise in space on July 29, 2024. *Photo credit — NASA/Bill Stafford*

Financial Performance

Crews transport NOAA's (National Oceanic and Atmospheric Administration) Geostationary Operational Environmental Satellite (GOES-U) from the Astrotech Space Operations facility to the SpaceX hangar at Launch Complex 39A at NASA's Kennedy Space Center in Florida beginning on Friday, June 14, 2024, with the operation finishing early Saturday, June 15, 2024. The fourth and final weather-observing and environmental monitoring satellite in NOAA's GOES-R Series will assist meteorologists in providing advanced weather forecasting and warning capabilities.

PHOTO CREDIT

NASA/Ben Smegelsky

Financial Highlights

Overview of Financial Position

NASA's Balance Sheet provides a comparable snapshot of the Agency's financial position as of September 30, 2024 and September 30, 2023. It displays amounts in three primary categories.

Assets

(+) the current and future economic benefits owned or available for use by NASA.

Liabilities

(—) the debts owed by NASA but not yet paid.

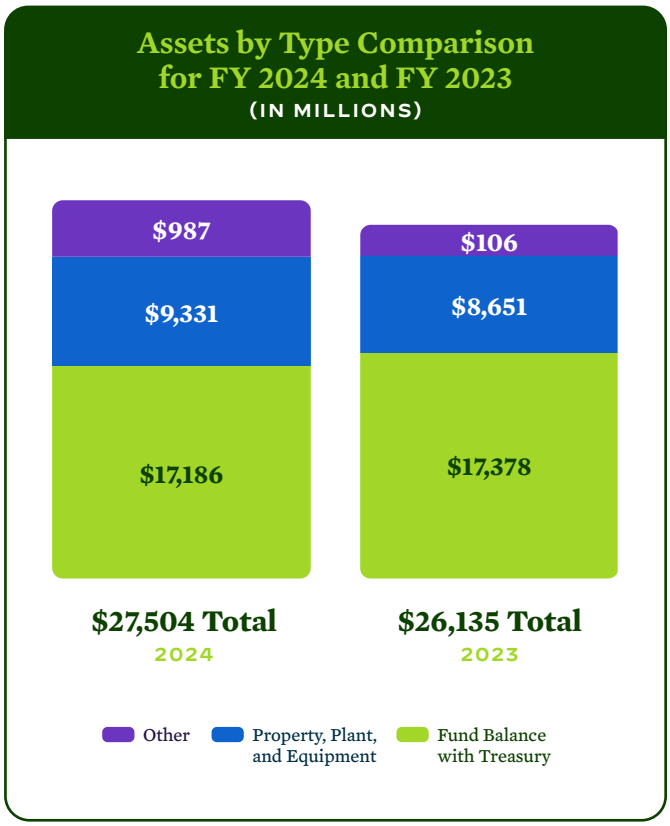
Net Position

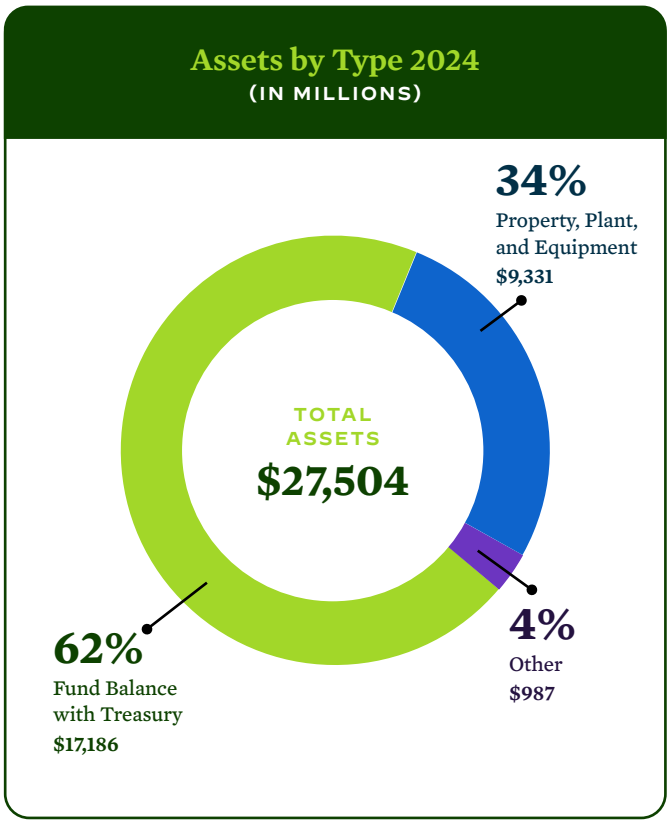
(=) the activity between revenue and other financing sources, and costs incurred since inception.

Balance Sheet Components FY 2024 and FY 2023

(IN MILLIONS)

Total Assets were the largest of the three categories (Total Liabilities plus Total Net Position will always equal Total Assets). NASA's total asset balance, as of September 30, 2024, was $27.5 billion, five percent higher than FY 2023.





The Agency's Fund Balance with Treasury (FBWT) and its Property, Plant, and Equipment (PP&E) were the two primary components of the total assets balance.

FBWT, which represents NASA's cash balance with the U.S. Department of the Treasury, was the largest asset at $17 billion, accounting for 62 percent of total assets. This cash balance includes Congressional appropriated funds available for NASA's mission operations (for example, employee labor or purchased goods or services from contractors) that have not yet been paid.

NASA's PP&E had a net book value of $9.3 billion as of September 30, 2024, 34 percent of total assets or an eight percent increase as compared to FY 2023. The increase is primarily attributed to the fabrication of essential assets supporting Artemis, Gateway, and the International Space Station (ISS) program requirements, ongoing revitalization, construction of facilities, and the active production work on Mobile Launcher-2.

The Other category represents Accounts Receivable, Advances and Prepayments, and Investments as of September 30, 2024. This category increased by $881 million. This increase is due to the implementation of a new Agency business process for lease accounting mandated by the Statement of Federal Financial Accounting Standards (SFFAS) 54, *Leases*, which requires additional financial reporting for leases.

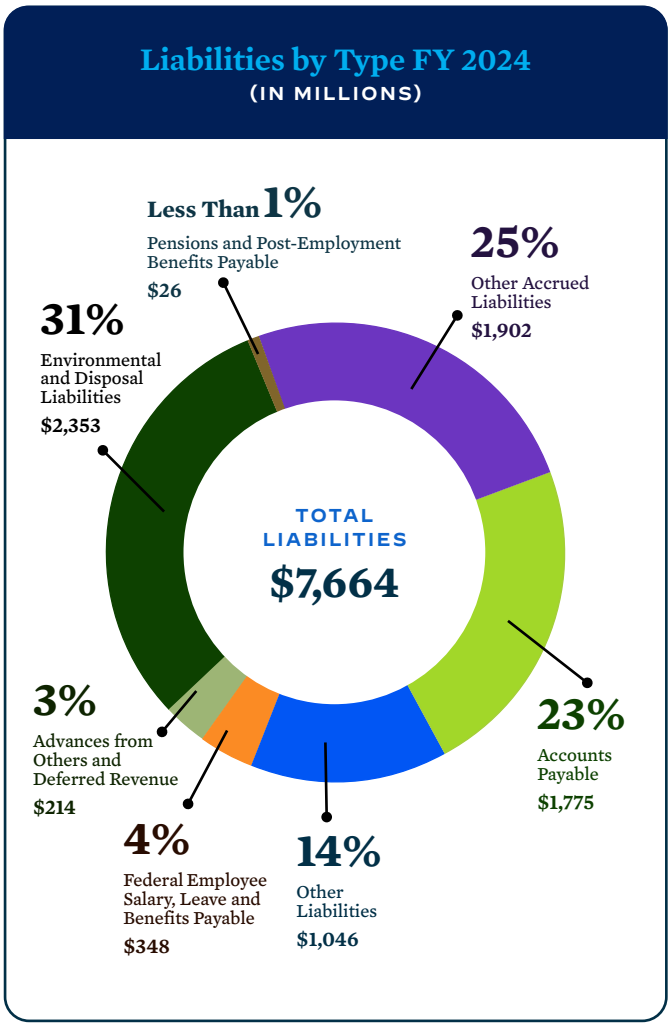
Total Liabilities, as of September 30, 2024, were $7.7 billion, 14 percent higher than FY 2023. Environmental and Disposal Liabilities, Accounts Payable, and Other Accrued Liabilities represent the majority of NASA's liabilities.

Environmental and Disposal Liabilities of $2.4 billion represent the estimated cost to clean up both known and projected environmental hazards. This category had an increase of $48 million or two percent.

Accounts Payable, which represents amounts owed to other entities, was $1.8 billion, an increase of $9 million, or one percent, compared to FY 2023. The increase is attributed to the timing of invoices being received, approved, and disbursed.

Other Accrued Liabilities with public entities were $1.9 billion, an increase of $109 million, or six percent, compared to FY 2023. Other Liabilities, which represents various amounts including Unearned Lease Revenue and Contingent Liabilities, were $1 billion, an increase of $744 million. The increase is primarily due to the implementation of SFFAS 54 in FY 2024 which requires additional financial reporting for leases.

Federal Employee Salary, Leave and Benefits Payable are Accrued Funded Payroll and Leave and Unfunded Leave.



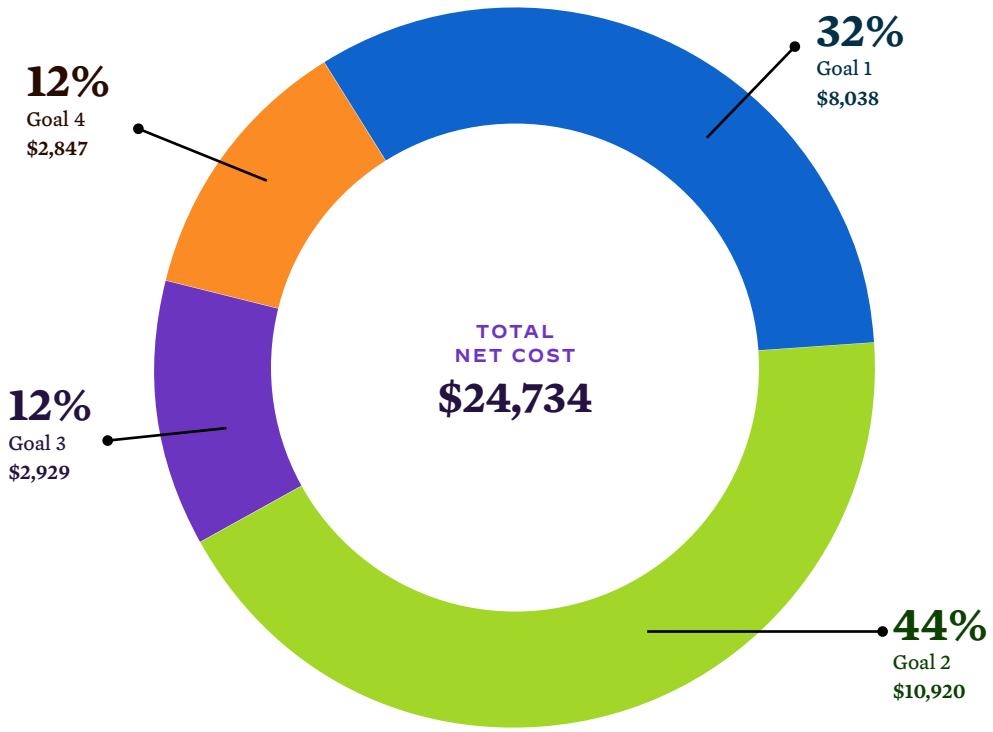
Total Net Position comprised of Unexpended Appropriations and Cumulative Results of Operations ("net worth"), increased by $424 million, two percent higher than FY 2023. Unexpended Appropriations, at $13 billion, decreased by $176 million or one percent from FY 2023. Cumulative Results of Operations, at $6.7 billion, increased by $600 million or 10 percent from FY 2023.

Results of Operations

Net Cost of Operations

The Statement of Net Cost presents NASA's Net Cost of Operations by strategic goal. NASA's strategic goals are described in the Mission Performance section of the Agency Financial Report (page 13). The Net Cost of Operations represents gross cost incurred less revenue earned for work performed for other government organizations or private entities. As of September 30, 2024, NASA's gross costs were $26.6 billion, an increase of $318 million from FY 2023. Earned Revenue from other governmental organizations or private entities was $1.8 billion, a $200 million increase from FY 2023. This leaves NASA with a FY 2024 net cost of $24.7 billion, an increase of $118 million from FY 2023.

Net Cost of Operations By Strategic Goal for FY 2024
(IN MILLIONS)



STRATEGIC GOAL 1
Expand human knowledge through new scientific discoveries.

STRATEGIC GOAL 2
Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization.

STRATEGIC GOAL 3
Catalyze economic growth and drive innovation to address national challenges.

STRATEGIC GOAL 4
Enhance capabilities and operations to catalyze current and future mission success.

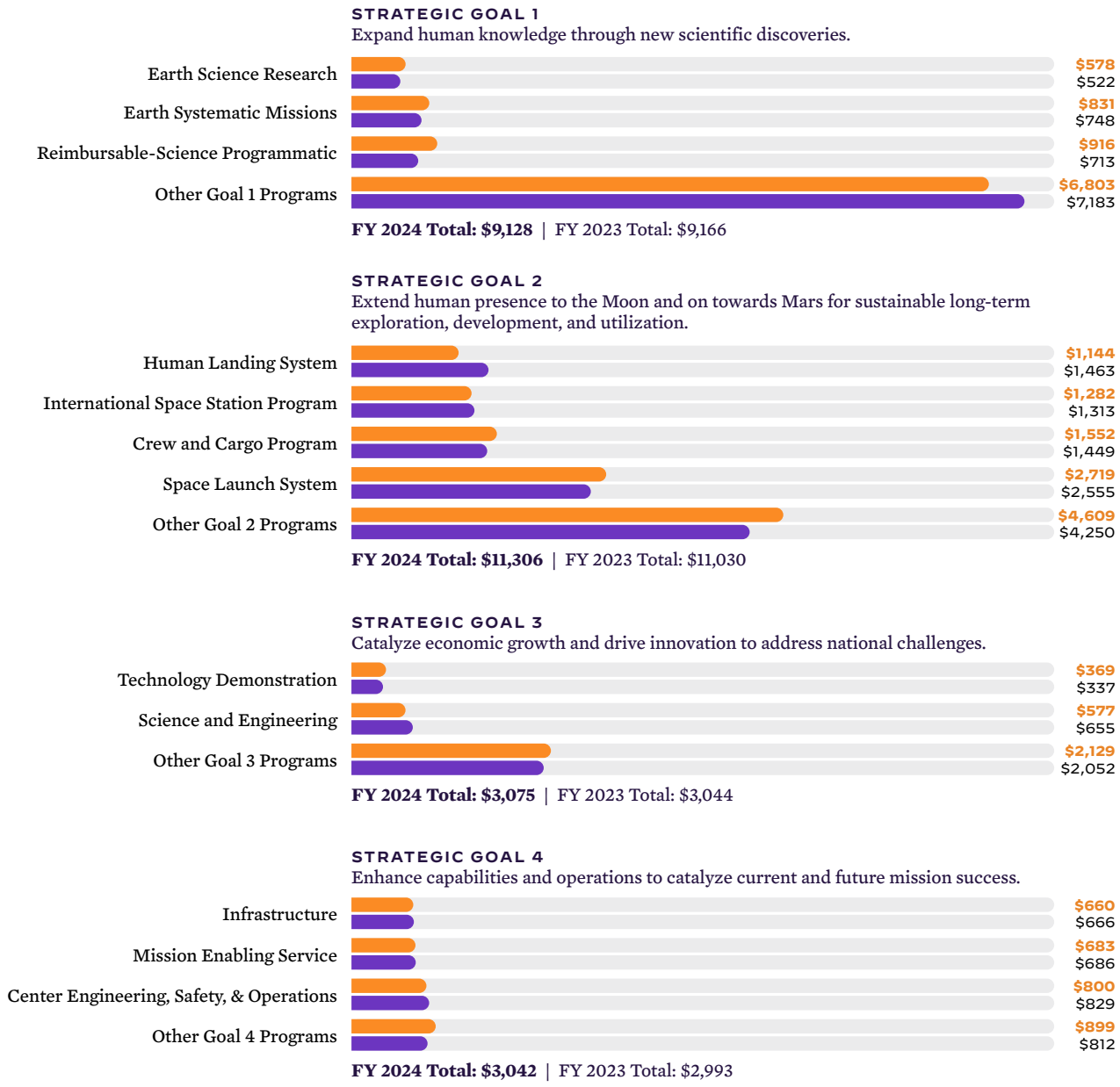
Results of Operations (CONTINUED)

Gross Cost of Operations

NASA's day-to-day operations are performed at NASA and contractor facilities around the globe and in space. Gross cost of operations is presented in the following table, detailing select NASA programs that support each strategic goal. Gross cost of operations include expenses incurred for NASA's research and development (R&D) investments that are expected to maintain or increase national economic productive capacity or yield other future benefits. Top programs by strategic goal in relation to gross cost have remained consistent year to year.

Comparative Gross Cost of Operations By Strategic Goal FY 2024 and FY 2023
(IN MILLIONS)

FY 2024 Total: $26,551
FY 2023 Total: $26,233
2024 2023



Sources of Funding

The Statement of Budgetary Resources provides information on the budgetary funding available to NASA. NASA's resources consist primarily of funds received from two sources:

Appropriations from Congress for the current fiscal year and unobligated balances from prior fiscal years.

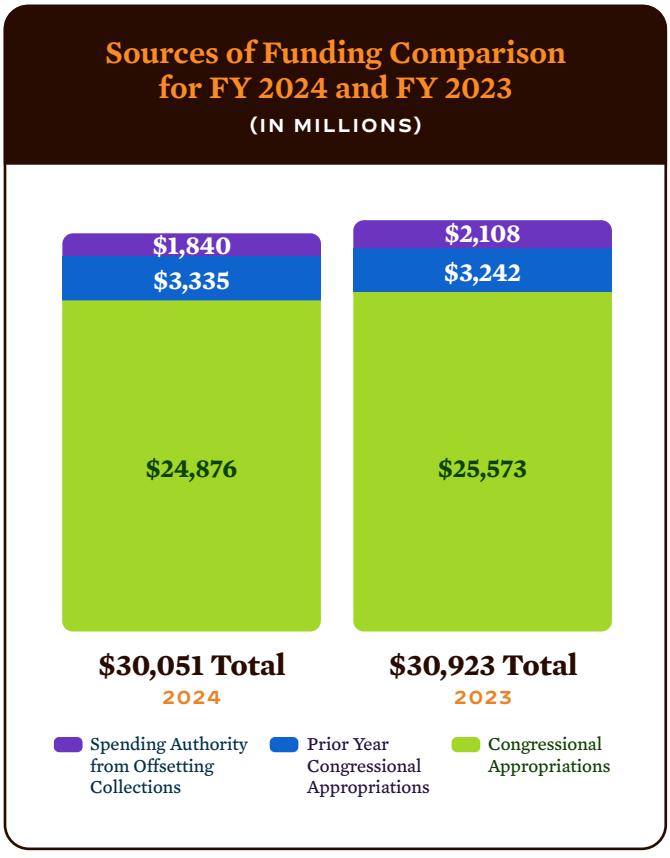
Revenue from agreements with other governmental organizations or private entities.

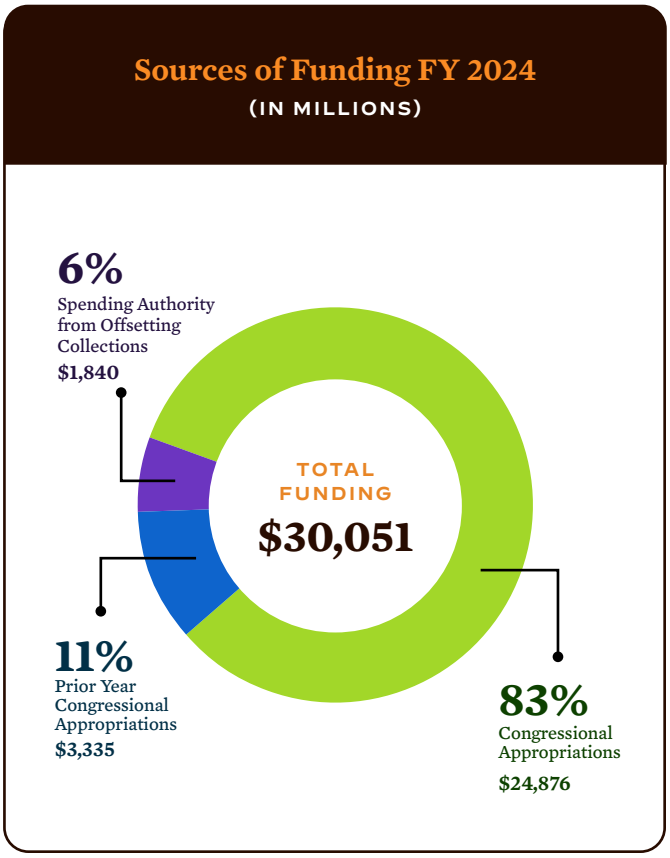
In FY 2024, the total funds available for use by the Agency was $30 billion — a decrease of $872 million or three percent, compared to FY 2023.

The $24.9 billion in appropriations from Congress for FY 2024 accounted for 83 percent of the total funds available for use by the Agency. Congress designates the funding available to the Agency for a specific NASA mission. Appropriations that remained available from prior years totaled $3.3 billion, 11 percent of NASA's available resources in FY 2024.

NASA's FY 2024 funding also included $1.8 billion spending authority from offsetting collections, primarily comprised of revenue earned and collected from agreements, representing six percent of NASA's available resources in FY 2024. Revenue is earned under NASA's authority to provide goods, services, or use of facilities to other entities on a reimbursable basis.

In FY 2024, NASA obligated $27 billion of the $30 billion available for Agency programmatic and institutional objectives. An obligation binds the Government to make an expenditure (or outlay) of funds and reflects a reservation of budget authority that will be used to pay for a contract, labor, or other items. The remaining $3 billion may be obligated until the funds' periods of availability expire.





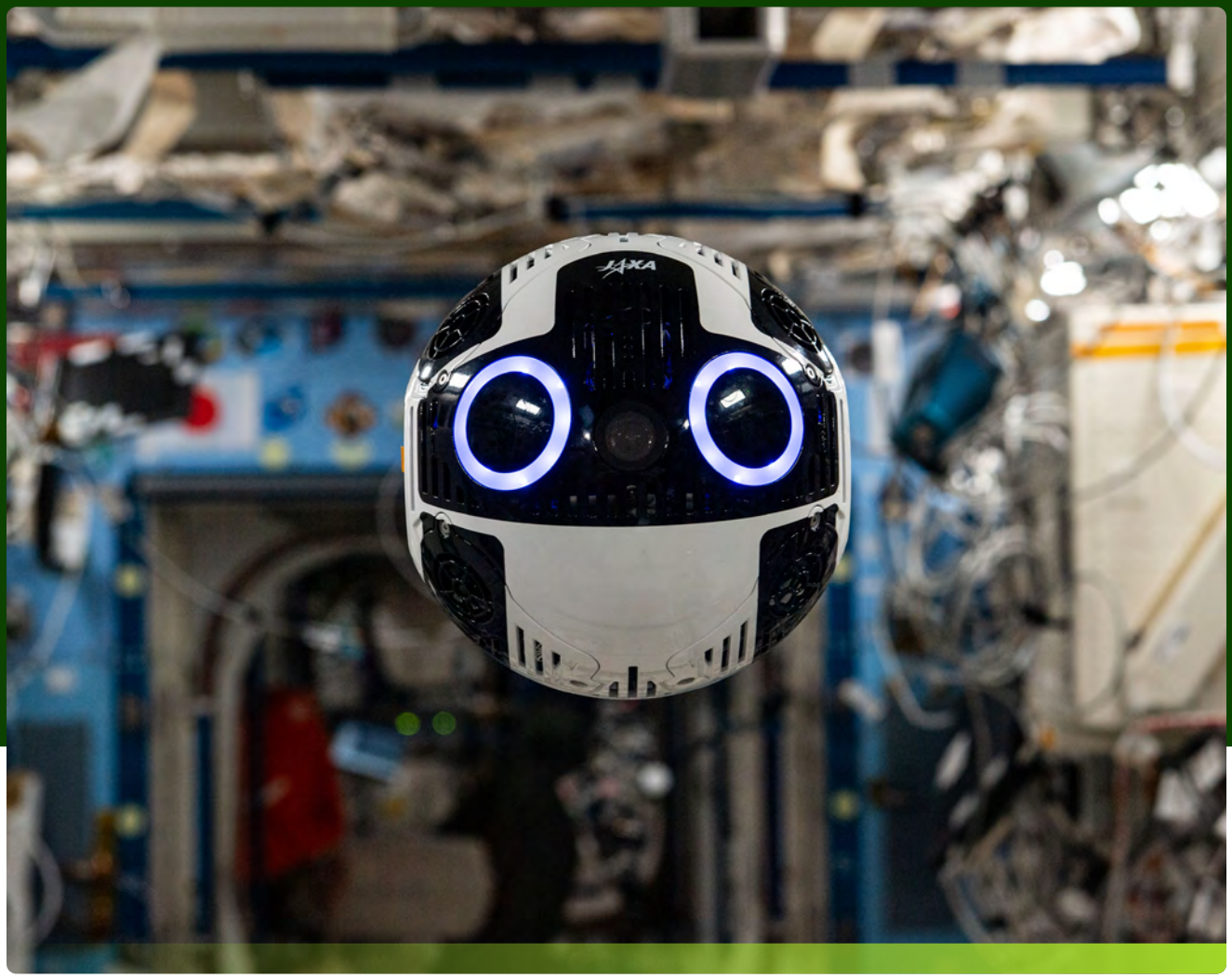
Limitations of the Financial Statements

The financial statements are prepared to report the financial position, financial condition, and results of operations, consistent with the requirements of 31 U.S.C. § 3515(b). The statements are prepared from records of Federal entities in accordance with Federal Generally Accepted Accounting Principles (GAAP) and the formats prescribed by the Office of Management and Budget (OMB). Reports used to monitor and control budgetary resources are prepared from the same records. Users of the statements are advised that the statements are for a component of the U.S. Government.

In honor of Women's History Month 2024 and those who paved the way for them, hundreds of female staff – from artists to administrative support, educators to engineers, and scientists to safety officers – gathered in front of the Katherine G. Johnson Computational Research Facility at NASA's Langley Research Center in Hampton, Virginia, on Feb. 6, 2024.

PHOTO CREDIT – NASA/David C. Bowman

Analysis of Systems, Controls, and Legal Compliance



JAXA's (Japan Aerospace Exploration Agency) free-flying robotic camera, also known as the JEM (Japanese Experiment Module) Internal Ball Camera 2, is pictured during a technology demonstration inside the Kibo laboratory module. The Internal Ball Camera 2 is being tested for its ability to autonomously maneuver and navigate aboard the International Space Station while photographing and videotaping crew activities.

PHOTO CREDIT

NASA Johnson, February 27, 2024

Internal Control Framework

Firefly Aerospace's Alpha rocket carrying eight CubeSats as part of NASA's CubeSat Launch Initiative (CSLI) lifts off from Space Launch Complex 2 at Vandenberg Space Force Base in California at 9:04 p.m. PDT Wednesday, July 3, 2024. The successful launch of the rocket, named "Noise of Summer," completed the company's Venture-Class Launch Services Demonstration 2 (VCLS Demo 2) contract with the agency. The CubeSat missions were designed by universities and NASA centers to conduct climate studies, satellite technology development, and educational outreach to students.

PHOTO CREDIT – **Firefly Aerospace/Sean Parker**

NASA Federal Managers' Financial Integrity Act Annual Statement of Assurance Process

The Federal Managers' Financial Integrity Act (FMFIA)[1] requires agency heads to evaluate and report on the internal control and financial systems to ensure the integrity of Federal programs and operations. This evaluation aims to provide reasonable assurance that internal controls are operating effectively to ensure efficient operations, reliable financial reporting, and compliance with applicable laws and regulations.

An effective system of internal control is at the core of NASA fulfilling its mission and meeting its objectives while safeguarding governmental resources. NASA's management is responsible for implementing internal control activities that support the organization in meeting established objectives.

NASA complies with the Office of Management and Budget's (OMB) Circular A-123[2], *Management's Responsibility for Enterprise Risk Management and Internal Control*, which provides Government-wide requirements for internal control and accountability, based on the FMFIA. OMB Circular A-123 also requires agencies to establish internal controls over operations, reporting, and compliance.

NASA assesses internal control across the Agency at various levels of the organization to ensure significant risks are identified, and related internal controls that address those risks are evaluated. NASA assesses the effectiveness of the

[1] The Federal Managers' Financial Integrity Act (FMFIA) https://www.congress.gov/97/statute/STATUTE-96/STATUTE-96-Pg814.pdf
[2] OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control* https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/memoranda/2016/m-16-17.pdf

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NASA Federal Managers' Financial Integrity Act Annual Statement of Assurance Process (CONTINUED)

internal controls over operations, management systems, and reporting with consideration of reviews and other relevant sources of information. NASA's executive leadership provides annual reporting and certifications on the effectiveness of internal controls that are implemented to meet intended objectives.

In addition, the NASA Office of the Chief Financial Officer (OCFO) implements an extensive annual assessment methodology and internal control testing techniques that evaluate internal controls over financial reporting.

In its execution of the Administrator's Statement of Assurance (SoA) Process, NASA considers Enterprise Risk Management (ERM) Program activities, including reviews of the Agency Risk and Fraud Risk Profiles, to inform the evaluation of and provide assurance over internal controls.

The FMFIA assurance statement is based on self-certifications submitted by NASA Officials-in-Charge that ultimately support the Administrator's SoA as well as a review of various internal and external sources of information. The self-certifications are based upon organizational self-assessments guided by the Government Accountability Office's (GAO) *Standards for Internal Control in the Federal Government* (known as the Green Book). The self-certifications and subsequent reviews are informed by relevant sources of information such as internal reviews of controls, as well as recommendations for improvements from external audits, investigations, and reviews conducted by the Office of Inspector General (OIG) and the GAO. The Mission Support Council (MSC), the organization responsible for oversight of NASA's Internal Control Program, advises the Administrator on the Statement of Assurance. The Senior Assessment Team (SAT), which supports the MSC, provides oversight for the internal control evaluation and reporting process that recommends the type of assurance resulting from execution of the SoA Program.

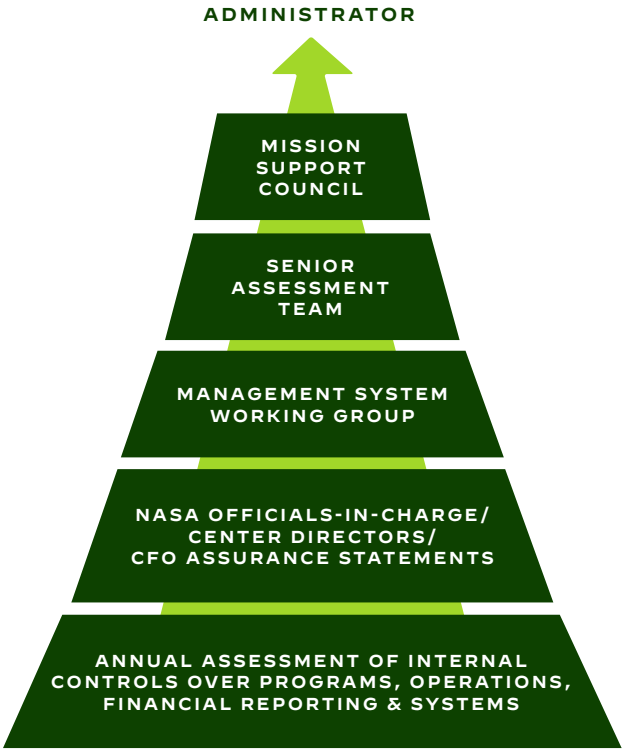


FIGURE 1
NASA FMFIA Annual Statement of Assurance Process

The Management System Working Group (MSWG) performs the first level evaluation of annual results and serves as the primary advisory body for NASA's internal control activities. The MSWG analyzes the annual assessment results and reports issues that may significantly impact the effective operation of internal controls and makes recommendations on the design of internal controls to the SAT. Figure 1 depicts the Agency's Annual SoA process and organizational components.

Did You Know?

For Your Processing Pleasure: The Sharpest Pictures of Jupiter's Volcanic Moon Io in a Generation

NASA's Juno spacecraft just made the closest flybys of Jupiter's moon Io that any spacecraft has carried out in more than 20 years. An instrument on this spacecraft called "JunoCam" returned spectacular, high-resolution images—and raw data are now available for you to process, enhance, and investigate. On Dec. 30, 2023, Juno came within about 930 miles (1,500 kilometers) of the surface of the solar system's most volcanic world.

LEARN MORE →

SCAN ME

PHOTO CREDIT - NASA/JPL-Caltech/SwRI/MSSS Image processing by Emma Wälimäki

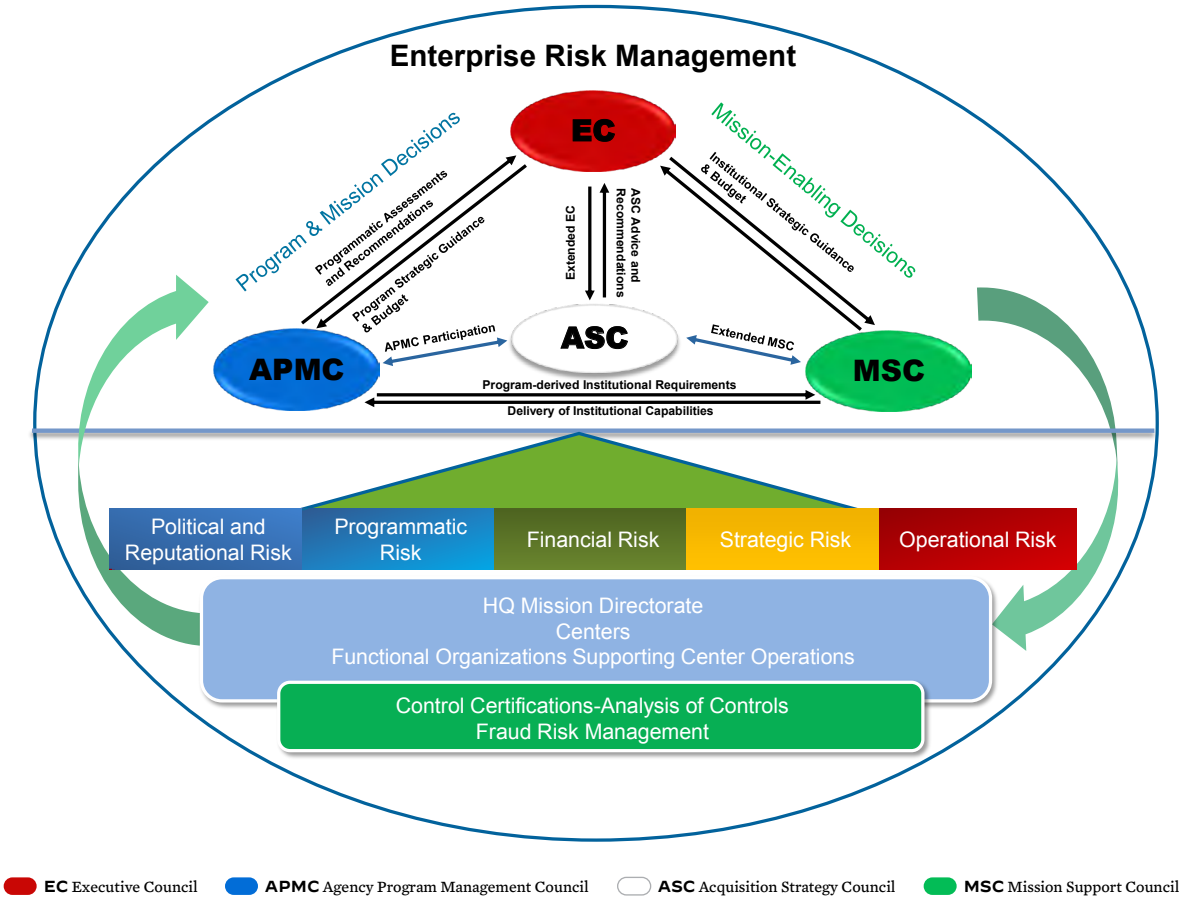
Enterprise Risk Management

OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*, requires Federal agencies to implement ERM to ensure Federal managers are effectively managing risks that could affect the achievement of Agency strategic objectives.

Risk management is embedded in NASA's culture, and the principles and practices are inherent in everyday operations. In July 2023, the NASA Deputy Administrator directed the formation of an internal Agency Risk Management Tiger Team to review, assess and propose options to strengthen the Agency's risk management framework. Specifically, the Tiger Team focused on identifying how to best support risk practitioners and senior leaders in managing and communicating their risks effectively. Based on the Tiger Team's findings, NASA implemented several initiatives to improve internal risk management processes. This includes establishment of an Agency Risk Management Officer (ARMO) within the Headquarters Office of Safety and Mission Assurance to fortify NASA's risk management policies, practices, and capabilities.

NASA's ARMO leads the Agency's ERM effort in collaboration with the Quality Assurance Division within OCFO. The NASA Unified Comprehensive Operational Risk Network (UNICORN), NASA's ERM framework, is the framework for the communication and exchange of risk information between NASA's functional organizations and the Agency leadership (see Figure 2). The framework is the foundation of the Agency's risk management policy, activities, and decisional councils.

FIGURE 2
NASA's UNICORN



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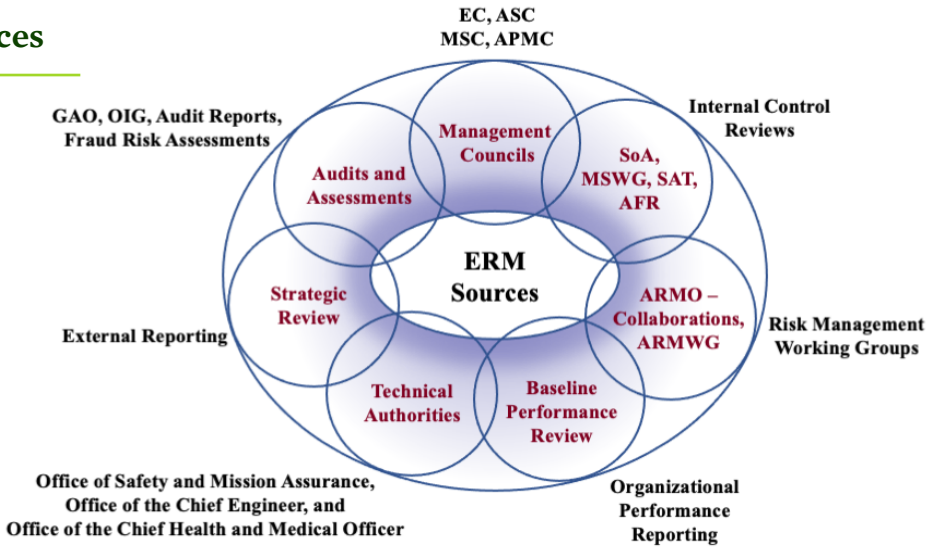
Enterprise Risk Management (CONTINUED)

The ARMO works in concert with Mission Directorates, Centers, Technical Authorities and Offices to increase awareness, understanding, and consideration of risks to NASA's strategic goals and objectives as well as opportunities to support risk-informed decision-making. This collaboration includes the application of objectives driven risk management (ODRM) and risk leadership principles to characterize and communicate the types and amount of risk NASA is willing to accept to achieve its objectives. The ARMO leads collaboration groups comprising senior-level representatives from across Agency Mission Directorates, Centers, and Technical Authorities. These groups help to foster increased risk awareness and understanding of potential cross-cutting implications, impacts, and/or opportunities for stakeholders.

As NASA's chief steward of risk management policy and practices, the ARMO oversees the development of strengthened capabilities to enable more efficient, effective, and sustainable risk communication and practices. Improving NASA's ERM capabilities is accomplished with the direct support of Agency leadership and through efforts such as enhancing tools for integrated data management and revising workforce training to grow and sustain enterprise risk management knowledge and expertise. The ARMO assesses an array of enterprise-level risks, Agency Risk Profile, and documents and makes accessible the risk data in a dashboard to support ODRM and risk-informed decisions. Significant risks affecting the Agency's strategic goals and objectives then are elevated and briefed by the responsible organization at monthly Baseline Performance Reviews, chaired by the NASA Associate Administrator.

As illustrated in Figure 3, NASA leverages a range of sources to identify potential enterprise risks and relies upon the Agency's governance structure of decisional councils. Other bodies include board and working groups across Mission Directorates, Programs/Projects, Centers, and the Technical Authorities that work to identify and assess individual and cross-cutting risks. Under ARMO's purview, the Agency Risk Management Working Group (ARMWG) provides a community of practice to support and enhance the discipline of risk management within the Agency.

FIGURE 3
ERM Sources



NASA continues to face new challenges in carrying out essential functions necessary to achieve its core mission. Long standing risk management processes and activities are inherently woven throughout NASA's culture, so the Agency is well positioned to respond to unknown threats or national emergencies that may disrupt operations for an extended period. NASA's leadership has developed Agencywide guidance that considers guidelines provided by the White House, Office of Personnel Management, and OMB.

NASA continues to strengthen its risk management and reporting process through comprehensive collaboration with the various risk bodies and stakeholders throughout the Agency, to effectively identify key risks and opportunities, develop effective risk responses, and implement timely mitigation actions. NASA continues to benchmark and collaborate with other Federal agencies to ensure continual learning and improvement of risk management.

Management Assurances

NOVEMBER 15, 2024

Administrator's Statement of Assurance

National Aeronautics and Space Administration (NASA) management is responsible for establishing and maintaining an effective system of internal control to support reliable financial reporting and effective and efficient programmatic operations. Accordingly, NASA conducted its Fiscal Year (FY) 2024 annual assessment of the effectiveness of management's internal controls for compliance with applicable laws, regulations, and policies; the Federal Managers' Financial Integrity Act (FMFIA); Federal Financial Management Improvement Act (FFMIA); the Office of Management and Budget's (OMB) Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*; the United States (U.S.) Government Accountability Office's *Standards for Internal Controls in the Federal Government*, and NASA policies. Based on the results of the assessment, NASA can provide reasonable assurance that internal control over operations, reporting, and compliance were operating effectively as of September 30, 2024, except for a material weakness associated with specific financial controls. While designed appropriately, the controls did not operate effectively, increasing the risk of a material misstatement on the Agency financial statements.

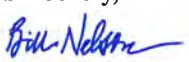
Except for the identified material weakness, NASA provides reasonable assurance that internal controls over financial reporting are operating effectively and in compliance with Federal financial management standards. Management remains dedicated to strengthening the control environment and ensuring reliability of financial reporting in future periods.

In addition, NASA complies with FMFIA and OMB requirements to evaluate and assure the reliability of internal controls over its financial management systems, complies with Federal financial management system requirements, and assures reliability of its Digital Accountability and Transparency Act of 2014 submissions.

FFMIA requires agencies to have financial management systems that substantially comply with Federal financial management system requirements, Federal Accounting Standards, and the U.S. Government Standard General Ledger at the transaction level. NASA conducted its evaluation of financial management systems for compliance with FFMIA in accordance with Appendix D of OMB Circular A-123. NASA's financial management systems substantially comply with FFMIA as of September 30, 2024.

NASA remains committed to ensuring that a sound system of internal control exists over operations, reporting, and financial management systems.

Sincerely,



Bill Nelson
Administrator

Financial Systems Strategies

NASA's Financial Management System Strategy is closely aligned with the Agency's mission for innovation and strategic objectives. Our comprehensive Core Financial Systems roadmap aims to enhance capabilities and operations, supporting the advancement of future technologies. Current initiatives focus on integrating solutions to modernize business processes, ensure compliance with internal and external Federal policies and standards, and meet evolving stakeholder requirements.

The SAP Enterprise Central Component (ECC) is NASA's core financial system and functions as the central hub for the Agency's business operations. It provides a robust platform for effective financial management, facilitating efficient operations and successful audit outcomes. With SAP ECC reaching its end-of-life in December 2027, the Chief Information Officer is exploring options to modernize the current centralized core financial system. Newer versions of Enterprise Resource Planning (ERP) systems would significantly enhance NASA's financial management capabilities by offering integrated analytics that facilitate real-time reporting. This shift will reduce reliance upon custom reports and minimize the need for extensive customization due to its advanced standard features. Improved integration among system components provides greater opportunities to further streamline and enhance financial management processes. Additionally, NASA is evaluating hosting options for the modernized ERP, considering both cloud-based solutions with subscription licensing and maintaining system functionality within the Agency's on-premise data centers. NASA expects the cutting edge ERP technology to drive overall efficiency and effectiveness of the next-generation financial management system and processes, ensuring that NASA continues to achieve optimal financial oversight and management.

The President's Management Agenda (PMA) outlines Government-wide priorities for enhancing Federal agency operations and performance. Each administration has issued one or more PMAs, grounded in the vision of a fair, effective, and accountable Government delivering results for all Americans. The current PMA focuses on areas including enhancing customer experience, modernizing information technology and digital services, and improving workforce capabilities. PMA emphasizes transforming Federal operations to better meet the needs of the American people through advanced technology and streamlined processes. NASA is committed to meeting PMA initiatives leveraging advanced data analytics and machine learning to enhance mission planning, operations, and data management to support more informed decision-making and operational efficiency.

The Treasury has mandated the implementation of G-Invoicing, a comprehensive Government-wide solution designed to modernize the management of intra-governmental transactions, improve accuracy and transparency, and enhance financial management. By adopting a standardized, digital invoicing system, the Federal government aims to achieve greater efficiency and better financial oversight. NASA has completed G-Invoicing implementation requirements, ensuring the appropriate integrations have been developed and activated to align NASA's SAP system with the Treasury G-Invoicing portal enabling effective transaction capabilities with trading partners.

The new Lease Accounting Standard, SFFAS 54, issued by the Federal Accounting Standards Advisory Board (FASAB), significantly changes lease accounting requirements. Lessees must now recognize leases on their balance sheets with a lease liability and corresponding lease asset, while lessors will recognize a lease receivable and unearned revenue. This standard provides more relevant and meaningful financial information for users and introduces comprehensive lease accounting guidelines for Federal entities. NASA has made significant investments to ensure the appropriate transactions can be recorded in the financial management system, reconciled, and reported in accordance with the established requirements.

On October 30, 2023, President Biden signed an Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (AI). In response, NASA appointed its first Chief Artificial Intelligence Officer on May 13, 2024. NASA has long utilized AI tools to support mission planning, data analysis, and autonomous systems development. AI helps streamline decision making, enhance resource efficiency, and maximize workforce potential. As AI continues to evolve, NASA is excited about its future contributions and growth with this technology.

Forward Looking

TechGirls Tour NASA Goddard

NASA Goddard hosted participants from the U.S. Department of State's TechGirls program once again this summer. On Aug. 1, 2024, 133 girls from 37 different countries/territories toured Goddard's research labs and TV production studios and heard from a panel of some of the incredible women that work at Goddard.

PHOTO CREDIT

NASA/Jay Friedlander

2025 and Beyond

NASA continues to plan for the future of deep space exploration, preparing for the launch of Artemis II and Artemis III. Whereas Artemis I was historic in demonstrating the Space Launch System (SLS) rocket to launch an uncrewed Orion spacecraft around the Moon, Artemis II will continue the Agency's history of innovation and lunar exploration by integrating four astronauts, including the first woman and the first person of color. Artemis II will mark NASA's first crewed mission of the Orion spacecraft.

The Agency has several other key Artemis development milestones planned in FY 2025, including the Human Landing System Option A propellant transfer flight test and the completion of the SLS Launch Vehicle Stage Adapter. Ground systems upgrades such as completing construction on a new liquid nitrogen (LN2) tank at Launch Pad 39B and erecting the primary steel on tower modules one, two, and three for the Mobile Launcher 2 are also planned to be completed in the upcoming fiscal year.

NASA is continuing to maintain human presence in Low-Earth Orbit (LEO) through ongoing missions to the International Space Station (ISS). Four Commercial Crew missions and ninety experiments are expected to be conducted using commercial facilities on ISS over the next two fiscal years. This commitment to using the ISS National Laboratory to expand the commercial space economy enables growth for Government agencies, academic institutions, and commercial partners alike.

As the Earth and its atmosphere continue to experience the effects of climate change, NASA is contributing data to enable implementation of sustainable solutions by making significant progress on four new observing systems by the end of FY 2025. NASA is expected to launch the Total and Spectral Solar Irradiance Sensor 2 mission, complete the Operational Readiness Review of the NASA-Indian Space Research Organisation Synthetic Aperture Radar (NISAR) mission, complete the Landsat Next System Requirements Review, and the Gravity Recovery and Climate Experiment-Continuity (GRACE-C) Critical Design Review (CDR). All four missions will enable new and updated climate models, observation tools, research abilities, and applications of the Earth system wholistically.

NASA is partnering with the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the National Institute of Standards and Technology to mature the Greenhouse Gas Monitoring and Information Center by improving data products and including additional intercomparison capabilities. NASA and its partners need to accomplish several milestones during FY 2025 to improve this center, including, but not limited to, prototyping initial demonstration areas, launching a web-based portal and information system, and establishing a regular cadence of stakeholder engagement.

Once each decade, NASA and its partners ask the National Research Council to look 10 or more years into the future and prioritize research areas, observations, and notional missions to make those observations. These findings are published in what is called a Decadal Survey. The next Decadal Survey for Solar and Space Physics (Heliophysics) 2024-2033, expected to publish in FY 2025, will present a prioritized strategy of basic and applied research to advance scientific understanding of the Sun, Sun-Earth connections and the origins of space weather, the Sun's interactions with other bodies in the solar system, the interplanetary medium, and the interstellar medium. NASA will incorporate this detailed research into its plans for the future of Heliophysics.

The Science Mission Directorate (SMD) will continue to make progress on projects to better understand the solar system, and the universe beyond it. Notably, Europa Clipper, a mission headed for Jupiter's moon Europa to determine whether there are places below the surface of Europa that could support life, and the Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer (SPHEREx), which will provide the first all-sky spectral survey of hundreds of millions of galaxies, are targeted for launch in FY 2025. NASA intends to expand the catalogue of large, near-Earth asteroids to include 11,400 asteroids in the following fiscal year. Many SMD projects are in development and will move closer towards their launches with key milestones in the upcoming years including the Nancy Grace Roman Space Telescope, the Interstellar Mapping and Acceleration Probe (IMAP), the Dragonfly mission, Near-Earth Object (NEO) Surveyor, and the Multi-Slit Solar Explorer (MUSE).

NASA's Space Technology Mission Directorate (STMD) has been charged with ensuring American global leadership in space technology innovations through increased partnering with industry and demonstrating key lunar surface and deep space technologies. STMD aims to achieve these goals by working closely with stakeholders, enlisting partnerships, utilizing evidence-based decision making, and promoting diversity, equity, inclusion, and accessibility. By the end of FY 2025, NASA will demonstrate leadership in space technology by enhancing partnerships with industry through initializing several tipping point opportunities. For FY 2026 and beyond, STMD is in the process of restructuring from a Technology Readiness

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2025 and Beyond (CONTINUED)

Level organization to one more focused on a domain and capability model. Targeting capability gaps will help propel the advancement of space technology, improving the effectiveness of development and adaptation to large multi-component missions.

Through the Tipping Point Announcement for Partnership proposals, NASA seeks industry-developed space technologies that can foster the development of commercial space capabilities and benefit future NASA missions. A technology is considered at a tipping point if an investment in a demonstration will significantly mature the technology, increase the likelihood of infusion into a commercial space application, and bring the technology to market for both government and commercial applications. The partnerships established through Tipping Point selections combine NASA resources with an industry contribution shepherding the development of critical space technologies/capabilities to stimulate commercial space economy while also saving the Agency and American taxpayers money.

Beyond Tipping Point opportunities, NASA has a robust Small Business Innovation Research and Small Business Technology Transfer program that provides early-stage funding to a diverse community of pioneers who are researching and developing technologies to change the world. This program ensures that technologies developed for missions in exploration and discovery are broadly available to the public, maximizing the benefit to the Nation. NASA has set an ambitious goal of transferring at least three technologies to small businesses by the end of FY 2025.

NASA's Aeronautics Mission Directorate is aiming to complete its first flight of the Low Boom Flight Demonstrator aircraft, the X-59, in FY 2025. This aircraft is years in the making and designed to reduce the perceived loudness of sonic booms and enable future industry innovation in commercial supersonic aircraft. Its gentle supersonic thump, instead of a sonic boom, could drastically reduce the noise burden of supersonic travel and have benefits to future generations of travelers. Progress will continue to be made on two other major aeronautics demonstration projects, the Sustainable Flight Demonstrator which has a planned Airframe Preliminary Design Review in FY 2025, and the Electrified Powertrain Flight Demonstrator which has a CDR of the Electric Propulsion Unit scheduled for FY 2025.

NASA submitted its inaugural Equity Action Plan in 2022, in accordance with Executive Order (EO) 13985, which outlines and reaffirms our Agency's strategy to successfully mitigate systemic barriers to equity. Specifically, NASA's plan discusses our strategic effort to achieve equity in procurements, grants, cooperative agreements, data accessibility, civil rights compliance, and accessibility to limited-English populations. EO 14091, which was released February 16, 2023, formally annualized the Equity Action Plan process. The 2023 Equity Action Plan builds on the success on the 2022 plan by providing strategies for ensuring more individuals can work and learn from NASA. NASA also published the Agency's FY 2022-2026 Diversity Equity Inclusion and Accessibility (DEIA) Strategic Plan in FY 2022, outlining the Agency's goals to increase workforce diversity, workforce equity and inclusion, workforce accessibility and inclusion, and integrating DEIA into the NASA mission.

Continuing with the theme of reducing barriers, the Agency is continuing its Full Workforce Barrier Analysis in FY 2025 to further explore potential underlying causes of barriers for four key identities: race/ethnicity, gender, disability status, and members of the LGBTQIA+ community. NASA will utilize the insights obtained through this barrier analysis to formulate equitable workforce policies. More information on this barrier analysis can be found in the FY 2025 Annual Evaluation Plan contained within the FY 2025 VIPer.

Addressing NASA's outdated infrastructure and facilities has been a constant challenge with the majority of NASA facilities beyond their original design life. Furthermore, as of September 2024, the Agency's list of construction repairs is at an estimated $5.4 billion and its recapitalization liability has grown to an estimated $9 billion. To address these concerns, NASA's Office of Strategic Infrastructure finalized its Master Plan for the Agency's facilities in early FY 2024. This plan will continue to guide NASA's strategy for resource allocation, construction, demolition, and other areas critical to maintaining facilities and assets in the coming fiscal years.

Continuing to develop the next generation of explorers remains one of NASA's priorities, achieved through engagement with meaningful learning experiences for students and interns. To better improve how NASA builds a diverse future science, technology, engineering, and mathematics (STEM) workforce, a full Internship Program Evaluation is set for FY 2025-2026 as well as a design assessment of NASA's online education products and review process. On top of internships, K-12 engagements, and university partnerships, over the next two fiscal years NASA intends to award 30 Teams Engaging Affiliated Museums and Informal Institutions (TEAM II) Community Anchors and National Connectors to implement NASA STEM opportunities that benefit diverse and regional audiences.

SECTION 2

Financial Section

As part of NASA's Artemis campaign to return humans to the Moon for the benefit of all, the agency is working with SpaceX to develop the company's Starship human landing system (HLS), which will land astronauts near the Moon's South Pole during the Artemis III and Artemis IV missions. On March 14, SpaceX launched the third integrated flight test of its Super Heavy booster and Starship upper stage, an important milestone toward providing NASA with a Starship HLS for its Artemis missions.

A complement of 33 Raptor engines, fueled by super-cooled liquid methane and liquid oxygen, powered the Super Heavy booster with Starship stacked on top, from the company's Starbase orbital launch pad at 8:25 a.m. CDT. Starship, using six Raptor engines, separated from the Super Heavy booster employing a hot-staging technique to fire the engines before separation at approximately three minutes into the flight, in accordance with the flight plan.

PHOTO CREDIT
SpaceX

Message from the Chief Financial Officer

I am pleased to join Administrator Nelson in presenting the Fiscal Year (FY) 2024 NASA Agency Financial Report (AFR). This report reflects our commitment to advancing NASA's mission and serving the American people through effective financial management and oversight of the resources entrusted to NASA. The Office of the Chief Financial Officer (OCFO) plays a crucial role in the development of this report, ensuring accurate, transparent, and timely financial reporting. Furthermore, OCFO supports NASA in its efforts to maintain the highest standards of financial stewardship, integrity, operating performance, and effective systems and controls. This standard of excellence is once again recognized in our FY 2024 Auditors' report, which affirms an unmodified "clean" opinion for the 14th consecutive year. This confirms that NASA's financial statements are free of material misstatements and have been prepared in accordance with U.S. Generally Accepted Accounting Principles, and that our system of internal control is operating effectively.

Our independent auditors identified one material weakness related to financial controls that were designed appropriately but did not operate effectively. We are implementing enhanced procedures, including strengthened validation and control processes and increased analytical protocols, to address the condition and mitigate the risk of potential errors. It is important to note that the auditors disclosed no instances of noncompliance with laws and regulations.

Office of the Chief Financial Officer's Goals

GOAL I

Ensure stewardship of the taxpayer's investment entrusted to NASA to advance and achieve the Agency's strategic goals, priorities, and missions.

GOAL II

Lead and develop a robust analytical community and capability that supports and empowers the Agency mission.

GOAL III

Develop and engage the Enterprise workforce to enable the NASA of the future.

The OCFO team has advanced several Government-wide initiatives over the past year, on top of our outstanding audit results. NASA has made significant investments to implement the new Federal mandate for lease accounting, ensuring that transactions are accurately recorded, reconciled, and reported in accordance with the established requirements from the Federal Accounting Standards Advisory Board. NASA has completed G-Invoicing implementation requirements to align NASA's financial system with the Treasury G-Invoicing portal to enable effective transaction capabilities with trading partners. In addition, NASA implemented the Organizational Health and Performance requirement outlined by the Office of Management and Budget, developing metrics to track and report NASA's internal health and external performance as an Agency.

In everything we do, we are committed to safety, integrity, teamwork, excellence, and inclusion, as demonstrated by the OCFO team members honored with the 2023 Agency Honor Awards and recognized by the Honor Agency Appreciation Program. These awards represent NASA's highest form of recognition for exceptional contributions and positive impacts on both NASA and the OCFO organization. Further, these efforts culminated in formal recognition from the AGA, which bestowed a tenth Certificate of Excellence in Accountability Reporting Award for NASA's FY 2023 AFR, along with the prestigious Best-in-Class Award. I am extremely proud of the NASA workforce and the strong foundation we have built together, a legacy which will allow NASA to confidently pursue ambitious goals and turn the seemingly unattainable into reality.

Sincerely,

Margaret V. Schaus

Margaret Vo Schaus

Spanish Translation Available

Click here or view page 119 to read the Spanish version. Haga clic aquí o vea la página 119 para leer la versión en español.

Introduction to the Principal Financial Statements

The principal financial statements are prepared to report the financial position and results of operations of the National Aeronautics and Space Administration, pursuant to the requirements of 31 U.S.C. § 3515(b).

Consolidated Balance Sheets

provide information on assets, liabilities, and net position as of the end of the reporting periods. Net position is the difference between assets and liabilities. It is a summary measure of the Agency's financial condition at the end of the reporting periods.

Consolidated Statements of Net Cost

report net cost of operations during the reporting periods by strategic goal and at the entity level. It is a measure of gross costs of operations less earned revenue, and represents the cost to taxpayers for achieving each strategic goal and Agency Mission at the entity level.

Consolidated Statements of Changes in Net Position

report the beginning balances of net position, current financing sources and use of resources, unexpended resources for the reporting periods, and ending net position for the current reporting periods.

Combined Statements of Budgetary Resources

report information on the sources and status of budgetary resources for the reporting periods. Information in these statements is reported on the budgetary basis of accounting, which supports compliance with budgetary controls and controlling legislation.

FINANCIAL SECTION

Financial Statements, Notes, and Required Supplementary Information

The GUSTO mission successfully launched on a scientific balloon from Antarctica Dec. 31, 7:30 p.m. local time (Dec. 31, 1:30 a.m EST). GUSTO is flying on a 39 million cubic-foot zero-pressure scientific balloon, which is so large it could easily fit 195 blimps inside of it. The balloon is used to fly missions for long periods of time during the Austral Summer over Antarctica. GUSTO is aiming for a NASA record of 55+ days in flight to achieve its science goals.

GUSTO is mapping a large portion of the Milky Way galaxy and Large Magellanic Cloud to help scientists study the interstellar medium. The observatory is transmitting the data it collects back to watchful teams on the ground as it steadily circumnavigates the South Pole around 120,000+ feet.

PHOTO CREDIT
NASA/Scott Battaion

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Consolidated Balance Sheets
As of September 30, 2024 and 2023

(IN MILLIONS)

	2024	2023
Assets		
Intragovernmental:		
Fund Balance with Treasury (Note 2)	$ 17,186	$ 17,378
Investments, Net (Note 3)	15	15
Accounts Receivable, Net (Note 4)	98	67
Advances and Prepayments	108	—
Total Intragovernmental	17,407	17,460
With the Public:		
Accounts Receivable, Net (Note 4)	26	1
Property, Plant, and Equipment, Net (Note 5)	9,331	8,651
Advances and Prepayments	43	23
Other Assets (Note 7)	697	—
Total with the Public	10,097	8,675
Total Assets	**$ 27,504**	**$ 26,135**
Stewardship PP&E (Note 6)		
Liabilities: (Note 8)		
Intragovernmental:		
Accounts Payable	$ 29	$ 36
Advances from Others and Deferred Revenue	34	39
Other Liabilities (Note 10)	188	175
Total Intragovernmental	251	250
With the Public:		
Accounts Payable	1,746	1,730
Federal Employee Salary, Leave and Benefits Payable	348	288
Pensions and Post-Employment Benefits Payable	26	27
Environmental and Disposal Liabilities (Note 9)	2,353	2,305
Advances from Others and Deferred Revenue	180	199
Other Liabilities (Note 10)		
Other Accrued Liabilities	1,902	1,793
Other	858	127
Total with the Public	7,413	6,469
Total Liabilities	**$ 7,664**	**$ 6,719**
Commitments and Contingencies (Note 12)		
Net Position:		
Unexpended Appropriations	$ 13,157	$ 13,333
Cumulative Results of Operations	6,683	6,083
Total Net Position	**$ 19,840**	**$ 19,416**
Total Liabilities and Net Position	**$ 27,504**	**$ 26,135**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Consolidated Statements of Net Cost
For the Fiscal Years Ended September 30, 2024 and 2023

(IN MILLIONS)

	2024	2023
STRATEGIC GOAL 1		
Expand human knowledge through new scientific discoveries:		
Gross Costs	$ 9,128	$ 9,166
Less: Earned Revenue	1,090	904
Net Costs	8,038	8,262
STRATEGIC GOAL 2		
Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization:		
Gross Costs	$ 11,306	$ 11,030
Less: Earned Revenue	386	354
Net Costs	10,920	10,676
STRATEGIC GOAL 3		
Catalyze economic growth and drive innovation to address national challenges:		
Gross Costs	$ 3,075	$ 3,044
Less: Earned Revenue	146	161
Net Costs	2,929	2,883
STRATEGIC GOAL 4		
Enhance capabilities and operations to catalyze current and future mission success:		
Gross Costs	$ 3,042	$ 2,993
Less: Earned Revenue	195	198
Net Costs	2,847	2,795
Net Cost of Operations		
Total Gross Costs	$ 26,551	$ 26,233
Less: Total Earned Revenue	1,817	1,617
Net Costs	**$ 24,734**	**$ 24,616**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Consolidated Statements of Changes in Net Position For the Fiscal Years Ended September 30, 2024 and 2023

(IN MILLIONS)

	2024	2023
Unexpended Appropriations:		
Beginning Balance	$ 13,333	$ 12,951
Appropriations Received	24,875	25,573
Appropriations Transferred-In/Out	4	—
Other Adjustments	(48)	(26)
Appropriations Used	(25,007)	(25,165)
Net Change in Unexpended Appropriations	$ (176)	$ 382
Total Unexpended Appropriations	**$ 13,157**	**$ 13,333**
Cumulative Results from Operations:		
Beginning Balance	$ 6,083	$ 5,258
Appropriations Used	25,007	25,165
Non-Exchange Revenue	27	1
Donations and Forfeitures of Property	8	44
Imputed Financing	292	231
Net Cost of Operations	(24,734)	(24,616)
Net Change in Cumulative Results of Operations	$ 600	$ 825
Total Cumulative Results of Operations	**$ 6,683**	**$ 6,083**
Net Position	**$ 19,840**	**$ 19,416**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Combined Statements of Budgetary Resources
For the Fiscal Years Ended September 30, 2024 and 2023

(IN MILLIONS)

	2024	2023
Budgetary Resources:		
Unobligated Balance from Prior Year Budget Authority, Net	$ 3,335	$ 3,242
Appropriations	24,876	25,573
Spending Authority from Offsetting Collections	1,840	2,108
Total Budgetary Resources	**$ 30,051**	**$ 30,923**
Status of Budgetary Resources:		
New Obligations and Upward Adjustments (Total)	$ 27,170	$ 28,276
Unobligated Balance, End of Year:		
Apportioned, Unexpired Accounts	2,612	2,466
Unapportioned, Unexpired Accounts	97	5
Unexpired Unobligated Balance, End of Year	2,709	2,471
Expired Unobligated Balance, End of Year	172	176
Unobligated Balance, End of Year (Total)	2,881	2,647
Total Budgetary Resources	**$ 30,051**	**$ 30,923**
Outlays, Net:		
Outlays, Net (Total)	$ 25,019	$ 25,326
Distributed Offsetting Receipts (-)	(4)	(7)
Agency Outlays, Net	**$ 25,015**	**$ 25,319**

THE ACCOMPANYING NOTES ARE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

01 NOTE 1 Reporting Entity and Summary of Significant Accounting Policies

Reporting Entity

The National Aeronautics and Space Administration (NASA) is an independent agency established by Congress on October 1, 1958 by the National Aeronautics and Space Act of 1958. NASA was incorporated from its predecessor agency, the National Advisory Committee for Aeronautics, which provided technical advice to the United States (U.S.) aviation industry and performed aeronautics research. Today, NASA serves as the principal agency of the U.S. Government for initiatives in civil space and aviation.

NASA is organized into five Mission Directorates supported by one Mission Support Directorate (see Organizational Structure on page 10):

- **Aeronautics Research:** conducts research which enhances aircraft performance, environmental compatibility, capacity, flexibility, and safety of the future air transportation system;
- **Exploration Systems Development:** defines and manages the systems development for programs critical to the Artemis lunar exploration initiatives and develops technologies and capabilities to support sustainable human deep space exploration;
- **Science:** explores the Earth, Moon, Mars, and beyond; charts the best route of discovery, and obtains the benefits of Earth and space exploration for society;
- **Space Operations:** manages launch services, space communications and navigation, the International Space Station, and commercial space capabilities; and
- **Space Technology:** develops new technologies needed to support current and future NASA missions, other agencies, and the aerospace industry.

The Agency's administrative structure includes the Executive Council, Mission Support Council, Agency Program Management Council, Acquisition Strategy Council, and other Committees to integrate strategic, tactical, and operational decisions in support of strategic focus and direction.

Operationally, NASA is organized into nine Centers and other facilities across the country, the Headquarters Office, and the NASA Shared Services Center (NSSC).

The Agency's consolidated financial statements present the accounts of all funds that have been established and maintained to account for the resources under the control of NASA management.

Disclosure Entities

The Federal Accounting Standards Advisory Board's (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) 47, *Reporting Entity,* is intended to guide Federal agencies in recognizing complex, diverse organizations possessing varying legal designations (e.g., government agencies, not-for-profit organizations, and corporations) that are involved in addressing public policy challenges. It provides guidance for determining what organizations should be included in a Federal agency's financial statements (consolidation entities) and footnote disclosures (disclosure entities; and related parties) for financial accountability purposes and is not intended to establish whether an organization is or should be considered a Federal agency for legal or political purposes.

Inter-Entity Costs

Goods and services are received from other Federal entities at no cost or at a cost less than the full cost to the providing Federal entity. Consistent with accounting standards, certain costs of the providing entity that are not fully reimbursed [by the component reporting entity] are recognized as imputed costs and are offset by imputed revenue. Such imputed costs and revenues relate to business-type activities such as employee benefits. However, unreimbursed costs of goods and services other than those identified above are not included in our financial statements.

01 NOTE 1 Reporting Entity and Summary of Significant Accounting Policies (CONTINUED)

Basis of Accounting and Presentation

These consolidated financial statements are prepared in accordance with FASAB standards in the format prescribed by the Office of Management and Budget (OMB) Circular A-136, *Financial Reporting Requirements*, Revised (May 2024). FASAB's authority to set Federal Government accounting standards is recognized by the American Institute of Certified Public Accountants (AICPA). The financial statements present the financial position, net cost of operations, changes in net position, and budgetary resources of NASA, as required by the Chief Financial Officers Act of 1990, Public Law (P.L.) 101-576, and the Government Management Reform Act, P.L. 103-356.

The accounting structure of Federal agencies is designed to reflect proprietary and budgetary accounting. Proprietary accounting uses the accrual method of accounting. Under the accrual method of accounting, revenues are recognized when earned and expenses are recognized when incurred, without regard to the timing of receipt or payment of cash. Budgetary accounting does not use the accrual method of accounting; it accounts for the sources and status of funds to facilitate compliance with legal controls over the use of Federal funds. Material intra-agency transactions and balances have been eliminated from the principal financial statements for presentation on a consolidated basis, except for the Statement of Budgetary Resources, which is presented on a combined basis in accordance with OMB Circular A-136. Accounting standards require all reporting entities to disclose that accounting standards allow certain presentations and disclosures to be modified, if needed, to prevent disclosure of classified information. In FY 2020, NASA implemented the requirements of paragraphs 2, 9, and 10 of SFFAS 57, *Omnibus Amendments*. The requirements set forth in paragraphs 3-8, 11 and 12 of the standard are effective in FY 2024.

Budgets and Budgetary Accounting

NASA complies with Federal budgetary accounting guidelines of OMB Circular A-11, *Preparation, Submission and Execution of the Budget*, Revised (July 2024). Congress funds NASA's operations through nine main appropriations: Science; Aeronautics; Exploration; Space Operations; Science, Technology, Engineering and Mathematics Engagement; Safety, Security and Mission Services; Space Technology; Office of Inspector General; and Construction and Environmental Compliance and Restoration. NASA also receives reimbursements from reimbursable service agreements that cover the cost of goods and services NASA provides to other Federal entities or non-Federal entities. The reimbursable agreement price is based on cost principles to reasonably reflect the actual cost for the goods and services provided to the customer.

Research and Development (R&D), Other Initiatives and Similar Costs

NASA makes substantial R&D investments for the benefit of the U.S. The R&D programs include activities to extend our knowledge of Earth, its space environment, and the universe; and to invest in new aeronautics and advanced space transportation technologies supporting the development and application of technologies. Following guidance outlined in the FASAB Technical Release 7, *Clarification of Standards Relating to the National Aeronautics and Space Administration's Space Exploration Equipment*, NASA applies the Financial Accounting Standards Board's (FASB) Accounting Standards Codification (ASC) 730-10-25, *Research and Development - Recognition*, and FASB ASC 730-10-50 *Research and Development - Disclosure*, to its R&D projects. Consistent with the above guidance, costs to acquire PP&E that is expected to be used only for a specific R&D project are expensed in the period they are incurred.

Exchange and Non-Exchange Revenue

NASA classified revenues as either exchange or non-exchange. Exchange revenues are those transactions in which NASA provides goods and services to another party for a price, primarily through reimbursable agreements that are priced based on cost principles to reasonably reflect the actual cost for the goods and services provided to the customer. These revenues are presented on the Statement of Net Cost and serve to offset the costs of these goods and services. Non-exchange revenues result from donations to the Government and from the Government's right to demand

01 NOTE 1 Reporting Entity and Summary of Significant Accounting Policies (CONTINUED)

payment, for taxes, fines, and penalties. These revenues are not considered to reduce the cost of NASA's operations and are reported on the Statement of Changes in Net Position.

Application of Significant Accounting Estimates

The preparation of financial statements requires management to make assumptions and reasonable estimates affecting the reported amounts of assets, liabilities, and disclosures of contingent liabilities as of the date of the financial statements as well as the reported amounts of revenues and expenses for the reporting period. Accordingly, actual results may differ from those estimates.

Fund Balance with Treasury (FBWT)

The U.S. Department of the Treasury (Treasury) collects and disburses cash on behalf of Federal agencies during the fiscal year. The collections include funds appropriated by Congress to fund the Agency's operations and revenues earned for services that are provided to other Federal agencies or for the public. The disbursements are for goods and services in support of NASA's operations and for other liabilities. FBWT is an asset account that shows the available budget spending authority of Federal agencies.

Investments, Net

NASA investments include the following intragovernmental non-marketable securities:

(1) The Endeavor Teacher Fellowship Trust Fund (Endeavor Trust Fund) was established from public donations in tribute to the crew of the Space Shuttle Challenger. The Endeavor Trust Fund biannual interest earned is reinvested in short-term bills. P.L. 102-195 requires the interest earned from the Endeavor Trust Fund investments be used to create the Endeavor Teacher Fellowship Program.

(2) The Science, Space and Technology Education Trust Fund (Challenger Trust Fund) was established to advance science and technology education. The Challenger Trust Fund balance is invested in short-term bills and/or a bond when feasible. P.L. 100-404 requires that a quarterly payment of $250,000 be sent to the Challenger Center from interest earned on the Challenger Trust Fund investments. In order to meet the requirement of providing funds to the Challenger Center, NASA typically invests the biannual interest earned in short-term bills with maturity that coincides with quarterly payments of $250,000 to beneficiaries. Interest received in excess of the amount needed for quarterly payment to beneficiaries may be reinvested. NASA has not been able to secure favorable returns on investment through securities issued by Treasury's Bureau of the Fiscal Service in recent years that were available for previous long-term bond investments. In anticipation of insufficient interest earnings that will not meet NASA's requirement to make quarterly disbursements, the Committees on Appropriations included a provision in both the FY 2024 and FY 2023 Consolidated Appropriations Act (P.L. 118-42 and P.L. 117-328), respectively, enabling NASA to utilize up to $1 million from the Safety, Security, and Mission Services appropriation for disbursement to the Challenger Center.

Accounts Receivable, Net

Most of NASA's Accounts Receivable are for intragovernmental reimbursements for cost of goods and services provided to other Federal agencies; the rest are for debts to NASA by employees and non-Federal vendors. Allowances for delinquent non-Federal accounts receivable are based on factors such as: aging of accounts receivable, debtors' ability to pay, payment history, and other relevant factors. Delinquent non-Federal accounts receivable over 120 days are referred to Treasury for collection, wage garnishment or cross-servicing in accordance with the Debt Collection Improvement Act, as amended. An allowance for uncollectible accounts is recorded for Accounts Receivable due from the public and Federal sector in order to reduce Accounts Receivable to its net realizable value in accordance with SFFAS 1, *Accounting for Selected Assets and Liabilities*.

01 NOTE 1 Reporting Entity and Summary of Significant Accounting Policies (CONTINUED)

Property, Plant, and Equipment (PP&E)

NASA reports depreciation and amortization expense using the straight-line method over an asset's estimated useful life, beginning with the month the asset is placed in service. PP&E are capitalized assets with acquisition costs of $500,000 or more, a useful life of two years or more, and R&D assets that are determined at the time of acquisition to have alternative future use. Assets that do not meet these capitalization criteria are expensed. Capitalized costs include costs incurred by NASA to bring the property to a form and location suitable for its intended use. Certain NASA assets are held by Government contractors. Under provisions of the Federal Acquisition Regulation (FAR), the contractors are responsible for the control and accountability of the assets in their possession. These Government-owned, contractor-held assets are included within the balances reported in NASA's financial statements.

NASA has barter agreements with international entities; the assets and services received under these barter agreements are unique, with limited easement to only a few countries, as these assets are on the International Space Station (ISS). The intergovernmental agreements state that the parties will seek to minimize the exchange of funds in the cooperative program, including the use of barters to provide goods and services. NASA has received some assets from these parties in exchange for future services. The fair value is indeterminable; therefore, no value was ascribed to these transactions in accordance with FASB ASC 845-10-25, *Non-Monetary Transactions – Recognition*, and ASC 845-10-50, *Non-Monetary Transactions – Disclosure*.

SFFAS 10, *Accounting for Internal Use Software*, requires the capitalization of internally developed, contractor developed, and commercial off-the-shelf software. Capitalized costs for internally developed software include the full costs (direct and indirect) incurred during the software development stage only. For purchased software, capitalized costs include amounts paid to vendors for the software and other material costs incurred by NASA to implement and make the software ready for use through acceptance testing. NASA capitalizes costs for internal use software when the total projected cost is $1 million or more, and the expected useful life of the software is two years or more.

Leases

In FY 2024, NASA implemented the requirements under SFFAS 54, *Leases*. Arrangements that meet the definition of a lease under SFFAS 54, other than short-term and intragovernmental, require NASA to report a right-to-use lease asset and a lease liability where NASA is the lessee, and a lease receivable and deferred revenue liability where NASA is the lessor. Further, as permitted under SFFAS 62, *Transitional Amendment to SFFAS 54*, NASA has elected the transitional accommodation related to "embedded leases" through the accommodation period ending September 30, 2026.

Advances from Others and Deferred Revenue

Advances from Others and Deferred Revenue are amounts received for goods or services to be delivered or performed in the future and reflect amounts that have yet to be earned. Because cash is not usually received when unearned lease revenue is recognized, unearned lease revenue is not included in advances from others and deferred revenue; it is instead included in Other Liabilities.

Liabilities Covered by Budgetary Resources

As a component of a sovereign entity, NASA cannot pay for liabilities unless authorized by law and covered by budgetary resources. Liabilities Covered by Budgetary Resources are those for which appropriated funds are available as of the balance sheet date. Budgetary resources include: new budget authority, unobligated balances of budgetary resources at the beginning of the year or net transfers of prior year balances during the year, spending authority from offsetting collections (credited to an appropriation or fund account), and recoveries of unexpired budget authority through downward adjustments of prior year obligations.

CONTINUED ON THE NEXT PAGE →

01 NOTE 1 Reporting Entity and Summary of Significant Accounting Policies (CONTINUED)

Liabilities Not Covered by Budgetary Resources

Liabilities Not Covered by Budgetary Resources include future environmental cleanup liability, legal claims, other retirement benefits, workers' compensation, annual leave, unearned lease revenue, and lease liability. Liabilities not covered by budgetary resources require future congressional action whereas liabilities covered by budgetary resources reflect prior congressional action. Liabilities that do not require the use of budgetary resources are covered by monetary assets that are not budgetary resources to the entity.

Federal Employee Salary, Leave and Benefits Payable

Annual, Sick and Other Leave

Annual leave is accrued as it is earned; the accrual is reduced as leave is taken. Each year, the balance in the accrued annual leave account is adjusted to reflect current pay rates. To the extent current or prior year appropriations are not available to fund annual leave earned but not taken, funding will be obtained from future financing sources. Sick leave and other types of non-vested leave are expensed as taken.

Insurance Benefits

SFFAS 5, *Accounting for Liabilities of the Federal Government,* requires Government agencies to report the full cost of Federal Employee Health Benefits and the Federal Employees' Group Life Insurance Programs. NASA uses the applicable cost factors and data provided by the Office of Personnel Management to value these liabilities.

Pensions and Post-Employment Benefits Payable

Retirement Benefits

NASA employees participate in the Civil Service Retirement System (CSRS), a defined benefit plan, or the Federal Employees Retirement System (FERS), a defined benefit and contribution plan. For CSRS employees, NASA makes contributions of 7.0 percent of gross pay. For FERS employees, NASA makes contributions to the defined benefit plan of 16.0 percent of gross pay. For employees hired January 1, 2013, and after, NASA contributes 18.4 percent of gross pay. The Agency also contributes 1.0 percent to a thrift savings plan (contribution plan) for each employee and matches employee contributions to this plan up to an additional 4.0 percent of gross pay.

Federal Employees' Compensation Act

A liability is recorded for workers' compensation claims related to the Federal Employees' Compensation Act (FECA), administered by the U.S. Department of Labor. FECA provides income and medical cost protection to covered Federal civilian employees injured on the job, employees who have incurred a work-related occupational disease, and beneficiaries of employees whose death is attributable to a job-related injury or occupational disease. The FECA program initially pays valid claims and subsequently seeks reimbursement from the Federal agencies employing the claimants. The FECA liability includes the actuarial liability for estimated future costs of death benefits, workers' compensation, medical and miscellaneous costs for approved compensation cases.

Public-Private Partnerships (P3)

SFFAS 49, *Public-Private Partnerships: Disclosure Requirements*, requires agencies to assess and disclose P3s (between Federal and the private sector) involving risk-sharing or limited protections and unequitable long-term benefit/cost characteristics greater than five years. Such arrangements or transactions provide a service or an asset for government and/or general public use; where in addition to the sharing of resources, each party shares in the risks and rewards of said arrangements or transactions. In FY 2024, NASA implemented SFFAS 54, *Leases*. If an arrangement meets the criteria of a Lease under SFFAS 54 and a Public-Private Partnership under SFFAS 49, the Net Present Value of the lease payments over the expected term beginning October 1, 2023, are disclosed in Note 11, Leases, and any shared risk under SFFAS 49 is disclosed in Note 18, Public-Private Partnerships.

CONTINUED ON THE NEXT PAGE →

01 NOTE 1 Reporting Entity and Summary of Significant Accounting Policies (CONTINUED)

Reclassification of FY 2024 Information

Certain reclassifications have been made to FY 2024 financial statements, notes, and supplemental information to better align with the Agency's policies and procedures effective in FY 2024 and in accordance with the Treasury Financial Manual and OMB Circular A-136.

Subsequent Events

Subsequent events have been evaluated per guidance in OMB Circular A-136 for FY 2024. The auditors' report date is the date the financial statements are available to be issued and management determined that there are no other items to disclose related to NASA's FY 2024 financial statements.

02 NOTE 2 Fund Balance with Treasury

The FBWT represents the total fund balance recorded in the general ledger for unobligated and obligated balances. Unobligated balances — available is the amount remaining in appropriated funds available for obligation. Unobligated balances — unavailable is primarily comprised of amounts remaining in appropriated funds used only for adjustments to previously recorded obligations. Obligated balance not yet disbursed is the cumulative amount of obligations incurred for which outlays have not been made. Non-Budgetary FBWT is comprised of amounts in non-appropriated funds.

(IN MILLIONS)	2024	2023
Status of Fund Balance with Treasury:		
Unobligated Balances		
Available	$ 2,612	$ 2,466
Unavailable	269	181
Obligated Balance Not Yet Disbursed	14,280	14,702
Non-Budgetary FBWT	25	29
Total	**$ 17,186**	**$ 17,378**

03 NOTE 3 Investments, Net

Investments consist of non-marketable par value intragovernmental securities issued by the Treasury's Bureau of the Fiscal Service. Trust fund balances are invested in Treasury securities, which are purchased at either a premium or discount and redeemed at par value exclusively through Treasury's Federal Investment Branch. The effective-interest method is used to amortize the premium on the bond, and the straight-line method is used to amortize discounts on bills.

Interest receivable on investments was zero in FY 2024 and FY 2023. In addition, NASA did not have any adjustments resulting from the sale of securities prior to maturity or any change in value that was more than temporary.

2024							
(IN MILLIONS)	COST	AMORTIZATION METHOD	AMORTIZED (PREMIUM) DISCOUNT	INTEREST RECEIVABLE	INVESTMENTS, NET	UNREALIZED GAIN/(LOSS)	MARKET VALUE DISCLOSURE
Intragovernmental Securities:		Straight-Line Effective-Interest					
Non-Marketable: Par value	$ 15	4.704 - 4.747%	$ —	$ —	$ 15	$ —	$ 15
Total	**$ 15**		**$ —**	**$ —**	**$ 15**	**$ —**	**$ 15**

2023							
(IN MILLIONS)	COST	AMORTIZATION METHOD	AMORTIZED (PREMIUM) DISCOUNT	INTEREST RECEIVABLE	INVESTMENTS, NET	UNREALIZED GAIN/(LOSS)	MARKET VALUE DISCLOSURE
Intragovernmental Securities:		Straight-Line Effective-Interest					
Non-Marketable: Par value	$ 15	4.676 - 5.441%	$ —	$ —	$ 15	$ —	$ 15
Total	**$ 15**		**$ —**	**$ —**	**$ 15**	**$ —**	**$ 15**

04 NOTE 4 Accounts Receivable, Net

The Accounts Receivable balance represents net valid claims by NASA to cash or other assets of other entities. Intragovernmental Accounts Receivable represents reimbursements due from other Federal entities for goods and services provided by NASA on a reimbursable basis. Accounts Receivable due from the public is the total of miscellaneous debts owed to NASA from employees and/or smaller reimbursements from other non-Federal entities. A periodic evaluation of accounts receivable is performed to estimate any uncollectible amounts based on current status, financial and other relevant characteristics of debtors, and the overall relationship with the debtor. An allowance for uncollectible accounts is recorded for Accounts Receivable due from the public and Federal sector to reduce Accounts Receivable to its net realizable value in accordance with SFFAS 1, *Accounting for Selected Assets and Liabilities.* The total allowance for uncollectible accounts during FY 2024 and FY 2023 is less than one–half million dollars.

2024			
(IN MILLIONS)	ACCOUNTS RECEIVABLE	ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS	NET AMOUNT DUE
Intragovernmental	$ 98	$ —	$ 98
Public	26	—	26
Total	**$ 124**	**$ —**	**$ 124**

2023			
(IN MILLIONS)	ACCOUNTS RECEIVABLE	ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS	NET AMOUNT DUE
Intragovernmental	$ 67	$ —	$ 67
Public	1	—	1
Total	**$ 68**	**$ —**	**$ 68**

05 NOTE 5 Property, Plant, and Equipment, Net

There are no known restrictions to the use or convertibility of NASA PP&E. The composition of NASA PP&E as of September 30, 2024 and 2023 is presented in the table below. Information concerning deferred maintenance and repairs and estimated land acreage is discussed in unaudited required supplementary information.

In FY 2024, NASA implemented the requirements under SFFAS 54, *Leases*. Arrangements that meet the definition of a lease under SFFAS 54, other than short-term and intragovernmental, requires NASA to report a right-to-use lease asset. See Note 11, Leases, for more information.

2024					
(IN MILLIONS)	DEPRECIATION/ AMORTIZATION METHOD	ESTIMATED USEFUL LIFE	COST	ACCUMULATED DEPRECIATION/ AMORTIZATION	BOOK VALUE
PP&E					
Structures, Facilities and Leasehold Improvements	Straight-Line	15-40 Years	$ 12,460	$ (9,603)	$ 2,857
Equipment	Straight-Line	5-20 Years	16,447	(15,541)	906
Work In Progress – Personal Property	N/A	N/A	4,448	—	4,448
Construction In Progress – Real Property	N/A	N/A	968	—	968
Right-to-Use Lease Assets – Real Property	Straight-Line	N/A	27	(4)	23
Internal Use Software	Straight-Line	5 Years	256	(252)	4
Land	N/A	N/A	124	—	124
Internal Use Software In Development	N/A	N/A	1	—	1
Total			**$ 34,731**	**$ (25,400)**	**$ 9,331**

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05 NOTE 5 Property, Plant, and Equipment, Net (CONTINUED)

2023					
(IN MILLIONS)	DEPRECIATION/ AMORTIZATION METHOD	ESTIMATED USEFUL LIFE	COST	ACCUMULATED DEPRECIATION/ AMORTIZATION	BOOK VALUE
PP&E					
Structures, Facilities and Leasehold Improvements	Straight-Line	15-40 Years	$ 12,393	$ (9,417)	$ 2,976
Equipment	Straight-Line	5-20 Years	16,493	(15,427)	1,066
Work In Progress – Personal Property	N/A	N/A	3,527	—	3,527
Construction In Progress – Real Property	N/A	N/A	955	—	955
Internal Use Software	Straight-Line	5 Years	253	(251)	2
Land	N/A	N/A	124	—	124
Internal Use Software In Development	N/A	N/A	1	—	1
Total			**$ 33,746**	**$ (25,095)**	**$ 8,651**

The following table presents the changes in total PP&E and accumulated depreciation from October 1, 2023 to September 30, 2024 and October 1, 2022 to September 30, 2023.

NET PP&E		
(IN MILLIONS)	2024	2023
Balance Beginning of Year, Unadjusted	**$8,651**	**$7,643**
Effects of Implementation of SFFAS 54	27	—
Balance Beginning of Year, Adjusted		
Capitalized Acquisitions	1,227	1,664
CY Amortization of Right-to-Use Lease Assets	(4)	—
Dispositions	(85)	(106)
Depreciation Expense	(492)	(594)
Donations	7	44
Balance End of Year	**$ 9,331**	**$ 8,651**

06 NOTE 6 Stewardship PP&E

Federal agencies are required to classify and report heritage assets, multi-use heritage assets, and stewardship land in accordance with SFFAS 29, *Heritage Assets and Stewardship Land*. Stewardship PP&E have physical characteristics similar to those of PP&E, but differ from PP&E because their value is more intrinsic and not easily determinable in dollars. The only type of stewardship PP&E owned by NASA is heritage assets.

Heritage assets are PP&E that possess one or more of the following characteristics:

- Historical or natural significance;
- Cultural, educational, or artistic (e.g., aesthetic importance);
- Significant architectural characteristics.

There is no minimum dollar threshold for designating PP&E as a heritage asset, and depreciation expense is not taken on these assets. For these reasons, heritage assets (other than multi-use heritage assets) are reported in physical units, rather than with assigned dollar values. In accordance with SFFAS 29, the cost of acquisition, improvement, reconstruction, or renovation of heritage assets is expensed in the period incurred.

Throughout the history of NASA's operations, the Agency has become an owner of historic buildings, structures, historical artifacts, art, and other cultural resources. The protection and conservation of these heritage assets is an

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06 NOTE 6 Stewardship PP&E (CONTINUED)

essential part of the Agency's mission. NASA acquires such assets as a result of donation, or acquires the assets as a result of historically significant items being retired from active service and preserved by the Agency for historic purposes. When capitalized assets are identified as heritage assets and no longer predominately serve NASA's primary operations, their values are removed from the PP&E accounts. Any maintenance costs incurred for the upkeep of the heritage assets are expensed in the period incurred.

Assets that have a heritage function and are used in NASA's day-to-day operations are considered multi-use heritage assets. NASA's multi-use heritage assets consist of items such as launch pads, research labs, and wind tunnels still in operational use. Such assets that meet the capitalization criteria are accounted for as PP&E and depreciated over their estimated useful life in the same manner as other PP&E. Multi-use heritage assets are presented at the individual item level. As of September 30, 2024, and 2023, the total number of NASA's multi-use heritage assets were 507 and 502 respectively.

When PP&E has no use in operations, but is designated as a heritage asset, its cost and accumulated depreciation are reclassified and removed from the PP&E asset accounts. Such assets remain on the record as heritage assets, except where there is legal authority for transfer or sale at which time they are removed from the heritage asset record. Heritage assets are withdrawn when they are disposed or reclassified as multi-use heritage assets. Heritage assets are generally in fair condition suitable for display.

SFFAS 29 provides agencies with considerations for defining individual physical heritage assets units as a collection, or a group of assets, where appropriate. NASA has reviewed and categorized its heritage assets into collection-type and non-collection-type assets. NASA's collection-type heritage assets include Air and Space Displays and Artifacts, and Art as described in the following paragraphs.

- Air and Space Displays and Artifacts collections are classified based on the physical custody of the asset. There are two collections: NASA-held and Contractor-held. Each collection is composed of assorted mementos of historic NASA events. Examples include items from previous missions that have historical significance to NASA and historic mission control artifacts that possess educational value and enhance the public's understanding of NASA's numerous programs.
- Art collection includes artwork inspired by the U.S. Aerospace program, as well as historical books, documents, and other library materials that document NASA's history. This collection is comprised of items created by artists who have contributed their time and talent to record their impressions of the history of the U.S. Aerospace Program through paintings, drawings, written form, and other media. These works of art not only provide a historic record of NASA projects, but they also support NASA's mission by giving the public a new and more comprehensive understanding of advancements in aerospace.

NASA's non-collection-type heritage assets include historic buildings, bunkers, towers, test stands, and properties that are listed or eligible to be listed on the National Register of Historic Places and National Historic Landmarks, and other resources.

- Non-collection-type heritage assets were established by locations for specific reasons and to pursue a variety of goals. Each is home to specific areas of expertise and support different elements of NASA's missions, taking on a unique identity. They provide the public with tangible examples of assets with historical significance or educational importance to NASA programs and missions at each location.

Total physical units, along with the additions and withdrawals for the year ended in September 30, 2023 and 2024, for NASA's heritage assets are displayed in the table to the right:

HERITAGE ASSETS (IN PHYSICAL UNITS)	2023	ADDITIONS	WITHDRAWALS	2024
Collection-type				
Air and Space Displays and Artifacts	2	—	—	2
Art	1	—	—	1
Non-Collection-type				
NASA Locations	9	—	1	8
Total Heritage Assets	**12**	**—**	**1**	**11**

07 NOTE 7 Other Assets

NASA's Other Assets consist of lessor lease receivables, which represent amounts due from lessees under lease agreements where NASA is the lessor. In FY 2024, NASA implemented the requirements under SFFAS 54, *Leases*, which requires NASA to record a lease receivable for the term of the lease at net present value where NASA is the lessor for arrangements other than (1) short-term leases, (2) contracts or agreements that transfer ownership, and (3) intragovernmental leases, including the estimated allowance for uncollectible accounts (See Note 11, Leases, for more information). The value of Other Assets at the end of the period was $697 million, which represent lessor lease receivables as of September 30, 2024. NASA has determined the estimated uncollectible amount is zero due to the nature of arrangements.

08 NOTE 8 Liabilities Not Covered by Budgetary Resources

Liabilities Not Covered by Budgetary Resources include future environmental cleanup liability, legal claims, other retirement benefits, workers' compensation, annual leave, unearned lease revenue, and lease liability. Liabilities not covered by budgetary resources require future congressional action whereas liabilities covered by budgetary resources reflect prior congressional action. Liabilities that do not require the use of budgetary resources are covered by monetary assets that are not budgetary resources to the entity.

The present value of the FECA actuarial liability estimate at year-end was calculated by the Department of Labor using a discount rate of 2.65 percent in FY 2024 and 2.33 percent in FY 2023. This liability includes the estimated future costs for claims incurred but not reported or approved as of the end of each year.

In FY 2024, NASA implemented the requirements of SFFAS 54, *Leases*. This Statement revises the financial reporting standards for Federal lease accounting. The requirements set forth in SFFAS 54 outline the recognition and measurement for lease liabilities and unearned lease revenue. See Note 11, Leases, for information on NASA's lease reporting.

(IN MILLIONS)	2024	2023
Intragovernmental Liabilities:		
Other Liabilities	$ 30	$ 58
Total Intragovernmental Liabilities	**30**	**58**
Federal Employee Salary, Leave and Benefits Payable	281	275
Pensions and Post-Employment Benefits Payable	26	27
Environmental and Disposal Liabilities (Note 9)	2,266	2,184
Other Liabilities	833	99
Total Liabilities Not Covered by Budgetary Resources	**$ 3,436**	**$ 2,643**
Total Liabilities Covered by Budgetary Resources	**$ 4,203**	**$ 4,048**
Total Liabilities Not Requiring Budgetary Resources	**$ 25**	**$ 28**
Total Liabilities	**$ 7,664**	**$ 6,719**

09 NOTE 9 Environmental and Disposal Liabilities

In accordance with guidance issued by FASAB, if an agency is required by Federal, state, and local statutes and regulations to clean up hazardous waste resulting from Federal operations, the amount of cleanup cost, if estimable, must be reported and/or disclosed in the financial statements.

The statutes and regulations most applicable to NASA environmental reporting, clean-up, and monitoring liabilities include: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; the Nuclear Waste Policy Act of 1982; and applicable state and local laws.

NASA assesses the likelihood of required cleanup as probable (more likely than not to occur), reasonably possible (more than remote but less than probable), or remote (slight chance of occurring). If the likelihood of required cleanup is probable and the cost can be reasonably estimated, a liability is recorded in the financial statements. If the likelihood of required cleanup is reasonably possible, the estimated cost of cleanup is disclosed in the notes to the financial statements. If the likelihood of required cleanup is remote, no liability or estimate is recorded or disclosed.

Environmental and Disposal Liabilities Represent Cleanup Costs Resulting From:

- Operations, including facilities obtained from other governmental entities, that have resulted in contamination from waste disposal methods, leaks and spills;
- Other past activity that created a public health or environmental risk, including identifiable costs associated with asbestos abatement; and
- Total cleanup costs associated with the removal, containment, and/or disposal of hazardous wastes or material and/or property at permanent or temporary closure or shutdown of associated PP&E.

Environmental and disposal liabilities as of September 30, 2024 and 2023 were as follows:

(IN MILLIONS)	2024	2023
Environmental Liabilities		
Restoration Projects	$ 2,112	$ 2,070
Asbestos	181	176
End of Life Disposal of Property, Plant, and Equipment	60	59
Total Environmental and Disposal Liabilities	**$ 2,353**	**$ 2,305**
Unfunded Environmental Liabilities (Note 8)	$ 2,266	$ 2,184
Funded Environmental Liabilities	87	121
Total Environmental and Disposal Liabilities	**$ 2,353**	**$ 2,305**

Restoration Projects

NASA recorded a total estimated liability for known restoration projects of $2.112 billion in FY 2024. This was an increase of $42 million from $2.070 billion recorded in FY 2023. The increase in this liability is primarily due to the availability of new or updated information on the extent of contamination and refinements to the estimation methodology. The liability for each restoration project is estimated for a duration of no more than 30 years, except where required by state statutes, regulations, or an agreement.

In addition to the probable cleanup costs for known hazardous conditions recognized in the financial statements, there are other remediation sites where the likelihood of required cleanup for known hazardous conditions is reasonably

09 NOTE 9 Environmental and Disposal Liabilities (CONTINUED)

possible. Remediation costs at certain sites classified as reasonably possible were estimated to be $18 million for FY 2024 and $22 million for FY 2023.

With respect to environmental remediation that NASA considers probable or reasonably possible but not estimable, NASA concluded that either the likelihood of a NASA liability is less than probable but more than remote, or the regulatory drivers and/or technical data that exist are not reliable enough to calculate an estimate.

Asbestos

NASA maintains numerous structures and facilities across each of its Centers that are known to contain asbestos. In accordance with FASAB Technical Bulletin 2006-1, *Recognition and Measurement of Asbestos Related Cleanup Costs*, NASA and other Federal entities are required to recognize a liability for friable and non-friable probable and reasonably estimable asbestos cleanup costs. FASAB Technical Release 10, *Implementation Guidance on Asbestos Cleanup Costs Associated with Facilities and Installed Equipment*, allows for an extrapolation of asbestos cleanup cost estimates for similar properties to develop an Agencywide cleanup estimate. NASA uses actual costs incurred to clean up asbestos in NASA structures and facilities that were recently demolished or fully renovated to estimate the asbestos liability. Agencywide asbestos cleanup cost factors were developed for both structures and facilities measured in square feet and for those not measured in square feet. These cost factors were then extrapolated across applicable NASA structures and facilities. The asbestos cleanup cost liability of $181 million in FY 2024 represents an increase of $5 million compared to the $176 million recorded in FY 2023. This increase was primarily due to changes in cost assumptions based on most recent actual asbestos abatement information.

End of Life Disposal of Property, Plant, and Equipment

Consistent with SFFAS 5, *Accounting for Liabilities of the Federal Government* and with SFFAS 6, *Accounting for Property, Plant, and Equipment*, NASA estimates the anticipated environmental disposal cleanup costs for PP&E. NASA recognizes and records in its financial statements an environmental cleanup liability for end-of-life disposal of PP&E that is probable and measurable.

NASA recorded a total estimated liability for the end-of-life disposal of PP&E of $60 million in FY 2024. This was an increase of $1 million over the $59 million recorded in FY 2023. This estimate includes both facilities with permits that require cleanup and an estimate for all remaining PP&E. As described in the following paragraphs, this estimate also considers end-of-life disposal costs for assets in space, including the ISS and satellites.

The current proposed decommissioning approach for the ISS is to execute a controlled targeted deorbit to a remote ocean location. This is consistent with the approach used to deorbit other space vehicles (e.g., Russia's Progress, Europe's Automated Transfer Vehicle (ATV) and Japan's H-II Transfer Vehicle (HTV)). The documented target reliability for this decommissioning approach is 99 percent. Prior to decommissioning the ISS, any hazardous materials on board the ISS would be removed or jettisoned. As a result, only residual quantities of hazardous, toxic, and radioactive materials would remain prior to the decommissioning.

Based on past experience with the re-entry of satellites, larger portions or fragments of the ISS would be expected to survive the thermal and aerodynamic stresses of re-entry. However, the historical disposal of satellites and vehicles into broad ocean areas with a controlled deorbit has left little evidence of their re-entry. Any remaining contamination in the ISS debris field would not be expected to have a substantive impact on marine life. Therefore, the probability of NASA incurring environmental cleanup costs related to the ISS is remote and no estimate for such costs has been developed or reported in these financial statements.

10 NOTE 10 Other Liabilities

Intragovernmental Other Liabilities primarily represent accrued cost estimates for goods and services performed by Federal trading partners and payroll costs related to employer contributions, payroll taxes payable, and other post-employment benefits. For FY 2024, Intragovernmental Other Liabilities included $29 million in other current liabilities that are not covered by budgetary resources.

Other Accrued Liabilities with public entities primarily consist of the accrual of contractor costs with related budgetary obligations for goods and services performed. The period of performance for contractor contracts typically spans the duration of NASA programs, which could be for a number of years prior to final delivery of the product. In such cases, NASA records a cost accrual throughout the fiscal year as the work is performed.

Other Liabilities with the public include unearned lease revenue and lease liability. In FY 2024, SFFAS 54, Leases, requires that Federal lessees recognize a lease liability and a right-to-use lease asset, and that Federal lessors recognize a lease receivable and unearned revenues at net present value over the lease term, unless the lease meets the definitional criteria of a short-term lease, contract or agreement that transfers ownership, or an intra-governmental lease. See Note 11, Leases, for information on NASA's lease reporting.

Other Liabilities with the public also include the accrual of incurred but not reported grant program costs incurred without related budgetary obligations in support of NASA's research and development and other related activities. Additionally, it represents other liabilities without related budgetary resources which include current obligations for cost to be funded within a year. For FY 2024, Other Liabilities with the public included $102 million in other current liabilities that are not covered by budgetary resources.

	2024			2023		
(IN MILLIONS)	CURRENT	NON-CURRENT	TOTAL	CURRENT	NON-CURRENT	TOTAL
Intragovernmental Liabilities						
Employer Contributions and Payroll Taxes Payable	$ 23	$ —	$ 23	$ 53	$ —	$ 53
Other Liabilities With Related Budgetary Obligations	158	—	158	117	—	117
Other Liabilities Without Related Budgetary Obligations	2	—	2	—	—	—
Other Post-Employment Benefits Due and Payable	4	1	5	5	—	5
Total Intragovernmental Liabilities	**$ 187**	**$ 1**	**$ 188**	**$ 175**	**$ —**	**$ 175**
With the Public Liabilities						
Other Accrued Liabilities	1,902	—	1,902	1,793	—	1,793
Other Liabilities						
Contingent Liabilities	10	—	10	2	—	2
Liability for Non-Fiduciary Deposit Funds and Undeposited Collections	25	—	25	28	—	28
Other Liabilities Without Related Budgetary Obligations	92	—	92	97	—	97
Lease Liability	—	24	24	—	—	—
Unearned Lease Revenue	—	707	707	—	—	—
Total With the Public Liabilities	**$ 2,029**	**$ 731**	**$ 2,760**	**$ 1,920**	**$ —**	**$ 1,920**
Total Other Liabilities	**$ 2,216**	**$ 732**	**$ 2,948**	**$ 2,095**	**$ —**	**$ 2,095**

11 NOTE 11 Leases

In FY 2024, NASA applied the provisions of SFFAS 54, *Leases* (Reference Note 1). For arrangements that meet the definition of a lease under SFFAS 54, other than short-term and intragovernmental, the net present value of future payments or receipts over the term of the lease is recognized and amortized over the term of the arrangement. NASA has arrangements that meet the definition of a lease under SFFAS 54 as both a lessee and a lessor. For leases that also meet the requirements of SFFAS 49, *Public-Private Partnership*, the shared risk is disclosed in Note 18.

A. Lessee

NASA, as a lessee, has lease arrangements where NASA has leased facilities and land to further its mission. These arrangements include leases across the country and abroad for office and warehouse space, other facilities, and land. The leases have a remaining term, including probable options, that range from three to eight years. These arrangements do not implicitly include interest/discount; however, under SFFAS 54 an interest/discount rate based on Treasury marketable securities was utilized. These rates ranged from 4.69% to 4.88% based on the remaining term. NASA recognized $5.4 million of annual lease expense in FY 2024 associated with leases under SFFAS 54.

	(IN MILLIONS)		
FY	PRINCIPAL	INTEREST	TOTAL LIABILITY
2025	$ 3	$ 1	$ 4
2026	4	1	5
2027	4	1	5
2028	3	1	4
2029	3	—	3
2030-34	7	—	7
Total	**$ 24**	**$ 4**	**$ 28**

See Note 5, Property, Plant, and Equipment, Net (Lease Assets and Amortization)

See Note 8, Liabilities Not Covered by Budgetary Resources (Lease Liabilities)

See Note 10, Other Liabilities (Lease Liabilities)

NASA, as a lessee, has intragovernmental lease arrangements for office space and associated parking. The leases have a remaining term, including probable options, that range from three to eight years.

	(IN MILLIONS)
ASSET CLASS	ANNUAL EXPENSE
Buildings/Other Structures	$ 38
Total	**$ 38**

B. Lessor

NASA, as a Lessor, has lease arrangements with non-intragovernmental entities for use of NASA's property for land, buildings, and other structures and facilities. The leases are generally executed under our enhanced use lease (51 U.S.C. § 20145), or National Historic Preservation Act (54 U.S.C. § 306121) authorities and are for land or facilities that are non-excess but underutilized. The leases have a remaining term, including probable options, that range from three years to eighty-eight years. These arrangements do not implicitly include interest/discount, however, under SFFAS 54 an interest/discount rate based on either a rate specified in the arrangement, or the Treasury marketable securities was utilized based on the remaining term of the arrangement. The interest/discount rates ranged from 1.7% to 8.35%. Arrangements that include sub-lease provisions based on future performance of the lessee are considered variable payments and are not included in the lease receivable and are recognized as revenue in the period received. NASA recognized $48.6 million of annual lease revenue in FY 2024 associated with leases under SFFAS 54.

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11 NOTE 11 Leases (CONTINUED)

FY	(IN MILLIONS) PRINCIPAL	INTEREST	TOTAL RECEIVABLE
2025	$ 5	$ 34	$ 39
2026	6	33	39
2027	5	33	38
2028	4	33	37
2029	3	33	36
2030-34	13	161	174
2035-39	14	157	171
2040-44	19	152	171
2045-49	22	147	169
2050-54	25	141	166
2055-59	34	134	168
2060-64	45	125	170
2065-69	55	113	168
2070-74	52	101	153
2075-79	52	88	140
2080-84	25	79	104
2085-89	32	73	105
2090-94	42	63	105
2095-99	49	52	101
2100-04	75	36	111
2105-09	89	16	105
2110-14	31	1	32
Total	**$ 697**	**$ 1,805**	**$ 2,502**
Allowance: Lease Receivable	—	—	—
Net:	**$ 697**	**$ 1,805**	**$ 2,502**

See Note 7, Other Assets (Lease Receivable)

See Note 8, Liabilities Not Covered by Budgetary Resources (Lease Liabilities)

See Note 10, Other Liabilities (Lease Liabilities)

See Note 18, Public-Private Partnerships (Leases that also meet the requirements under SFFAS 49)

NASA, as a lessor, does not have any material intragovernmental lease arrangements.

12 NOTE 12 Commitments and Contingencies

NASA is a party in various administrative proceedings, court actions (including tort suits), and claims. For cases in which management and legal counsel believe it is probable that the outcomes will result in a loss to NASA, contingent liabilities are recorded. There are certain cases where the likelihood of loss is deemed reasonably possible. A contingent liability is not required to be recorded for these cases; however, the estimated range of loss is disclosed below.

Additionally, there are cases reviewed by legal counsel where the likelihood of loss is deemed remote. A contingent liability is not required to be disclosed for these cases.

	2024			2023		
		ESTIMATED RANGE OF LOSS			ESTIMATED RANGE OF LOSS	
(IN MILLIONS)	ACCRUED LIABILITIES	LOWER END	UPPER END	ACCRUED LIABILITIES	LOWER END	UPPER END
Legal Contingencies:						
Probable	$ 10	$ —	$ —	$ 2	$ —	$ —
Reasonably Possible		$ —	$ —		$ 12	$ 13

NOTE 13

13 Explanation of Differences Between the SBR and the Budget of the U.S. Government

The FY 2026 Budget of the United States Government (President's Budget), which presents the actual amounts for the year ended September 30, 2024, has not been published as of the issue date of these financial statements. The FY 2026 Budget of the United States Government will be published on a later date at https://www.whitehouse.gov/omb/budget (Unaudited).

NASA reconciled the amounts of the FY 2023 column on the Statement of Budgetary Resources (SBR) to the actual amounts for FY 2023 in the FY 2025 President's Budget for budgetary resources, new obligations, upward adjustments (total), distributed offsetting receipts, and net outlays as presented below.

(IN MILLIONS)	TOTAL BUDGETARY RESOURCES	NEW OBLIGATIONS & UPWARD ADJUSTMENTS (TOTAL)	DISTRIBUTED OFFSETTING RECEIPTS	NET OUTLAYS
Combined Statement of Budgetary Resources	$ 30,923	$ 28,276	$ (7)	$ 25,326
Included on SBR, not in President's Budget				
Expired Accounts	(318)	(142)	—	—
Distributed Offsetting Receipts	—	—	7	—
Budget of the United States Government	**$ 30,605**	**$ 28,134**	**$ —**	**$ 25,326**

NOTE 14

14 Undelivered Orders at the End of the Period

Undelivered Orders represent the amount of goods and/or services ordered to perform NASA's mission objectives, which have not been received. Undelivered Orders at the end of the period totaled $12 billion as of September 30, 2024 and $13 billion as of September 30, 2023.

(IN MILLIONS)	2024	2023
Federal		
Unpaid	$ 601	$ 706
Paid	212	101
Total	813	807
Nonfederal		
Unpaid	$ 11,355	$ 12,076
Paid	46	26
Total	11,401	12,102
Total Undelivered Orders	**$ 12,214**	**$ 12,909**

15 NOTE 15 Reconciliation of Net Cost to Net Outlays

Budgetary accounting is used for planning and control purposes and relates to both the receipt and use of cash, as well as reporting the Federal deficit. Financial accounting is intended to provide a picture of the Government's financial operations and financial position on an accrual basis. The accrual basis includes information about costs arising from the consumption of assets and the incurrence of liabilities. The reconciliation of net outlays is presented on a budgetary basis, and the net cost is presented on an accrual basis, which provides an explanation of the relationship between budgetary and financial accounting information. The reconciliation serves not only to identify costs in the past and those paid in the future, but also to assure integrity between budgetary and financial accounting. The analysis below illustrates this reconciliation by listing the key differences between net cost and net outlays.

2024			
(IN MILLIONS)	INTRAGOVERNMENTAL	WITH THE PUBLIC	TOTAL
Net Cost	**$ 371**	**$ 24,363**	**$ 24,734**
Components of Net Cost not part of the Budgetary Outlays			
Property, plant, and equipment depreciation expense	—	(492)	(492)
Property, plant, and equipment disposals and revaluations	—	(85)	(85)
Lessee lease amortization	—	(4)	(4)
Lease expense	—	(3)	(3)
Applied overhead/cost capitalization offset	—	1,227	1,227
Increase/(Decrease) in Assets not affecting Budgetary Outlays:			
Accounts receivable, net	30	25	55
Other assets	111	20	131
(Increase)/Decrease in Liabilities not affecting Budgetary Outlays:			
Accounts payable	7	(16)	(9)
Lessee lease liability	—	(24)	(24)
Environmental and disposal liabilities	—	(49)	(49)
Federal employee salary, leave, and benefits payable	—	(60)	(60)
Pensions and Post-Employment Benefits Payable	—	1	1
Other liabilities	(11)	(94)	(105)
Financing Sources:			
Imputed cost	(292)	—	(292)
Total Components of Net Cost not part of the Budgetary Outlays	(155)	446	291
Components of the Budgetary Outlays not part of Net Cost:			
Financing Sources:			
Transfers out (in) without reimbursements	(20)	—	(20)
Total Components of the Budgetary Outlays not part of Net Cost	(20)	—	(20)
Misc Items			
Distributed offsetting receipts	(4)	—	(4)
Recognition of right-to-use lease assets	—	27	27
Custodial/Non-exchange revenue	(1)	(13)	(14)
Appropriated receipts for Trust/Special Funds	1	—	1
Total Other Reconciling Items	(4)	14	10
Total Net Outlays (Calculated Total)	**$ 192**	**$ 24,823**	**$ 25,015**
Budgetary Agency Outlays, net			**$ 25,015**

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15 NOTE 15 Reconciliation of Net Cost to Net Outlays (CONTINUED)

2023			
(IN MILLIONS)	INTRAGOVERNMENTAL	WITH THE PUBLIC	TOTAL
Net Cost	**$ 640**	**$ 23,976**	**$ 24,616**
Components of Net Cost not part of the Budgetary Outlays			
Property, plant, and equipment depreciation expense	—	(593)	(593)
Property, plant, and equipment disposals and revaluations	—	(106)	(106)
Applied overhead/cost capitalization offset	—	1,664	1,664
Donations	—	44	44
Gains/Losses on all other investments	—	—	—
Increase/(Decrease) in Assets not affecting Budgetary Outlays:			
Accounts receivable, net	11	—	11
Other assets	(32)	(6)	(38)
(Increase)/Decrease in Liabilities not affecting Budgetary Outlays:			
Accounts payable	(17)	110	93
Environmental and disposal liabilities	—	(175)	(175)
Federal employee benefits payable	—	(1)	(1)
Other liabilities	41	46	87
Financing Sources:			
Imputed cost	(231)	—	(231)
Total Components of Net Cost not part of the Budgetary Outlays	(228)	983	755
Components of the Budgetary Outlays not part of Net Cost:			
Financing Sources:			
Donated revenue	—	—	—
Transfers out (in) without reimbursements	—	—	—
Total Components of the Budgetary Outlays not part of Net Cost	—	—	—
Misc Items			
Distributed offsetting receipts	(7)	—	(7)
Custodial/Non-exchange revenue	(1)	(44)	(45)
Other temporary timing differences	—	—	—
Appropriated receipts for Trust/Special Funds	—	—	—
Total Other Reconciling Items	(8)	(44)	(52)
Total Net Outlays (Calculated Total)	**$ 404**	**$ 24,915**	**$ 25,319**
Budgetary Agency Outlays, net			**$ 25,319**

16 NOTE 16 Disclosure Entity

The Jet Propulsion Laboratory (JPL) is a NASA-owned facility which serves as a Federally Funded Research and Development Center (FFRDC). The facility commenced activities in the mid-1930s and at that time was sponsored by the U.S. Army to develop rocket technology and missile systems.

The California Institute of Technology (Caltech), a private, not-for-profit 501(c)(3) university, manages JPL pursuant

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16 NOTE 16 Disclosure Entity (CONTINUED)

to a sole-source, five-year, FAR-based contract with NASA. The value of NASA's Caltech contract for FY 2024 was $3 billion. Under this contract, NASA issues task orders to Caltech for various research programs and projects conducted at JPL. The contract is subject to the usual FAR-based Federal contract oversight and reporting requirements. Caltech has managed JPL as a NASA FFRDC since 1959.

Caltech and NASA's relationship at JPL is governed by the terms and conditions of their contract which does not give NASA responsibility for or insight into Caltech's business objectives or operations at JPL. JPL staff is comprised of Caltech employees and contractors, while NASA has a resident office at the facility staffed by Federal managers who administer the NASA/Caltech contract. The physical plant and equipment used to conduct operations under the contract are Government furnished property and material, made available to Caltech for the performance of its contract with NASA, and includes contractor-acquired property. The work performed by JPL for NASA is funded by NASA as part of one or more of NASA's major programs and supports NASA's missions and programs. Every year, JPL issues a review of its accomplishments which can be viewed in the JPL Annual Reports.[1]

NASA has the unilateral authority to establish or amend the fundamental purpose and mission of activities at its JPL FFRDC. NASA's contract with Caltech reflects and incorporates NASA's authority into its terms and conditions. NASA also has the unilateral authority to orderly phase down and close its FFRDC and thus, the NASA contract with Caltech. As such, the contract terms allow NASA to close the FFRDC, transfer sponsorship of the FFRDC to another sponsor (Federal agency), transition the FFRDC to another contractor (e.g., another university), or renew the contract. In the event of a termination of its contract with Caltech for the management of JPL, JPL would only receive costs that NASA deems allowable, allocable, and reasonable under the contract's terms.

17 NOTE 17 Reclassification of Financial Statement Line Items for Financial Report Compilation Process

To prepare the *Financial Report of the U.S. Government (Financial Report)*, the Department of the Treasury requires agencies to submit an adjusted trial balance, which is a listing of amounts by U.S. Standard General Ledger account that appear in the financial statements. Treasury uses the trial balance information reported in the Government-wide Treasury Account Symbol Adjusted Trial Balance System (GTAS) to develop a Reclassified Statement of Net Cost and a Reclassified Statement of Changes in Net Position. Treasury eliminates intragovernmental balances from the reclassified statements and aggregates lines with the same title to develop the Financial Report statements. This note shows the Agency's financial statements and the Agency's reclassified statements prior to elimination of intragovernmental balances and prior to aggregation of repeated Financial Report line items. A copy of the 2023 Financial Report can be found here: Financial Report of the United States Government - Financial Statements of the United States Government for the Fiscal Years Ended September 30, 2023, and 2022 (treasury.gov) and a copy of the 2024 *Financial Report* will be posted to this site as soon as it is released.

The term "intragovernmental" is used in this note to refer to amounts that result from other components of the Federal Government.

The term "non-federal" is used in this note to refer to Federal Government amounts that result from transactions with non-federal entities. These include transactions with individuals, businesses, non-profit entities, and State, local, and foreign governments. The Agency does not have funds from dedicated collections.

[1] JPL Annual Reports (https://www.jpl.nasa.gov/annual-report)

NOTE 17

17 Reclassification of Financial Statement Line Items for Financial Report Compilation Process (CONTINUED)

FY 2024 NASA STATEMENT OF NET COST		LINE ITEMS USED TO PREPARE FY 2024 GOVERNMENT-WIDE STATEMENT OF NET COST	
FINANCIAL STATEMENT LINE	AMOUNTS (IN MILLIONS)	AMOUNTS (IN MILLIONS)	RECLASSIFIED FINANCIAL STATEMENT LINE
			Gross Cost
		24,784	Non-Federal Gross Cost
		24,784	**Total Non-Federal Gross Cost**
			Federal Gross Cost
Gross Costs	26,551	669	Benefit Program Costs
		292	Imputed Costs
		612	Buy/Sell Costs
		194	Other Expenses (without reciprocals)
		1,767	**Total Federal Gross Cost**
Total Gross Costs	26,551	26,551	***Department Total Gross Cost***
			Earned Revenue
		421	Non-Federal Earned Revenue
Earned Revenue	1,817		**Federal Earned Revenue**
		1,396	Buy/Sell Revenue (Exchange)
		1,396	**Total Federal Earned Revenue**
Total Earned Revenue	1,817	1,817	***Department Total Earned Revenue***
Net Cost	**$ 24,734**	**$ 24,734**	**Net Cost of Operations**

FY 2024 NASA STATEMENT OF CHANGES IN NET POSITION		LINE ITEMS USED TO PREPARE FY 2024 GOVERNMENT-WIDE STATEMENT OF CHANGES IN NET POSITION	
FINANCIAL STATEMENT LINE	AMOUNTS (IN MILLIONS)	AMOUNTS (IN MILLIONS)	RECLASSIFIED FINANCIAL STATEMENT LINE
Unexpended Appropriations			
Beginning Balance	13,333	13,333	Net Position, Beginning of Period
Appropriations Received	24,875	24,827	Appropriations Received as Adjusted
Other Adjustments	(48)		
Appropriations Transferred-In/Out	4	4	Non-Expenditure Transfers-In of Unexpended Appropriations and Financing Sources
Appropriations Used	(25,007)	(25,007)	Appropriations Used
Net Change in Unexpended Appropriations	(176)	(176)	
Total Unexpended Appropriations	**13,157**	**13,157**	
Cumulative Results from Operations			
Beginning Balance	6,083	6,083	Net Position, Beginning of Period
Appropriations Used	25,007	25,007	Appropriations Expended
Non-Exchange Revenue	27	38	Non-Federal Non-Exchange Revenue/Other Taxes and Receipts
Donations and Forfeitures of Property	8	1	Federal Non-Exchange Revenue
		(4)	Non-Entity Collections Transferred to the General Fund of the U.S. Government
Imputed Financing	292	292	Imputed Financing Sources
Net Cost of Operations	(24,734)	(24,734)	Net Cost of Operations
Net Change in Cumulative Results of Operations	600	600	
Total Cumulative Results of Operations	**6,683**	**6,683**	
Net Position	**$ 19,840**	**$ 19,840**	**Net Position, End of Period**

18 NOTE 18 Public-Private Partnerships

NASA engages in various relationships with private entities in furtherance of NASA's Mission and Strategic Goals and describes many of these relationships as "public-private partnerships." The terminology is used informally to describe working relationships between NASA, its contractors, and industry partners rather than used to describe a financial benefit or risk sharing relationship as set forth in the criteria and characteristics of SFFAS 49, *Public-Private Partnerships: Disclosure Requirements*. Many of these relationships cover Science, Technology, Engineering, and Mathematics (STEM) activities; research and development; technology transfer; commercialization of space capabilities and operations; and other mission projects, but do not otherwise meet SFFAS 49 requirements.

While these relationships support education, innovation, research, and economic growth to further the Nation's space program and other missions, NASA also collaborates with private entities for commercial space capabilities in accordance with the National Space Policy of the United States (the latest iteration of which was issued December 9, 2020)[1]. The National Space Policy establishes principles and goals for the Nation's Space Programs. One such principle provides for "A robust, innovative, and competitive commercial space sector is the source of continued progress and sustained United States leadership in space" and states that "The United States remains committed to encouraging and facilitating the continued growth of a domestic commercial space sector that is globally competitive, supports national interests, and advances United States leadership in the generation of new markets and innovation driven entrepreneurship." Under this principle and related goal to "promote and incentivize private industry to facilitate the creation of new global and domestic markets for United States space goods and services, and strengthen and preserve the position of the United States as the global partner of choice for international space commerce," NASA has pursued collaborations for commercial space capabilities for human and cargo transportation providers, commercialization of other low Earth orbit activities, and for sustainability of the ISS National Lab, to name a few.

NASA utilizes its organic authorization, 51 U.S.C. § 20101 et seq., and other authorities, along with its procurement contract authority (as promulgated in regulation via the FAR and NASA FAR Supplement (NFS) requirements) to execute agreement instruments with its partners. These relationships may be initiated and established through various outreach methods, such as a NASA announcement of collaboration opportunity, request for proposal, request for information, other competitive announcement, or direct contact by a partner. For the initial partnership arrangements, NASA provides expertise and funding to enable the development and advancement of integrated space capabilities. After the initial arrangement milestones are verified and certified, NASA awards FAR based service contracts with FAR/NFS clauses, such as, limitation of funds, liability, and termination, to protect NASA. Pursuant to the terms and conditions set forth in these contracts, the contractor's liability for loss or damage to Government property during performance of contract activities is limited for commercial space. NASA continues to use these arrangements, and by way of these, NASA has established safe, reliable, and cost-effective access to space with the commercial space sector. NASA does not consider these types of arrangements to meet the criteria and characteristics for P3 disclosure as there is no demonstrated shared risk and reward nor a NASA commitment to guarantee success.

Leveraging this model, NASA has also awarded FAR based firm fixed price contracts under a competitive broad area announcement procurement entitled "Next Space Technologies for Exploration Partnerships" (NextSTEP). NextSTEP is a competitive acquisition that seeks to meet NASA needs via commercial development of deep space exploration capabilities to support more extensive human spaceflight missions in and beyond cislunar space—the space, near Earth, that extends just beyond the Moon. The capabilities developed under these contracts include components in support of the Human Landing System (HLS), Gateway, and development of other deep space exploration technologies to support extensive human spaceflight missions. In the Offerors' proposals, they identified corporate contributions that were evaluated as part of the awarded contracts. NASA does not have a requirement to repay the corporate contributions and does not guarantee contractor financing under the terms and conditions in the contracts. NASA has also made Government resources available under these contracts to support contract development activities through Government task agreements (GTAs), but this activity is optional. Although contractors may elect to use a GTA, fulfillment of the contract is not predicated on government resources being provided. The contracts contain FAR clauses to protect NASA's

[1] https://trumpwhitehouse.archives.gov/wp-content/uploads/2020/12/National-Space-Policy.pdf

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18 NOTE 18 Public-Private Partnerships (CONTINUED)

interests including limitation of funds, termination, and liability. Similar to the above arrangements, NASA does not consider these to meet the criteria and characteristics for P3 disclosure.

Although the prior discussed arrangements do not warrant disclosure, NASA has determined two other categories as meeting the P3 disclosure requirements and considered, in aggregate, to be of material and qualitative value: energy savings performance/utility energy service contracts and leases. NASA has awarded energy savings performance contracts (ESPCs) and utility energy service contracts (UESCs) under National Energy Conservation Policy Act (42 U.S.C. § 8287), as amended, and Energy Policy Act of 1992, P.L. 102-486 (codified as 42 U.S.C. § 8256) to reduce energy, water and/or related operating costs and to assist agencies with upgrading aging infrastructure, systems, and equipment. These contracts do not require up-front capital costs or special appropriations from Congress and are repaid over time to the provider. Further information and detail are provided below in item A.

NASA has executed real estate arrangements as part of commercialization of space initiatives and research and development. Solicitations are used to identify a potential partner's interest for NASA facilities or land that are non-excess but underutilized by the Agency, which may be used to further NASA's mission. These facilities or land use arrangements outline responsibilities, terms, and conditions and are generally executed under our enhanced use lease (51 U.S.C. § 20145) or the National Historic Preservation Act (54 U.S.C. § 306121). Further information and detail are provided below in item B.

A. Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs):

NASA has entered into ESPCs and UESCs to procure energy savings and facility improvements. These contracts do not require up-front capital costs or special appropriations from Congress and by statute, cannot exceed 25 years. Under these contracts, NASA retains the additional cost savings and receives title to installed goods, equipment, and improvements.

Federal agencies are authorized to enter into ESPCs under the National Energy Conservation Policy Act (42 U.S.C. § 8287), as amended. An ESPC is a partnership between an agency and an energy service company (ESCO) to reduce energy, water and/or related operating costs and to assist agencies with upgrading aging infrastructure, systems, and equipment. Upon conducting a comprehensive audit, the ESCO designs and constructs a project that meets the Agency's needs and arranges financing to pay for the project. The ESCO guarantees that the improvements will generate sufficient energy cost savings to pay for the project over the term of the contract. NASA currently has ESPCs with an expected life based on contract terms of 16 to 24 years expected life and payment period. NASA funds the contract and pays the contractor directly, except in two instances where payment is made on behalf of NASA by the contract administrator who has been designated responsibility for contract operations administration over the contract term.

Authorized by the Energy Policy Act of 1992, P.L. 102-486 (codified as 42 U.S.C. § 8256), UESC is a limited-source contract between a Federal agency and its serving utility for energy and water-efficiency improvements and demand-reduction services, allowing Federal agencies to pay for the services over time, either on their utility bill or through a separate agreement. NASA currently has UESCs with an expected life based on contract terms of 14 to 17 years expected life and payment period. NASA funds the contracts and pays the contractor directly.

Under OMB Memorandum M-98-13 and M-12-21, ESPC and UESC repayments can be funded on an annual basis. ESPCs and UESCs can be terminated for convenience in part or in full. In the event of termination, NASA may be responsible for outstanding loan balances and early termination or payment fees. Measurement and verification of energy savings is required under ESPCs and UESCs. The benefits of ESPCs and UESCs include:

- Infrastructure improvements that pay for themselves over time; and,
- Ability to install longer payback energy and water conservation measures by bundling savings.

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18 NOTE 18 Public-Private Partnerships (CONTINUED)

PUBLIC-PRIVATE PARTNERSHIPS AGREEMENTS/ CONTRACTS (IN MILLIONS)	2024			2023		
	ACTUAL AMOUNT PAID IN FY	ESTIMATED AMOUNT TO BE PAID IN FUTURE YEARS	ESTIMATED CUMULATIVE AMOUNT TO BE PAID OVER EXPECTED LIFE OF ARRANGEMENT	ACTUAL AMOUNT PAID IN FY	ESTIMATED AMOUNT TO BE PAID IN FUTURE YEARS	ESTIMATED CUMULATIVE AMOUNT TO BE PAID OVER EXPECTED LIFE OF ARRANGEMENT
ESPC	$ 14	$ 189	$ 302	$ 14	$ 204	$ 302
UESC	5	41	87	6	46	87
Estimated Total	**$ 19**	**$ 230**	**$ 389**	**$ 20**	**$ 250**	**$ 389**

B. Leases

NASA's Enhanced Use Lease (EUL) and National Historic Preservation Act (NHPA) programs allow NASA to manage non-excess, underutilized property through leasing arrangements to private sector organizations. Title 51 U.S.C. § 20145, *Lease of Non-Excess Property*, authorizes NASA to lease real property under NASA's control or jurisdiction to other public and private entities on a long-term basis in return for cash consideration at fair market value. NASA's previous EUL authority expired on December 31, 2021, and was extended until December 31, 2022, through passage of the Omnibus Bill under H.R. 2471-1065, and was most recently extended until December 31, 2032, under P.L. 117-80, effective August 9, 2022. NASA's previous EUL authority under 42 U.S.C. § 2459j (2007) permitted in-kind consideration. A few of NASA's leases executed under the previous EUL authority included in-kind consideration that was negotiated as part of the terms and conditions of the arrangements. Title 54 U.S.C. § 306121 (P.L. 89-665 October 15, 1966), *Lease or Exchange* (NHPA), authorizes Federal agencies to lease historic property owned by the agency to any person or organization or exchange its property with comparable historic property, if determined that the lease or exchange will adequately ensure the preservation of the historic property. Title 40 U.S.C. § 1314, *Easements*, allows Federal agencies to grant real property owned by the agency to any person or organization that is not adverse to the interest of the Government with monetary or other consideration, including an interest in real property.

NASA's EUL and NHPA leases serve to provide space to third parties on NASA land or a NASA Facility. NASA's EUL and NHPA leases range from 5 to 96 years expected life, i.e., base term of the lease and amendments plus extensions that can be reasonably anticipated and represent the period in which receipts are expected to be received directly from the partner. NASA's EUL and NHPA leases include waivers of liability, tenant insurance requirements, and tenant environmental responsibilities to protect NASA's interest and mitigate potential risk of loss.

Benefits to NASA from the EUL and NHPA program include:

- Revenue in the form of lease payments; and
- Cost savings, (i.e., operations and maintenance associated with the leased assets that would normally be paid by NASA under normal operations).

Under the EUL and NHPA program, NASA does not:

- Provide any kind of guarantee for the purpose of private-party financing; or,
- Allow for payment from NASA to the partner.

NASA will only pursue termination of a lease commenced under EUL or NHPA prior to the end of the lease term in the event of default, noncompliance, nonperformance by the lessee, or for reasons of force majeure or act of Congress. When termination does occur, NASA does not owe or pay any fees, costs, expenses or penalties, and the lessee bears all risk. Upon termination, NASA would assume responsibility for operations and maintenance of the leasehold or divestment through normal program and budget planning processes. In most cases, the tenants are required to remove any additions or improvements and return the leasehold to its original state unless otherwise

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18 NOTE 18 Public-Private Partnerships (CONTINUED)

agreed to under the terms of the arrangement. A few of NASA's long-term leases provide for transfer of constructed assets to NASA or a third-party entity upon termination. Under these leases NASA would assume responsibility for operations and maintenance, divestment, or establishment of a new lease based on the current need of the assets at the time of termination. Based on the current state of these arrangements, NASA does not anticipate that this would be likely in the near future and does not consider this to be any more than a remote risk of loss.

NASA's leases or easements that include in-kind consideration provided by the tenant were negotiated into the terms and conditions of the lease or easement. In accordance with the specified terms, NASA may assume responsibility for operations of infrastructure improvements provided by the tenant under normal program and budget planning processes, may seek an alternative tenant, or may request the property be returned to its original state.

NASA has identified a limited number of leases where development by the tenant on the leasehold could impact Center infrastructure and operations such as water, sewer, maintenance, or security operations based on increased capacity. NASA would negotiate any potential impacts with existing providers and the tenant. NASA currently has a lease that requires additional Center infrastructure capacity based on the original terms of the lease; however, the lease is in the transition phase and tenant development on the leasehold has not started. NASA is continuing to research alternative options to mitigate the potential risks.

In FY 2024, NASA implemented the requirements under SFFAS 54 for Leases (Reference Note 1). Arrangements meeting the criteria of a Lease under SFFAS 54 are disclosed in Note 11, Leases, based on the Net Present Value of future lease payments. For arrangements that meet the requirements of a lease under SFFAS 54 and a Public-Private Partnership under SFFAS 49, the table below discloses the prior year estimated amounts associated with the implementation of SFFAS 54 for Leases (Note 11), actual amounts received in the prior year were not impacted. For arrangements that have a future commencement date, these are included in the P3 disclosure below and are not included in the SFFAS 54 Lease Implementation amount.

PUBLIC-PRIVATE PARTNERSHIPS AGREEMENTS/CONTRACTS (IN MILLIONS)	2024			
	ACTUAL AMOUNT RECEIVED IN FY	ESTIMATED AMOUNT TO BE RECEIVED IN FUTURE YEARS	ESTIMATED CUMULATIVE AMOUNT TO BE RECEIVED OVER EXPECTED LIFE OF ARRANGEMENT	ESTIMATED CUMULATIVE IN KIND CONSIDERATION
EUL	$ 1	$ 567	$ 569	$ 20
NHPA	—	14	14	—
Easement Authority	—	—	—	2
Estimated Total	**$ 1**	**$ 581**	**$ 583**	**$ 22**

PUBLIC-PRIVATE PARTNERSHIPS AGREEMENTS/CONTRACTS (IN MILLIONS)	2023			
	ACTUAL AMOUNT RECEIVED IN FY	ESTIMATED AMOUNT TO BE RECEIVED IN FUTURE YEARS	ESTIMATED CUMULATIVE AMOUNT TO BE RECEIVED OVER EXPECTED LIFE OF ARRANGEMENT	ESTIMATED CUMULATIVE IN KIND CONSIDERATION
EUL	$ 12	$ 935	$ 1,020	$ 27
NHPA	16	1,044	1,160	—
Estimated Subtotal	**$ 28**	**$ 1,979**	**$ 2,180**	**$ 27**
SFFAS 54, Lease Implementation		(1,411)	(1,610)	(7)
Estimated Total	**$ 28**	**$ 568**	**$ 570**	**$ 20**

REQUIRED SUPPLEMENTARY INFORMATION

Combining Statements of Budgetary Resources For the Fiscal Year Ended September 30, 2024

(IN MILLIONS)	SPACE OPERATIONS MISSION	SCIENCE MISSION	EXPLORATION MISSION	AERONAUTICS MISSION	SAFETY, SECURITY AND MISSION SERVICES	STEM ENGAGEMENT MISSION
Budgetary Resources:						
Unobligated Balance from Prior Year Budget Authority, Net	$ 424	$ 844	$ 321	$ 68	$ 1,017	$ 9
Appropriations	4,221	7,325	7,648	935	3,127	143
Spending Authority from Offsetting Collections	—	—	—	—	1,512	—
Total Budgetary Resources	**$ 4,645**	**$ 8,169**	**$ 7,969**	**$ 1,003**	**$ 5,656**	**$ 152**
Status of Budgetary Resources:						
New Obligations and Upward Adjustments (Total)	$ 4,339	$ 7,263	$ 7,827	$ 974	$ 4,833	$ 141
Unobligated Balance, End of Year:						
Apportioned, Unexpired Accounts	229	779	127	26	809	6
Unapportioned, Unexpired Accounts	1	84	—	—	8	—
Unexpired Unobligated Balance, End of Year	230	863	127	26	817	6
Expired Unobligated Balance, End of Year	76	43	15	3	6	5
Unobligated Balance, End of Year (Total)	306	906	142	29	823	11
Total Budgetary Resources	**$ 4,645**	**$ 8,169**	**$ 7,969**	**$ 1,003**	**$ 5,656**	**$ 152**
Outlays, Net:						
Outlays, Net (Total)	$ 4,340	$ 7,706	$ 7,203	$ 947	$ 3,099	$ 145
Distributed Offsetting Receipts (—)	—	—	—	—	—	—
Agency Outlays, Net	**$ 4,340**	**$ 7,706**	**$ 7,203**	**$ 947**	**$ 3,099**	**$ 145**

(IN MILLIONS)	OFFICE OF INSPECTOR GENERAL	SPACE TECHNOLOGY MISSION	CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION	OTHER	TOTAL
Budgetary Resources:					
Unobligated Balance from Prior Year Budget Authority, Net	$ 5	$ 68	$ 500	$ 79	$ 3,335
Appropriations	48	1,100	326	3	24,876
Spending Authority from Offsetting Collections	—	—	20	308	1,840
Total Budgetary Resources	**$ 53**	**$ 1,168**	**$ 846**	**$ 390**	**$ 30,051**
Status of Budgetary Resources:					
New Obligations and Upward Adjustments (Total)	$ 48	$ 1,090	$ 335	$ 320	$ 27,170
Unobligated Balance, End of Year:					
Apportioned, Unexpired Accounts	—	70	509	57	2,612
Unapportioned, Unexpired Accounts	—	—	1	3	97
Unexpired Unobligated Balance, End of Year	—	70	510	60	2,709
Expired Unobligated Balance, End of Year	5	8	1	10	172
Unobligated Balance, End of Year (Total)	5	78	511	70	2,881
Total Budgetary Resources	**$ 53**	**$ 1,168**	**$ 846**	**$ 390**	**$ 30,051**
Outlays, Net:					
Outlays, Net (Total)	$ 47	$ 1,150	$ 370	$ 12	$ 25,019
Distributed Offsetting Receipts (—)	—	—	—	(4)	(4)
Agency Outlays, Net	**$ 47**	**$ 1,150**	**$ 370**	**$ 8**	**$ 25,015**

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REQUIRED SUPPLEMENTARY INFORMATION

Combining Statements of Budgetary Resources For the Fiscal Year Ended September 30, 2023

(IN MILLIONS)	SPACE OPERATIONS MISSION	SCIENCE MISSION	EXPLORATION MISSION	AERONAUTICS MISSION	SAFETY, SECURITY AND MISSION SERVICES	STEM ENGAGEMENT MISSION
Budgetary Resources:						
Unobligated Balance from Prior Year Budget Authority, Net	$ 521	$ 883	$ 301	$ 45	$ 967	$ 18
Appropriations	4,267	7,791	7,447	935	3,128	144
Spending Authority from Offsetting Collections	—	—	—	—	1,761	—
Total Budgetary Resources	**$ 4,788**	**$ 8,674**	**$ 7,748**	**$ 980**	**$ 5,856**	**$ 162**
Status of Budgetary Resources:						
New Obligations and Upward Adjustments (Total)	$ 4,546	$ 7,925	$ 7,623	$ 944	$ 4,933	$ 154
Unobligated Balance, End of Year:						
Apportioned, Unexpired Accounts	167	703	108	33	918	4
Unapportioned, Unexpired Accounts	1	—	—	—	—	—
Unexpired Unobligated Balance, End of Year	168	703	108	33	918	4
Expired Unobligated Balance, End of Year	74	46	17	3	5	4
Unobligated Balance, End of Year (Total)	242	749	125	36	923	8
Total Budgetary Resources	**$ 4,788**	**$ 8,674**	**$ 7,748**	**$ 980**	**$ 5,856**	**$ 162**
Outlays, Net:						
Outlays, Net (Total)	$ 4,170	$ 7,871	$ 7,447	$ 859	$ 3,135	$ 147
Distributed Offsetting Receipts (—)	—	—	—	—	—	—
Agency Outlays, Net	**$ 4,170**	**$ 7,871**	**$ 7,447**	**$ 859**	**$ 3,135**	**$ 147**

(IN MILLIONS)	OFFICE OF INSPECTOR GENERAL	SPACE TECHNOLOGY MISSION	CONSTRUCTION AND ENVIRONMENTAL COMPLIANCE AND RESTORATION	OTHER	TOTAL
Budgetary Resources:					
Unobligated Balance from Prior Year Budget Authority, Net	$ 5	$ 53	$ 383	$ 66	$ 3,242
Appropriations	48	1,193	612	8	25,573
Spending Authority from Offsetting Collections	1	—	23	323	2,108
Total Budgetary Resources	**$ 54**	**$ 1,246**	**$ 1,018**	**$ 397**	**$ 30,923**
Status of Budgetary Resources:					
New Obligations and Upward Adjustments (Total)	$ 48	$ 1,199	$ 561	$ 343	$ 28,276
Unobligated Balance, End of Year:					
Apportioned, Unexpired Accounts	1	39	449	44	2,466
Unapportioned, Unexpired Accounts	—	—	4	—	5
Unexpired Unobligated Balance, End of Year	1	39	453	44	2,471
Expired Unobligated Balance, End of Year	5	8	4	10	176
Unobligated Balance, End of Year (Total)	6	47	457	54	2,647
Total Budgetary Resources	**$ 54**	**$ 1,246**	**$ 1,018**	**$ 397**	**$ 30,923**
Outlays, Net:					
Outlays, Net (Total)	$ 46	$ 1,064	$ 547	$ 40	$ 25,326
Distributed Offsetting Receipts (—)	—	—	—	(7)	(7)
Agency Outlays, Net	**$ 46**	**$ 1,064**	**$ 547**	**$ 33**	**$ 25,319**

REQUIRED SUPPLEMENTARY INFORMATION

Deferred Maintenance and Repairs for FY 2024

Federal agencies are required to report information related to the estimated cost to remedy deferred maintenance of property, plant, and equipment as required supplementary information in accordance with SFFAS 42, *Deferred Maintenance and Repairs*.

Maintenance and repairs (M&R) are activities directed toward keeping fixed assets in an acceptable condition. Activities include preventive maintenance; replacement of parts, systems, or components; and other activities needed to preserve or maintain the asset. M&R, as distinguished from capital improvements, excludes activities directed toward expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, its current use. Deferred maintenance and repairs (DM&R) are M&R activities that were not performed when they should have been or were scheduled to be and which, therefore, are put off or delayed for a future period. DM&R reporting enables NASA to be accountable to citizens for the proper administration and stewardship of its assets. Specifically, DM&R reporting assists users by providing an entity's realistic estimate of DM&R amounts and the effectiveness of asset maintenance practices the entities employ in fulfilling their missions.

Maintenance and Repairs Policies

Facilities, Buildings, and Other Structures

It is NASA's policy to ensure that NASA-owned and operated assets are properly aligned with the NASA mission and are safe, environmentally sound, affordable, the right type and size, and in acceptable operating condition. NASA's facilities are maintained in the most cost-effective fashion to minimize risk to processes and products, protect the safety and health of personnel and the environment, protect and preserve capabilities and capital investments, provide quality work places for NASA employees, and enable the Agency's mission. Estimates reported herein include DM&R for all facilities on-site or off-site that are owned, leased, occupied, or used by NASA (NASA Programs or Contractors) including heritage assets without regard to capitalization thresholds or depreciation status. NASA does not assess DM&R on general land parcels.

In FY 2022, NASA revised its approach to facility assessments and DM&R calculations to enhance the accuracy of its reporting. The updated methodology combines detailed facility condition assessments with the previous parametric estimating approach to calculate DM&R for NASA's asset portfolio. Previously, NASA conducted Deferred Maintenance assessments on Real Property Assets every two years, using a parametric method that involved a rapid, independent visual assessment of nine facility systems. The new approach aligns with industry standards by implementing a full Facility Condition Assessment (FCA) every five years for assets with a Current Replacement Value (CRV) over $500,000. This new process provides more precise DM&R values and redefines both the Facility Condition Index and CRV based on up-to-date construction, renovation, and repair costs. The revised assessments now evaluate 20 systems, rather than the previous nine, and are conducted on a five-year cycle. FY 2022 marked the start of this transitional period, with all Centers expected to be assessed by FY 2026. Assets not reviewed during a given cycle year will have their assessments adjusted parametrically, based on findings from the next FCA at that location.

Equipment

NASA has established the deferred maintenance and repair tracking process to encompass assets that meet or exceed the Agency capital equipment threshold. Equipment that doesn't meet the capital threshold will not be tracked in this process due to the consumable aspect of those assets. Maintenance requirements for equipment are developed during the annual budget process and updated based on work completion, equipment condition and additional requirements. Not all unfunded maintenance requirements are deferred. In support of the planning, programming, budgeting, and execution process, each program, project, and activity managing equipment has a methodical process for determining their maintenance requirements. During the maintenance analysis process and as equipment is utilized, maintenance strategies are adjusted, refined and the amount of funding is determined, based on mission needs and assessments of risk within each activity.

CONTINUED ON THE NEXT PAGE →

REQUIRED SUPPLEMENTARY INFORMATION

Deferred Maintenance and Repairs for FY 2024 (CONTINUED)

Maintenance requirements and funding amounts are included in program, project, or activity baseline budgets. In the year of execution, the equipment managing activity takes steps to either mitigate, or increase the levels of deferred maintenance based on the availability of resources and mission priorities. Each NASA activity managing equipment may take steps to reduce the amount of deferred maintenance through the reallocation of resources from lesser priority areas, or supplemental funding received from shifting project schedules.

Ranking and Prioritizing M&R Activities

NASA typically prioritizes the M&R activities based on mission need, health, safety, fire detection and protection, and environmental requirements. NASA also prioritizes the M&R projects with an emphasis on mission critical facilities, followed by mission support, then Center support. Managing activities also maintain agile strategies to react to emerging requirements and real-world events to review and reprioritize M&R requirements. The evaluation of the facility conditions by building type indicates that NASA continues to focus M&R activities on direct mission-related facilities and infrastructure.

Factors Considered in Determining Acceptable Condition Standards

NASA applies industry accepted codes and standards or equipment manufacturer's recommendations to all facilities related work. The standard of condition depends on the intended use, the mission criticality, utilization or health and safety aspects of that use. The Agency employs risk-based methodologies in determining acceptable levels of equipment operational risk.

Changes from Prior Year

As of September 30, 2024, $4.141 billion of DM&R was estimated to be required to return real property assets to an acceptable operating condition. This is an overall increase of $369 million from $3.772 billion as of September 30, 2023. The increase in the DM&R estimate can be attributed to various reasons; including changes to deterioration of facilities due to natural disasters, damage from testing to program support equipment in high-value assets, and normal inflation increases in CRV of assets and high-value infrastructure assets as upgrades progress.

The table below shows Real Property DM&R as of September 30, 2024 and 2023.

(IN MILLIONS)	2024	2023
Asset Category		
PP&E – Real Property	$ 4,068	$ 3,710
Heritage Assets – Real Property	73	62
Total Deferred Maintenance and Repairs	**$ 4,141**	**$ 3,772**

REQUIRED SUPPLEMENTARY INFORMATION

Government Land

NASA reports information regarding PP&E land and permanent land rights as required supplemental information in accordance with SFFAS 59: *Accounting and Reporting of Government Land*.

NASA owns and manages various land, aiding in the Agency's mission of exploration and continued innovation for advancing space-, air-, and Earth-based activities. NASA categorizes land it owns into three main use categories:

- **Operational:** Land predominantly used for general, administrative, day-to-day operations and mission support purposes. Assets such as NASA office buildings, manufacturing plants, and research and development labs are located on operational land.
- **Conservation and Preservation:** Land predominantly used to support conservation or preservation purposes, including conservation of natural resources and preserving significant cultural and historical resources associated with NASA's mission. Assets such as monuments, parks, watershed and water resources, and educational and visitor information centers are located on such land.
- **Commercial:** Land predominantly used to generate income from commercial arrangements with the public sector. These include NASA land leased to commercial entities participating in co-location and other arrangements designed to support the NASA mission at reasonable market rates.

NASA's land held for disposal includes land no longer needed for current or future NASA operations. The various methods of disposition include donation, sale, exchange, abandonment, or any combination thereof. NASA disposes of land in these instances in a prompt manner that minimizes continued care and handling costs while optimizing appropriate returns.

The Agency's estimated land acreage identified by predominant use subcategory as of September 30, 2024, is as follows:

	2024			
(IN ACRES)	COMMERCIAL	CONSERVATION AND PRESERVATION	OPERATIONAL	TOTAL ESTIMATED ACREAGE
PP&E Land				
Start of Prior Year	4,217	101,198	29,898	135,313
End of Prior Year/Start of Current Year	4,217	101,198	29,900	135,315
End of Current Year	4,217	101,198	29,900	135,315
Held for Disposal or Exchange (also included in the balances above)				
End of Prior Year				175
End of Current Year				175

Audit Reports

NASA Engineer Cindy Fuentes Rosal waves goodbye to a Black Brant IX sounding rocket launching from NASA's Wallops Flight Facility in Virginia during the total solar eclipse on April 8, 2024. The rocket was part of a series of three launches for the Atmospheric Perturbations around Eclipse Path (APEP) mission to study the disturbances in the electrified region of Earth's atmosphere known as the ionosphere created when the Moon eclipses the Sun. The rockets launched before, during, and after peak local eclipse time on the Eastern Shore of Virginia.

PHOTO CREDIT

NASA/Chris Pirner

Letter from the Inspector General on Audit

NASA OFFICE OF INSPECTOR GENERAL

OFFICE OF AUDITS

SUITE 8U71, 300 E ST SW
WASHINGTON, D.C. 20546-0001

November 15, 2024

TO: Bill Nelson
Administrator

Margaret Vo Schaus
Chief Financial Officer

SUBJECT: *Audit of NASA's Fiscal Year 2024 Financial Statements*
(Report No. IG-25-001; Assignment No. A-24-05-00-FMD)

The Office of Inspector General contracted with the independent public accounting firm Ernst & Young LLP (EY) to audit NASA's fiscal year (FY) 2024 financial statements. EY performed the audit in accordance with the Government Accountability Office's *Government Auditing Standards* and the Office of Management and Budget's Bulletin No. 24-02, *Audit Requirements for Federal Financial Statements*.

This audit resulted in a "clean" or unmodified opinion on NASA's FY 2024 financial statements (see Enclosure 1). An unmodified opinion means the financial statements present fairly, in all material respects, the financial position and results of NASA's operations in conformity with U.S. generally accepted accounting principles.

EY also reported on NASA's internal control over financial reporting and compliance with laws and regulations for FY 2024 (see Enclosure 2). For FY 2024, EY reported no instances of significant noncompliance with applicable laws and regulations but did identify one material weakness in internal control related to financial reporting oversight.

EY is responsible for their enclosed reports, dated November 15, 2024, and the conclusions expressed therein. We do not express an opinion on NASA's financial statements, conclusions about the effectiveness of internal control over financial reporting, or conclusions on compliance with certain laws and regulations, including but not limited to the Federal Financial Management Improvement Act of 1996.

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We appreciate the courtesies extended to our team during the audit. Please contact Brian Mullins, Acting Assistant Inspector General for Audits, at 202-358-3725 or brian.mullins@nasa.gov if you have any questions about the enclosed reports.

George A. Scott
Deputy Inspector General

Enclosures – 2

Independent Auditors' Report

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Report of Independent Auditors

The Administrator and the Inspector General of the
National Aeronautics and Space Administration

Report on the Financial Statements

Opinion

We have audited the financial statements of the National Aeronautics and Space Administration (NASA), which comprise the consolidated balance sheets as of September 30, 2024 and 2023, and the related consolidated statements of net cost and changes in net position and combined statements of budgetary resources for the years then ended, and the related notes (collectively referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of NASA at September 30, 2024 and 2023, and the results of its net cost of operations, its changes in net position and its budgetary resources for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS), in accordance with the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*), and in accordance with the provisions of Office of Management and Budget (OMB) Bulletin No. 24-02, *Audit Requirements for Federal Financial Statements*. Our responsibilities under those standards and the provisions of OMB Bulletin No. 24-02 are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of NASA and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Adoption of SFFAS 54, Leases

As discussed in Note 1 and Note 11 to the financial statements, in fiscal year 2024, NASA implemented new accounting guidance for lease accounting as a result of the adoption of the Federal Accounting Standards Advisory Board Statement of Federal Financial Accounting Standards (SFFAS) 54, *Leases*. Our opinion is not modified with respect to this matter.

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Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* and the provisions of OMB Bulletin No. 24-02 will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards* and the provisions of OMB Bulletin No. 24-02, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of NASA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate that raise substantial doubt about NASA's ability to continue as a going concern for a reasonable period of time.

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We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and Required Supplementary Information such as the Combining Statements of Budgetary Resources, Deferred Maintenance and Repairs, and Government Land on pages 78-82 within NASA's Agency Financial Report, be presented to supplement the financial statements. Such information is the responsibility of management and, although not a part of the financial statements, is required by the Federal Accounting Standards Advisory Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. Although our opinion on the financial statements is not affected, the results of the limited procedures have raised doubts about whether material modifications should be made to required supplementary information for it to be presented in conformity with guidelines established by SFFAS 59, *Accounting and Reporting of Government Land*.

Other Information

Management is responsible for the other information included in the Agency Financial Report. The other information comprises the Introduction, the Message from the Chief Financial Officer, Introduction to the Principal Financial Statements, Letter from the Inspector General on Audit, Other Information, and Appendices, as identified on NASA's Agency Financial Report's Table of Contents but does not include the Financial Statements, Notes to the Financial Statements and our Independent Auditor's Report thereon. Our opinion on the financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

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Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 15, 2024, on our consideration of NASA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of NASA's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering NASA's internal control over financial reporting and compliance.

Ernst & Young LLP

November 15, 2024

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Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Administrator and the Inspector General of the
National Aeronautics and Space Administration

We have audited, in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States (*Government Auditing Standards*) and with the provisions of Office of Management and Budget (OMB) Bulletin No. 24-02 *Audit Requirements for Federal Financial Statements*, the financial statements of the National Aeronautics and Space Administration (NASA), which comprise the consolidated balance sheet as of September 30, 2024, and the related consolidated statements of net cost and changes in net position and combined statement of budgetary resources for the year then ended, and the related notes (collectively referred to as the "financial statements"), and our report dated November 15, 2024, expressed an unmodified opinion thereon.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered NASA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of NASA's internal control. Accordingly, we do not express an opinion on the effectiveness of NASA's internal control. We did not consider all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982, such as those controls relevant to preparing performance information and ensuring efficient operations.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

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Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We identified certain deficiencies in internal control described below that we consider to be a material weakness.

Material Weakness in Financial Reporting Oversight Controls

NASA implemented controls to ensure completeness and accuracy in its financial reporting process. These control activities are performed at each of NASA's centers and at headquarters throughout the year and include validation of manual entries into the financial system and variance analyses. NASA designed these controls to include edit checks and thresholds it deems appropriate to prevent and detect material errors in financial reporting and maintains written evidence of its reviews and approvals. During our tests of yearend financial statement amounts included in the draft agency financial report, we identified an unusual increase in the accounts payable balance when compared to the prior year amount. Upon investigation it was determined that a routine accrual for contract costs was posted to the financial management system in an amount that misstated the accounts payable line item by $254 million.

During our testing, we identified multiple controls that did not operate as designed and failed to prevent and/or detect and correct the erroneous posting in a timely manner. The original entry for the yearend accrual was reviewed for validation against the supporting contractor cost report; however, the reviewer failed to identify and investigate the error for correction. Subsequently, during the standard general ledger variance analysis performed by management over yearend amounts, the increase in the accounts payable balance was not appropriately investigated to determine whether a misstatement existed. Instead, the increase was documented as an expected variance based on operational activity. The posting for the September accrual was not corrected until November 2024.

Although the individual error was ultimately corrected by management and the amount of the error was not material to the overall financial statements, the failure of multiple controls in the financial reporting process increases the risk of similar errors going undetected and, therefore, causing a material misstatement of NASA's financial statements. The severity of a deficiency does not depend on whether a misstatement actually occurred but on whether there is a reasonable possibility that the entity's controls will fail to prevent or detect and correct a misstatement of an account balance or disclosure.

Government Accountability Office (GAO), *Standards of Internal Control for the Federal Government* (September 2014), Principle 12 – Implement Control Activities, states that management should implement controls through policies and that those policies should be evaluated through documentation of responsibility for the controls and reviews of the control activities. Regarding the latter, reviews should be conducted to determine each control activity's continued relevance and operating effectiveness in addressing related risks. Further, Principle 16 – Perform Monitoring Procedures, states that management should perform ongoing monitoring of

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the design and operating effectiveness of the internal control system as part of the normal course of operations, including regular management and supervisory activities.

To mitigate the risks of undetected errors in the financial reporting process, management should ensure that control activities are operating as designed and that the appropriate level of documentation to evidence reviews is maintained to prevent and detect material misstatements. Management should also consider whether additional training on proper operation of its controls is necessary to enhance NASA's financial reporting control environment. Finally, management should perform ongoing monitoring over the operating effectiveness of its financial reporting controls.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether NASA's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements as well as the requirements referred to in the Federal Financial Management Improvement Act of 1996 (FFMIA), noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and the provisions of OMB Bulletin No. 24-02 and disclosed no instances of noncompliance in which NASA's financial management systems did not substantially comply with the Section 803(a) requirements of FFMIA.

NASA's Response to Findings

Government Auditing Standards requires the auditor to perform limited procedures on NASA's response to the findings identified in our audit and described previously. NASA's response was not subjected to the other auditing procedures applied in the audit of the financial statements and accordingly, we express no opinion on the response.

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Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Ernst & Young LLP

November 15, 2024

SECTION 3

Other Information

A top-down view of the OSIRIS-REx Touch-and-Go-Sample-Acquisition-Mechanism (TAGSAM) head with the lid removed, revealing the remainder of the asteroid sample inside. Erika Blumenfeld, creative lead for the Advanced Imaging and Visualization of Astromaterials (AIVA) and Joe Aebersold, project management lead, captured this picture using manual high-resolution precision photography and a semi-automated focus stacking procedure. The result is an image that can be zoomed in on to show extreme detail of the sample. The remaining sample material includes dust and rocks up to about .4 in (one cm) in size.

PHOTO CREDIT

NASA/Erika Blumenfeld & Joseph Aebersold, January 17, 2024

Summary of Financial Statement Audit and Management Assurances

The following tables summarize the Agency's FY 2024 Financial Statement Audit and Management Assurances. Table 1 summarizes the status of prior year—FY 2023 material weaknesses identified, if any by the Financial Statement Auditor. Table 2 summarizes the status of prior year material weaknesses, if any identified by NASA Management.

TABLE 1

Summary of Financial Statement Audit

Audit Opinion	Unmodified				
Restatement	No				
Material Weaknesses	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Ending Balance**
Deficiencies in Financial Reporting Oversight Controls	0	1	0	0	1
Total Material Weaknesses	0	1	0	0	1

TABLE 2

Summary of Management Assurances

EFFECTIVENESS OF INTERNAL CONTROL OVER FINANCIAL REPORTING (FMFIA 2)						
Statement of Assurance	Modified					
Material Weaknesses	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
Deficiencies in Financial Controls	0	1	0	0	0	1
Total Material Weaknesses	0	1	0	0	0	1

EFFECTIVENESS OF INTERNAL CONTROL OVER OPERATIONS (FMFIA 2)						
Statement of Assurance	Unmodified					
Material Weaknesses	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
None	0	0	0	0	0	0
Total Material Weaknesses	0	0	0	0	0	0

CONFORMANCE WITH FEDERAL FINANCIAL MANAGEMENT SYSTEM REQUIREMENTS (FMFIA 4)						
Statement of Assurance	Federal Systems conform to financial management system requirements.					
Non-Conformances	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
None	0	0	0	0	0	0
Total Non-Conformances	0	0	0	0	0	0

COMPLIANCE WITH FEDERAL FINANCIAL MANAGEMENT IMPROVEMENT ACT (FFMIA)		
	Agency	**Auditor**
1. Federal Financial Management System Requirements	No lack of compliance noted	No lack of compliance noted
2. Applicable Federal Accounting Standards	No lack of compliance noted	No lack of compliance noted
3. USSGL at Transaction Level	No lack of compliance noted	No lack of compliance noted

Summary of Reports

NASA astronaut Andre Douglas holds open a sample bag for NASA astronaut Kate Rubins as she pours some geology samples into it during a simulated moonwalk in the San Francisco Volcanic Field in Northern Arizona on May 17, 2024.

PHOTO CREDIT – NASA/Josh Valcarcel

Payment Integrity Information Act (PIIA) Reporting

Per OMB requirements, each Executive Branch agency must complete an Annual Data Call. The Annual Data Call fulfills reporting requirements under the Payment Integrity Information Act of 2019 (Public Law (P.L.) 116-117) (PIIA) and provides the public with comprehensive improper payment data and information. NASA's response to the OMB Annual Data Call accomplishing PIIA reporting requirements can be found on www.PaymentAccuracy.gov.

NASA's Annual OIG Audit Follow-up Activity Report

Pursuant to the Inspector General Act of 1978 (P.L. 95-452), as amended, and codified at 5 U.S.C. Section 405(c), NASA's FY 2023 OIG Audit Follow-up Activity Report is available online at: www.nasa.gov/audit-liaison-resolution-alr-and-follow-up-program/. The FY 2024 Report will be posted to this site as soon as it is released.

Did You Know?

A Home for Astronauts around the Moon

The primary structure of the Gateway space station's HALO (Habitation and Logistics Outpost) module is one step closer to launch following welding completion in Turin, Italy. HALO is one of four Gateway modules where astronauts will live, conduct science, and prepare for lunar surface missions. NASA is partnering with Northrop Grumman and their subcontractor Thales Alenia Space to develop HALO.

PHOTO CREDIT – Northrop Grumman/Thales Alenia Space, April 12, 2024

OIG Report on NASA's Top Management and Performance Challenges

MESSAGE FROM THE DEPUTY INSPECTOR GENERAL

As required by the Reports Consolidation Act of 2000, this annual report presents the Office of Inspector General's independent assessment of the top management and performance challenges facing NASA. For 2024, we consolidated our previously reported seven challenges into three broader challenges to provide a more streamlined report that minimizes overlap, improves clarity, and highlights the interrelated nature of the issues. This year's challenges include:

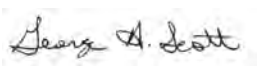
- Improving the Management of Major Programs and Projects
- Partnering with Commercial Industry
- Enabling Mission Critical Capabilities and Support Services

NASA stands at the forefront of aeronautics, science, and space exploration and is responsible for numerous scientific discoveries and technological innovations. Since its creation in 1958, NASA has made extraordinary achievements in human space flight and science and aeronautics research and continues to maintain world renowned facilities and personnel.

Despite these achievements, substantial cost growth, lengthy schedule delays, and significant technical issues continue to impact not only human space flight programs, like the Artemis campaign, but also other major science and exploratory programs, projects, and missions. At the same time, NASA is partnering with the commercial industry to build, own, and operate space systems so the Agency can purchase services for its exploration, science, and research needs. While these arrangements could drive new ideas, bring down costs, and grow the space economy, they also present the Agency with challenges to ensuring the long-term economic viability, safety, and reliability of NASA programs. Lastly, key to accomplishing all of NASA's missions is ensuring it has the right personnel, up-to-date facilities, secure information technology, and efficient procurements, all of which have been long standing challenges for the Agency.

In deciding whether to identify an issue as a "top challenge" we consider its significance in relation to NASA's overall mission; whether its underlying causes are systemic in nature; and its susceptibility to fraud, waste, and abuse. These three highlighted challenges are not the only significant issues that confront NASA, and identification of an issue as a top challenge does not denote significant deficiencies or lack of attention on the Agency's part. Rather, most of these issues are long-standing, difficult challenges central to NASA's core missions. Consequently, they require consistent, sustained attention from senior NASA leadership and ongoing engagement with Congress and other stakeholders.

The Office of Inspector General is committed to providing independent, objective, and comprehensive oversight to improve Agency outcomes. To that end, we plan to conduct audits and investigations in the coming year that focus on NASA's continuing efforts to address these and other challenges. The Office of Inspector General's 2024 report on the Agency's top management and performance challenges is available on our website https://oig.nasa.gov/office-of-inspector-general-oig/2024-report-on-nasas-top-management-and-performance-challenges/.



George A. Scott
Deputy Inspector General

Agency Response to OIG Report on NASA's Top Management and Performance Challenges

National Aeronautics and Space Administration

Office of the Administrator
Mary W. Jackson NASA Headquarters
Washington, DC 20546-0001

November 5, 2024

TO: Inspector General (Acting)

FROM: Administrator

SUBJECT: Agency Response to Office of Inspector General Draft Report, "2024 Report on NASA's Top Management and Performance Challenges"

The National Aeronautics and Space Administration (NASA) appreciates the opportunity to review and comment on the Office of Inspector General (OIG) draft report entitled, "2024 Report on NASA's Top Management and Performance Challenges" (Q-24-02-00-AOQA), dated September 30, 2024.

The Agency values the OIG's perspective on risks and vulnerabilities related to our programs and operations, as well as its recognition of progress we made addressing these challenges. As an Agency, we continue to aggressively pursue the mitigation and remediation of findings related to the audit recommendations issued by your office, including those that underpin your observations in your report.

We agree with the three broad areas outlined in your 2024 report and would like to highlight the following mitigation and remediation efforts relative to each challenge that either have been taken or are underway. We believe these efforts demonstrate NASA's commitment to addressing our most significant management and performance challenges.

Challenge 1: Improving the Management of Major Programs and Projects

NASA is at a historic inflection point, poised to advance the most significant series of science and human exploration missions in over a generation. The Agency continues to optimize the use of available resources in the pursuit of effective and efficient solutions that improve project management and support the advancement of ingenuity and innovation in space science, human exploration, and aerospace technology. NASA recognizes the inherent challenges of managing large, complex, often first-of-their-kind space flight and aeronautics programs and has worked over many years to improve policies and processes that control cost and schedule while ensuring safety and mission success.

The Chief Program Management Officer (CPMO)—a position established in the Office of the Administrator in 2022—is revitalizing NASA's project management community through various activities that include the annual project management symposium co-sponsored with the NASA Chief Knowledge Officer, the rollout of the NASA Project Management Network community of practice, and greater degrees of cross-Agency collaboration to improve and streamline program and project governing policies and tailoring processes. In addition, the CPMO assumed the Chair of the Program and Project Management Board and enhanced its

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role tailoring proposals, identifying project management challenges, and discussing ideas to strengthen program and project management.

Since the OIG's 2023 report on management and performance challenges, the Deputy Administrator initiated a tiger team to identify ways NASA can further develop the risk management framework in support of Mission Directorates, Centers, and programs and projects to manage and communicate risk more effectively. As part of this study, a key area of focus was to assess how NASA can ensure realism in early formulation and provide Agency senior management officials with recommendations on how to mitigate early optimism. The study found optimism exists in pre-formulation regardless of mission category, as well as a lack of connectivity between pre-formulation program and project policy under NASA Procedural Requirements (NPR) 7120.5, NASA Space Flight Program and Project Management Requirements, and acquisition policy activities within NASA Policy Directive (NPD) 1000.5, Policy for NASA Acquisition.

In response to the study's findings, the Agency Program Management Council approved a series of recommendations intended to improve realism in early program and project formulation, strengthen NASA's acquisition management, and ultimately achieve improvements in the management of NASA's major programs and projects. NASA has already implemented a number of these objectives and is in the process of adjusting our approach to foster a greater balance between strengthening realism in early formulation and addressing early optimism. Specifically, NASA will be updating NPD 1000.5, NPR 7120.5, and the Standing Review Board handbook to include a Mission Concept Review (MCR) requirement; conducting independent assessments of Single Project Programs, Category 1 projects, and select Category 2 projects at MCR prior to Acquisition Strategy Meetings (ASM)—including independent cost estimates; updating ASM templates to ensure consideration of concepts such as risk management; and driving meaningful adoption of risk management principles across Agency processes through the permanent Agency Risk Management Officer position established within the Office of Safety and Mission Assurance.

With regard to the OIG's statement that NASA has not provided stakeholders with complete, credible, or timely cost and schedule commitments for major projects, NASA's governance and policy documentation requires Mission Directorates to set a baseline commitment prior to receiving leadership approval for formal entrance into the Implementation phase. The Agency has established Agency Baseline Commitments (ABC) for each project element of the Artemis Campaign—under the leadership of the Moon to Mars Program Office—and has set ABCs for projects over $250 million across Mission Directorates. NASA also regularly updates the Office of Management and Budget (OMB) and Congress on the performance and progress of our development projects.

NASA continues to uphold the highest standards for prudent financial management and reporting while strengthening our ability to accomplish our mission and contribute to maintaining American leadership in space, aeronautics, climate research, and innovation.

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Artemis Campaign

NASA remains unwavering in our commitment to ensuring safe missions to low Earth orbit (LEO), the cis-lunar environment, and the lunar surface, reflecting our dedication to the safety of astronauts, mission success, and the advancement of human space exploration. The Exploration Systems Development Mission Directorate (ESDMD) continuously learns from past missions and incorporates lessons learned into future missions to enhance safety and performance. Through post-mission analyses, assessments, and feedback mechanisms, ESDMD identifies areas for improvement and implements corrective actions to optimize mission safety and effectiveness. As such, NASA appreciates OIG's recognition of the Agency's work to determine the root cause of the heat shield anomaly from Artemis I's flight.

Artemis implementation is also unique from other NASA activities in that a flexible architecture is a guiding principle within the Artemis Campaign, enabling NASA to adapt to changing requirements, leverage partnerships, and achieve sustainable and cost-effective human exploration of the Moon and beyond. By embracing flexibility and innovation, NASA aims to establish a robust infrastructure and lay the foundation for future exploration missions to Mars and beyond. NASA's approach helps to ensure that capabilities are developed to meet the needs of the architecture and are consistent with NASA policy and protocol under NPR 7120.5.

NASA is prioritizing both short-term cost containment and long-term mission objectives to achieve meaningful and impactful exploration and scientific discovery in space. To that end, as noted earlier, ABCs have been established for the following capability upgrades and programs associated with Artemis: Orion Crew Capsule, Space Launch Systems Block 1B Exploration Upper Stage and Associated Capabilities, the Gateway Program initial capability[1], the Human Landing System (HLS) initial capability, and Mobile Launcher 2 (ML2). With regard to the report's comments on ML2, the ABC established in June 2024 reflects the most current position of the project taking into consideration that ML2 has transitioned from design phase into construction phase. In prior estimates, the complete scope of ML2 was underestimated, but is now fully understood by prime contractor Bechtel National, Inc. (Bechtel) and risks associated with potential uncertainties have been included in NASA's estimate. NASA also worked with Bechtel to establish and negotiate an incentive plan to motivate cost and schedule performance. NASA also recognizes the significance of Artemis accountability and transparency highlighted in the report; however, OIG's internal projection of a flight-by-flight cost assessment as a benchmark on individual Artemis missions is inconsistent with the integrated design of the program and the Agency's obligation to include costs captured in their individual element at Phase E, Operations and Sustainment, which are generally five-year estimates.[2]

[1] The Power and Propulsion Element and the Habitation and Logistics Outpost make up the initial Gateway capability.

[2] This requirement can be found in NPR 7120.5, paragraph 2.4.1.6 (August 3, 2021).

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International Space Station

The International Space Station (ISS or Station) Program's greatest accomplishment is as much a human achievement as it is a technological one—how best to plan, coordinate, and monitor the varied activities of many organizations and operations. An international partnership of space agencies representing five countries/regions (the United States (U.S.), Russia, Japan, Canada, and the European Union) provides, operates, and maintains the elements of the Station. Relying on and cooperating with international partners to transport crew and cargo is integral to the success of the science and research conducted on the Station. For our part, NASA continues to use commercial services to safely transport cargo and astronauts to the ISS to conduct critical research, science, and technology demonstrations. These operations inform and reduce risk for future missions to the Moon and Mars and provide insight and breakthroughs that directly affect life on Earth. NASA is working to solidify both a transition to commercial space station operations through our Commercial LEO Destinations Program (CLDP) and a controlled deorbit plan for the ISS.

The Communications Services project will deliver commercial communication services to the Near Space Network by the early 2030s and the CLDP will provide a seamless transition from the ISS to a commercial space station platform or platforms. Both of these have a tailored approach to implementing NPR 7120.5, allowing flexibility in the programmatic approach to account for commercial development aspects. Additionally, CLDP was the first program to conduct an independent review as part of its MCR after implementation of that requirement.

Russia has been authorized to continue participation in the ISS through 2028 and Congress has authorized U.S. participation through 2030. To mitigate uncertainty, NASA is developing a deorbit vehicle for the ISS. In June 2024, NASA and Roscosmos signed a memorandum agreeing to a contingency deorbit plan in case deorbit must occur prior to the arrival of the United States Deorbit Vehicle (USDV). NASA has contracted with Space Exploration Technologies Corporation (SpaceX) to provide the USDV by 2028 and will conduct a Systems Requirements Review in early 2025. While NASA concurs that this development timeline is brief, SpaceX is using heritage systems such as its Dragon capsule to support the USDV and NASA remains confident with the schedule.

Science and Aeronautics Research Missions

NASA's commitment to improving cost and schedule performance extends to the Science Mission Directorate (SMD), which has delivered 18 projects on budget between 2009 and 2022. NASA remains challenged to deliver large flagship projects that are developing first-of-its-kind technology, such as the James Webb Space Telescope and the Mars Sample Return (MSR) mission. The recommendations from the risk management tiger team described in the opening section of this response incorporate a pre-formulation MCR, an independent assessment of that review, and more stringent acquisition strategy requirements—all of which should contribute to better early cost estimates for flagship projects. NASA agrees with the OIG's assessment that cost recommendations from the Decadal Surveys that guide SMD's portfolio can result in unrealistic funding expectations, but NASA is confident that our new early formulation mission definition and cost estimation

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efforts will mitigate these challenges in the future. However, it is important to note that even when cost and/or schedule assumptions prove overly optimistic, the Agency has taken steps to pause and reformulate missions. For example, SMD paused work on MSR and solicited new architecture proposals. NASA has also made difficult decisions to cancel projects for lack of performance.

While the report points to several performance and management challenges with the Aeronautics Research Mission Directorate's X-59 Low Boom Flight Demonstrator project, several activities and initiatives have been implemented to mitigate future concerns. New detailed reporting techniques and metrics were developed and implemented to enable prime contractor Lockheed Martin Corporation (Lockheed Martin) and NASA to better track progress and maintain insight into performance throughout discoveries of one-of-a-kind aircraft testing. Test approaches were, and continue to be, refined to identify minimum requirements that safely and effectively support system testing progress with minimum schedule margin loss. NASA also maintains a consistent onsite presence to maximize issue resolution and collaboratively address challenges with Lockheed Martin.

Lastly, NASA appreciates OIG's recognition of recent efforts to utilize Standing Review Boards, Independent Review Boards, and independent assessment to continue to improve program management. As a key element in NASA's strategic framework for managing major programs and projects, these areas help to ensure appropriate program and project management oversight to increase the likelihood of mission success.

Challenge 2: Partnering with Commercial Industry

The Low Earth Orbit Economy

NASA agrees that a sustained presence in LEO will be critical in carrying out NASA's research and exploration missions. NASA continues to work with its industry and commercial partners to refine the plan to transition from the ISS to Commercial LEO Destinations (CLD) later in the decade. NASA recognizes that work remains to be done to avoid a gap as part of this transition, and NASA's CLDP, Commercial Crew Program, and ISS Program are working together as parts of a LEO ecosystem. In 2024, NASA began work on a LEO Microgravity Strategy, using the same goals and objectives approach used to develop the Moon to Mars Strategy, to ensure that our future needs in LEO are clearly identified and are accounted for in our procurement of CLDs. The LEO Microgravity Strategy work is ongoing and has included several internal and external stakeholder feedback gathering activities to ensure future needs are taken into account. Successful implementation of the LEO Microgravity Strategy work, combined with the forthcoming CLD Phase 2 Agency acquisition strategy decisions, will ensure continued U.S. leadership in LEO and a successful transition from ISS to a commercial LEO economy.

The Lunar Economy

NASA agrees that pioneering new technologies and missions often involves uncertainty and embraces the difficulties and challenges of first-time development by fostering a culture of innovation, collaboration, and resilience. NASA's ESDMD, under the Artemis Campaign, is

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working with the commercial industry to return to the Moon quickly and sustainably. Building on our experiences and partnerships, we are enabling a new lunar economy with private partners to deliver science and technology to the Moon, build and resupply the Gateway, provide crew transportation from orbit to the lunar surface, and more.

Space exploration development is an incredibly complex and challenging endeavor. It requires cutting-edge technology, significant financial investment, and a deep understanding of various scientific disciplines, from engineering to astrobiology. The collaboration with commercial partners has significantly advanced human spaceflight capabilities and fostered a more sustainable space economy. By actively promoting open communication and interdisciplinary teamwork, NASA not only enhances problem-solving capabilities but also cultivates a spirit of curiosity and exploration, driving progress even in the face of adversity. These partnerships have encouraged the growth of the commercial space industry. By fostering competition and innovation, NASA has enabled other companies to enter the market, increasing overall capabilities that have led to advancements in various technologies, such as reusable rocket systems, which significantly reduce the cost of access to space.

NASA applies diligent rigor to the buying of commercial services. NASA has implemented several key strategies to help commercial partners successfully meet our requirements and schedules. These strategies involve thorough evaluation of partner capabilities, experience, and track record; structured agreements setting expectations and accountability; and regular reviews, oversite meetings, and strict safety standards and assessments. Additionally, collaborative teams of NASA and commercial partners work together to maintain open lines of communication to quickly address any concerns that may arise. While NASA maintains ultimate authority on the Certification of Flight Readiness, NASA provides technical oversight and support throughout the development process with a focus area on risk reduction and design certification. All these strategies help to ensure success while safeguarding mission integrity and safety.

Commercial Lunar Payload Services

NASA's SMD manages a dynamic, complex portfolio of next-generation scientific programs that are extending the boundaries of humanity's understanding. NASA's Commercial Lunar Payload Services (CLPS) initiative has implemented an aggressive approach to stimulate the lunar economy. This innovative initiative, which partners with American industry, allows NASA to send science instruments and technology demonstrations to the lunar surface, eventually enabling humans to reach the lunar surface. Under the CLPS initiative, currently, 14 providers on contract are eligible to bid on task orders, both large and small.

NASA is excited by the opportunities made available through the CLPS program to advance science, technology, and exploration. In an effort to evolve and further optimize the CLPS program, SMD will critically review the CLPS programmatic and contract experiences to date, in coordination with the Office of Procurement and with the support and advice from the Office of the General Counsel, to incorporate changes and improvements based on what NASA and the CLPS providers have learned from those experiences to ensure we are meeting mission objectives that are enabled by CLPS.

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Human Landing System

While ESDMD recognizes the challenges identified by the OIG, it is important to note that Congress has consistently and directly supported the public-private partnership approach taken to develop HLS systems and encouraged NASA to use firm-fixed-price partnerships as appropriate. Through firm-fixed-price contracts, clearly defined project scopes, deliverables, and performance metrics help establish expectations for both NASA and contractors. In these contracts, the contractor assumes much of the financial risk; therefore, NASA maintains a certain level of flexibility within the contract terms to address unforeseen challenges while still holding contractors accountable for their commitments. Overall, this approach promotes collaboration, encourages cost-effective solutions, and ultimately helps NASA achieve our exploration goals while minimizing financial exposure to the public taxpayer.

The HLS program uses risk-based insight as the implementation approach for the Government team to certify the integrated lander systems. Key components of the risk-based insight include risk management, safety reviews, testing and verification, data analysis, stakeholder engagement and implementation of lessons learned from past missions, and ongoing evaluation to enhance safety measures. Risk-based insight is integral to ensuring that the Artemis missions are conducted safely with a strong focus on the well-being of astronauts and the integrity of the mission objectives.

In addition to risk-based insight, the HLS program established integration teams that include personnel from both NASA and the commercial provider. These teams facilitate communication and collaboration on technical issues, helping NASA stay informed throughout the development processes. Commercial providers are required to provide regular documentation and participation documentation and reports on their development activities. This includes design documentation, test plans, and progress updates, which give NASA visibility into ongoing work. NASA participates in key testing phases, including design reviews, hardware testing, and simulations. This involvement allows NASA to observe and assess systems firsthand. NASA provides feedback based on their evaluations and observations, which helps guide development and ensures alignment with NASA's safety and performance standards.

The HLS collaborations with SpaceX and Blue Origin have made significant strides. SpaceX has successfully conducted five Starship test flights, each advancing technology with improvements in on-orbit attitude control, re-entry landing, splashdown capabilities, and a first-time milestone of returning the first stage booster back to its launch pad using giant mechanical arms. In 2025, SpaceX plans to undertake a long-duration flight test and a propellant transfer flight test. The critical design review for Artemis III's initial capability is set for summer 2025. SpaceX's ability to rapidly iterate designs and reduce costs through streamlined manufacturing processes offers valuable insights into how firm-fixed-price contracts can encourage innovation while managing risk.

Blue Origin will launch its first test flight of the New Glenn rocket no earlier than November 2024. Additionally, the Blue Moon lander, slated for the Artemis IV mission, has begun various testing phases at Kennedy Space Center. By developing technologies like the New Glenn and New Shepard rockets, Blue Origin showcases efficient project management and

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engineering practices that can inform NASA's contracting strategies. Blue Origin's focus on collaboration and transparency with NASA helps refine the expectations and structures of firm-fixed-price agreements. These insights contribute to a better understanding of risk management, cost estimation, and performance evaluation—ultimately benefiting NASA's future contracting efforts.

NASA remains unwavering in our commitment to ensuring safe missions to the Moon, reflecting our dedication to the safety of astronauts, mission success, and the advancement of human space exploration. By fostering a collaborative environment, NASA encourages open communication, enabling both organizations to share insights, challenges, and solutions as development progresses.

Challenge 3: Enabling Mission Critical Capabilities and Support Services

The work of NASA's mission support community is foundational to mission success. We strive to provide the tools, people, and capabilities to ensure NASA's leadership position in aerospace, science, and exploration. The following highlights the Agency's efforts relative to this challenge.

Mission Critical Capabilities

Workforce

The Agency remains committed to tackling workforce issues and building a stronger talent pipeline to accomplish NASA missions. NASA's Office of the Chief Human Capital Officer modernized the recruiting process and developed a coordinated recruitment strategy using a standardized approach leveraging digital platforms to engage with prospective candidates. A critical piece of the recruitment strategy focuses on increasing workforce diversity by reaching new talent communities and establishing NASA as an employer that celebrates diversity and inclusion as keys to success. NASA has received multiple awards in 2022, 2023, and 2024 in recognition of our outreach and employment of under-represented groups.[3] To ensure success, NASA continually measures efforts and iterates our recruitment strategy. Multiple hiring authorities are utilized to quickly fill positions as well as pay incentives to recruit the right skills into the Agency.

The NASA 2040 initiative, launched in June 2023, brings a new focus in aligning our institutional operations to our priority mission needs. This initiative aims to drive meaningful changes that ensure NASA remains the global leader in aerospace and science. As part of this initiative, NASA is refining the Agency's workforce planning process to attract, develop, and retain a diverse, talented workforce aligned with future mission demands, to include pipeline development and talent exchanges.

[3] The awards included: America's Best Employers for Diversity (Forbes, 2023, 2022), America's Best Employers for New Graduates (Forbes, 2024, 2023, 2022), America's Best Employer for Veterans (Forbes, 2023, 2022), America's Best Employers for Women (Forbes, 2024, 2023, 2022), Ranked #1 Most Prestigious Internships (Vault/Firsthand, 2023), Top 20 Government Employers (STEM Workforce Diversity Magazine, 2023), and Top 20 Government Employers (Woman Engineer Magazine, 2023).

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For the last five years, NASA has infused our Employee Value Proposition (EVP) into Agency recruitment and outreach efforts to attract candidates to the mission. The EVP is NASA's promise to the employee on what they will gain from their time at the Agency. As part of NASA 2040, NASA's EVP was refreshed and the Agency plans to use our four core elements to engage leaders and supervisors to drive culture change through creating a compelling work environment and experience for employees, continually integrating the EVP into all internal communications channels, and infusing EVP marketing across the employee life cycle.

NASA maintains a modern career website and is focused on building a digital recruitment presence which allows us to reach over 6 million followers on LinkedIn and other social media sites. Our digital presence helps us cultivate talent communities that help engage underrepresented groups, such as women in science, technology, engineering, and mathematics (STEM) and individuals with disabilities. NASA uses recruitment strategies to find candidates who are interested in working at NASA and provides valuable information to jobseekers so they can better understand NASA's values, the types of positions filled by NASA, and information about the Federal application process. The Offices of STEM Engagement, the Chief Human Capital Officer, and Diversity and Equal Opportunity partner to ensure the Agency's varied outreach and recruitment efforts are aligned to ensuring the NASA workforce is representative of the American workforce.

NASA continues to advocate for workforce flexibilities that support our ongoing needs to meet our critical hiring needs. NASA has worked with the Office of Personnel Management to obtain direct hire authority to meet our critical hiring needs to support our mission to return human missions to the moon, human and robotic missions to Mars and other destinations, addressing climate change, and positioning our Nation as the leader in civil aerospace and aviation.

Organizations across NASA are engaged in growing the STEM workforce pipeline broadly by investing in internship and fellowship programs sponsored by NASA Mission Directorates. NASA's Pathways Internship Program hires interns aligned with NASA's future workforce needs, providing experiences that prepare students for a career at NASA and an opportunity for full time employment upon graduation. NASA's Office of STEM Engagement engages more than 2,000 students annually in hands-on internships. NASA's STEM engagement opportunities inherently align with NASA's mission critical workforce needs because they are in STEM areas. Going forward, NASA's mission critical occupation workforce needs identified in the workforce planning process will be considered as part of the NASA Office of STEM Engagement's annual portfolio planning process.

Infrastructure

To address challenges with aging infrastructure and facilities, NASA is implementing a top-down, mission-driven Agency Master Plan (AMP). This plan ensures that the required infrastructure is available and affordable, guides Agency investments to prioritize mission critical assets, reduces the risk of unplanned failures, and guides divestment of assets not needed for the Agency's missions. The AMP will establish a 20-year vision for physical infrastructure and real property assets that aligns with current, evolving, and future mission requirements. NASA will use this process to identify critical capabilities and areas for asset

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sustainment, investment, repurposing/out-granting, or divestment of infrastructure. To alleviate the maintenance burden, NASA's Office of Strategic Infrastructure (OSI) will continue to strongly advocate to increase its funding for demolition of unneeded facilities.

NASA released NPR 8820.2H, Facility Project Requirements, on September 27, 2022,[4] which included revisions due to OIG audits and other Agency studies of its organization and operations. Specifically, this revision included parameters for the assignment and use of institutional and programmatic Construction of Facilities (CoF) funds, the ability to identify cost-sharing as a funding method, a requirement for energy savings projects to conduct life cycle cost analyses, requirements to reduce and consolidate the Agency's footprint, tools to assist in the development of project requirements, and a definition of new Headquarters roles that will improve oversight of the implementation of CoF projects.

OSI concurs with the challenges identified that are associated with leasing NASA facilities to non-NASA entities (also referred to as out-grants). In 2017, OSI began to conduct an analysis on the Agency's leasing policies, procedures, and practices. As a result of this analysis, in 2020, NASA decided to centralize real estate functions across all Centers to OSI's Facilities and Real Estate Division (OSI-FRED). Additionally, OSI-FRED recently completed updates to Title 14 of the Code of Federal Regulations (CFR)[5] to serve as the guidelines for the Real Estate Contracting Officer program that codifies the centralization of the real estate function to OSI-FRED. Along with this update, OSI-FRED completed the updates to NPD and NPR 8800 on NASA's Real Estate Management Program.[6] Both updates required a complete analysis of the Agency's Enhanced Use Lease Program to ensure that internal controls are established and that real estate agreements are properly coordinated with all stakeholders and are compliant with all rules, regulations, and laws. As a result of this process, NASA will be able to reduce the time to complete a lease agreement by up to 50 percent while ensuring full cost and fair market value are captured within the agreements.

NASA has also identified investment strategies using Reliability Centered Maintenance (RCM) principles to stave off the increasing deferred maintenance liability within the Agency. OSI-FRED is implementing a tiered maintenance approach with foundations of Condition-Based Maintenance principles for relevant and critical assets. These efforts will lead to optimized maintenance programs and prioritization of available operations and maintenance resources. OSI leadership continues to inform and carry forward advocacy for additional investments necessary to improve the condition of important building systems and facilities across the Agency. Ultimately, this will increase the availability and reliability of these critical assets to meet current, emerging, and future mission needs. Implementation of these RCM principles ensures that the right type of maintenance is performed on the most critical assets, at the right time, and for the right reasons. RCM, paired with immediate investments in the replacement of obsolete items associated with the Agency's higher-

[4] NASA revised this version and issued NPR 8820.2I in September 2024.

[5] 14 CFR, "Aeronautics and Space," Part 1204, "Administrative Authority and Policy," Subpart 5, "Delegations and Designations."

[6] NPD 8800.14F, Policy for Real Estate Management (August 15, 2024) and NPR 8800.15F, Real Estate Management Program (October 8, 2024).

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criticality assets, can provide near-term corrective mitigation for known risks and avoid mission/schedule impacts. These maintenance strategies focus on increasing equipment availability and avoiding disruptive failures and unplanned repair costs.

These initiatives will mitigate the Agency's ongoing challenge of aging and outdated infrastructure and facilities. Through the implementation of the AMP integrating and prioritizing projects using a "One NASA" approach and the ongoing investments in maintenance, demolition, repair, recapitalization, and out-granting, NASA continually strives to right-size the Agency's infrastructure toward more modern and efficient facilities that will continue to provide a robust real property asset portfolio for NASA mission objectives.

Information Technology and Data

In June 2023, the Office of the Chief Information Officer filled the Chief Data Officer (CDO) position and in May 2024 formalized and appointed the Chief Artificial Intelligence Officer (CAIO). The CDO is working to develop a NASA Interim Directive as an initial policy to establish key data governance roles and a federated data governance framework. The objective is to build a comprehensive and collaborative approach to governing the Agency's most critical data. The CDO is also drafting the fiscal year (FY) 2025 – FY 2027 NASA Data Strategy that focuses NASA on building foundational data management practices enabling an Agency-level data catalogue, metadata management and standards, as well as maturing data acumen across the Agency. The NASA Data Strategy will align to NASA's mission and goals to include implementing a Zero Trust Architecture and artificial intelligence (AI) governance. Lastly, the CDO team works closely with the Agency Privacy Officer to assure that CDO policies and standards account for specific guidelines and mitigate any risks associate with NASA personally identifiable information.

The Agency's intent for AI is to maximize the value AI provides to NASA while also managing AI risks. In compliance with Administration directives and guidance[7] the CAIO established NASA's Artificial Intelligence Strategy Board and Artificial Intelligence Strategy Working Group as the initial steps in building the NASA AI governance framework. The CAIO has begun an AI Registry effort with a focus on completing a full inventory of AI, categorizing the AI use to understand how it should be monitored and governed, and collecting OMB-reportable AI use cases to include identification of potential safety and human rights use cases. The AI Registry provides an understanding of AI use across NASA, informs AI governance processes, and facilitates collaboration and shared awareness of AI success so they may be reused rather than duplicated by AI adopters. In partnership with the Office of the Chief Human Capital Officer and the NASA Digital Transformation Officer, the CAIO co-sponsored a "Summer of AI" campaign that reached more than 4,000 unique participants across 40 events over the span of three months, transforming the way our Agency approaches AI awareness training and upskilling. In partnership with the Digital Transformation Officer, CAIO launched AI-ready workshops to facilitate organizational planning for AI adoption as part of annual organizational Digital Transformation Implementation Plans. The CAIO is recruiting for additional AI staff to lead the policy,

[7] Executive Order 14110, "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," and OMB Memorandum M-24-10, "Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence."

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strategy, governance, and adoption of innovative AI technologies in support of NASA's missions and mission support functions.

Procurement

The following highlights the Agency's efforts relative to challenges related to the oversight of contracts, award fees, procurement fraud avoidance, and improper use of NASA grant funds.

Oversight

NASA has improved contract oversight through various strategies. In FY 2024, the Office of Procurement obligated funds using a variety of contract/instrument types:

Instrument Type	Percentage of Total Obligations
Firm-Fixed-Price	31%
Cost-Plus-Award-Fee	28%
Cost-Plus-Fixed-Fee	23%
Cost-Plus-Incentive-Fee	6%
Grant	6%
Other *	6%

* includes Cost-No-Fee, Fixed-Price-Award-Fee, and Time-and-Materials

NASA acquisition professionals are equipped with tools, training, and processes to assist in analyzing risks to ensure that contract types align with Agency needs while balancing risk and incentives. When appropriate, contracting officers work with the program management community to ensure the maximum use of hybrid cost and fixed-price and/or fixed-price contractual instruments to minimize NASA cost-risk and incentivize successful contractor performance.

NASA continues to strengthen our contract administration and oversight of contract cost/performance risk through revitalization of the Procurement Management Review (PMR) process, which assesses compliance with regulations, and effectiveness of contract execution. The PMR process has instituted improvements such as quarterly corrective action plan reviews, development of an organizational health rating scheme, and the addition of special focus areas to identify cost control risks.

Award Fees

Award fees are a critical acquisition management tool by which the Federal Government can incentivize enhanced contractor performance during the execution of a design and development type contract. The NASA Federal Acquisition Regulation Supplement was revised to implement an independent award fee panel for procurements over $1 billion. This independent Agency-level panel provides stakeholder confidence of award fee scores that reflect unbiased assessments of contractor performance. NASA also developed the new Peer Review policy (comparable to the Department of Defense peer review process) for review of any actions valued over $1 billion.

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In addition, NASA leveraged our Enterprise Pricing Office (EPO) responsible for the design, implementation, successful execution, and sustainment of the contract pricing, audit, and closeout capability across NASA's enterprise. The EPO created a dedicated vendor management role focused on driving more effective and strategic relationships with our key vendors. One of the primary goals of this role is to significantly enhance pre-negotiation positioning, ensuring that contract negotiations begin with a clear, data-driven understanding to motivate vendor performance, pricing trends, and market conditions. The role also allows standardization of best practices, enhanced risk mitigation, and more streamlined procurement processes to improve compliance.

Procurement Fraud Avoidance and Improper Use of Grant Funds

NASA has added several strategic efforts to strengthen processes and meet the challenges of contract management, thus securing better value and improving contract oversight of vendor performance:

- Sustaining Vendor Management: Centralizing vendor oversight and refining pre-negotiation strategies to achieve more favorable contract terms, improve consistency in vendor performance, and optimize procurement outcomes across the Agency.
- Pricing Academy: A comprehensive training program designed for contracting professionals to provide in-depth instruction on pricing strategies, cost analysis, and negotiation techniques.
- Development of Prices Paid Capabilities: Focused on robust data analytics and reporting tools to track and analyze prices paid across various contracts and vendors. This capability will enhance benchmark pricing, offer cost-saving opportunities, and ensure greater transparency and accountability in procurement practices.

In addition, NASA launched initiatives to increase monitoring of grants together with integrating revisions to 2 CFR, "Office of Management and Budget Guidance for Federal Financial Assistance," into policy and processes. These updates equipped NASA with the tools to monitor distribution of funds to combat fraud, waste, and abuse. One of the more proactive monitoring approaches included Transaction Testing Reviews. These reviews require the grant officer to randomly select a quarter of grantee expenditures and review for questionable costs. The reviews are conducted at least once every five years for each award during its period of performance. In addition to Transaction Testing Reviews, the grant officer reviews Federal Financial Reports on a semi-annual basis and the grantees must provide explanations for any on-hand cash, as well as any anomalies identified. Finally, all out-year (i.e., future) funding now requires the NASA technical officer's concurrence prior to funding action in addition to the grantee's annual Performance Report.

These proactive measures allow NASA to closely monitor the grants for improper use of grant funds. In FY 2024, NASA conducted 968 Transaction Testing Reviews and 6,738 Federal Financial Report reviews. It is important to emphasize that outcomes such as convictions, indictments, debarments, and suspensions typically result from investigations that span several years. Consequently, it is likely that the awards reported by the OIG pertain to grants issued before NASA's new enhanced monitoring procedures were implemented.

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Thank you for the opportunity to review and comment on the draft 2024 Report on NASA's Top Management and Performance Challenges, as well as provide additional updates on the important progress we have made. If you have any questions regarding NASA's response, please contact Mark Jenson, GAO/OIG Audit Liaison Program Manager, at (202) 358-0629.

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Chief Human Capital Officer/Ms. Elliott

Civil Monetary Penalty Adjustment for Inflation

NASA astronaut and Artemis II commander Reid Wiseman participates in training Jan. 23 in the Neutral Buoyancy Lab at the agency's Johnson Space Center in Houston.

PHOTO CREDIT – NASA Johnson Space Center

For The Fiscal Year Ended September 30, 2024

The Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (P.L. 114-74), requires agencies to make annual inflation adjustments to civil monetary penalties and report on these adjustments in their AFR.

Agencies must include, as Other Information, information about civil monetary penalties within their jurisdiction and the annual inflation adjustments made under the Act.

NASA reviewed each of the penalty amounts under its statutes and penalty amounts for inflation when required under law. The authorities imposing the penalties, the civil penalties, the adjustment years, and the current penalty amounts for penalty updates are located in the Federal Register Volume 89, No. 56 at govinfo.gov/content/pkg/FR-2024-03-21/pdf/2024-05999.pdf.

Did You Know?

The Cygnus space freighter fires its engine to raise the station's orbital altitude

This long-duration photograph taken with a station camera uses increased sensitivity and shows the Northrop Grumman Cygnus space freighter firing its engine to raise the International Space Station's orbital altitude. The reboosts counteract atmospheric drag and prepare for the space station upcoming spacecraft activities. The orbital outpost was soaring 263 miles above the Indian Ocean with a field of star trails above and the Aurora Australis below.

PHOTO CREDIT – NASA Johnson

Undisbursed Balances in Expired Grant Accounts

In December 2015, Congress passed the Commerce, Justice, Science, and Related Agencies Appropriations Act, 2016 (Division B of the Consolidated Appropriations Act, 2016, P.L. 114-113), which required NASA to report undisbursed balances in expired grant accounts. OMB Memorandum M-16-18, *Financial and Performance Reporting on Undisbursed Balances in Expired Grant Accounts*, requires this information to be included each year until instructed otherwise. NASA monitors and tracks grants' undisbursed balances in expired accounts through a monthly review of internal control activities designed to identify undisbursed balances in expired accounts.

NASA generates financial management reports to aid in the tracking and monitoring of undisbursed amounts. An aging report of open obligations is generated monthly to determine the last day activity occurred. For open obligations in which no activity has occurred in a six-month period and/or there is no supporting documentation, further review is performed to determine the validity of obligation balances and the existence of valid source documentation. Additionally, further analysis is performed to determine if funds can be de-obligated. If obligations are valid, the aging reports are updated to reflect that obligations have been confirmed with procurement as valid.

NASA will continue to track undisbursed balances in expired grant accounts through its monthly review of internal control activities designed to identify funds for de-obligation. This involves the continuous monitoring of undisbursed balances, identifying balances that should be de-obligated, and performing timely closeout of grants and other activities. Additionally, NASA's financial management and procurement offices will continue to collaborate in monitoring and tracking undisbursed balances.

Currently, NASA does not have undisbursed balances in expired accounts that may be returned to the Treasury of the United States. The following chart reflects the total number and dollar amount of undisbursed grants for which the period of performance has expired. All amounts have been obligated to a specific project.

The expired awards listed below include awards that are within 120 days of the period of performance end date. Code of Federal Regulations § 200.344 allows grant recipients 120 days to finalize reporting and complete final financial transactions. Once all closeout requirements are met by the grantee, NASA makes every effort to close out the grant in a timely manner. The number of expired grants with undisbursed balances closely correlate to the total number of awards that expired each year, which is the cause for the increase in FY 2024.

FISCAL YEAR	TOTAL NUMBER OF EXPIRED GRANTS WITH UNDISBURSED BALANCES	TOTAL AMOUNT OF UNDISBURSED BALANCES FOR EXPIRED GRANTS (IN THOUSANDS)
2024	975	$ 12,936
2023	663	$ 8,126
2022	669	$ 16,718

Did You Know?

NASA Participates in the Podcast Movement

NASA participates in the Podcast Movement conference, Tuesday, Aug. 20, 2024, at the Gaylord National Resort and Convention Center in National Harbor, Md. During the event, NASA hosted a panel entitled, "Eclipses, Moon Missions, and Climate Change: How NASA Reaches Curious Listeners."

PHOTO CREDIT – NASA/Bill Ingalls

Grants Programs Information

Significant reporting entities with Federal grants programs must submit a brief high-level summary of expired, but not closed, Federal grants and cooperative agreements (awards). NASA continues to ensure its grants programs operate efficiently with the timely processing of expired, but not closed, Federal grants and cooperative agreements (awards) for closeout.

The Continuing Monitoring Program ensures ongoing review and validation of financial data and the effectiveness of internal controls over the entire financial management process, including grants. When grants with undisbursed balances in expired accounts are identified, appropriate action is taken to ensure optimum use of grant resources.

In FY 2024, the number of grants expired 2 or more years was reduced from 14 to 8. The total amount of undisbursed balances in this population increased from $7,169 to $202,870. The Agency fully implemented unilateral closeout procedures outlined in the NASA Grant and Cooperative Agreement Manual (GCAM) 9.1.4. In FY 2024, there were three instruments with undisbursed balances that could not be deobligated and closed, leading to the increase in undisbursed balances. One instrument is pending closeout of cost reimbursable sub-awards. Another instrument is pending legal review of a request for Principal Investigator transfer to another institution. The third instrument is pending supporting documentation.

NASA continued an automated process which sends expired grants to closeout on a weekly basis. This enhancement continues to ensure that the Agency operates with efficiency when managing and monitoring the grant close out process.

CATEGORY	2-3 YEARS	4-5 YEARS	MORE THAN 5 YEARS
Number of Grants/Cooperative Agreements with Zero Dollar Balances	1	1	3
Number of Grants/Cooperative Agreements with Undisbursed Balances	2	1	0
Total Amount of Undisbursed Balances (In Thousands)	$ 183	$ 20	$ —

Did You Know?

You'll surely get wrapped up in this episode of Surprisingly STEM featuring Paula Cain, a thermal blanket technician at NASA's Goddard Space Flight Center. She covers why things sent into space need to be protected by a thermal blanket. **(November 3, 2023)**

LEARN MORE →

SCAN ME

Climate-Related Financial Risk

The DC-8 aircraft completed its last mission, ASIA-AQ, which collected detailed air quality data over several locations in Asia to improve the understanding of local air quality in collaboration with local scientists, air quality agencies, and government partners.

PHOTO CREDIT – NASA/Carla Thomas, January 24, 2024

Climate Adaptation Plan and Sustainability Plan

Climate variability and climate change have important impacts on NASA's ability to fulfill its mission and thus merit a proactive and integrated response. As such, NASA continues to implement proactive measures to execute its mission and reduce the Agency's environmental, institutional, programmatic, and operational risks. As a global leader in the field of Earth science, NASA also recognizes that it has a unique role in end-to-end Earth System Science, which includes observing and researching the climate system, as well as applying that knowledge for decision making and to inform the public about climate change.

Fundamental to NASA efforts are the Climate Adaptation Plan (CAP) and Sustainability Plan. The CAP provides NASA's vision for adapting to climate change effects on mission, facilities, infrastructure, natural lands, and other assets, now and in the future. It identifies opportunities to further incorporate consideration of climate risk into management functions and other processes to prioritize those risks, apply resources and track progress. The Sustainability Plan summarizes actions to meet Federal sustainability goals, track results/cost savings, and showcase the Agency's strategies for continued progress and performance improvements. These Plans are also aligned to NASA's Strategic Plan and Agency Master Plan. Addressing climate requires an integrated and aligned approach to NASA's various strategic plans and policies.

Please explore the links below to discover and learn about NASA's Climate Adaptation Plan and the Sustainability Plan:

2024-2027 NASA Climate Adaptation Plan
www.sustainability.gov/pdfs/nasa-2024-cap.pdf

2022 NASA Sustainability Plan
www.sustainability.gov/pdfs/nasa-2022-sustainability-plan.pdf

Did You Know?

Welcome to NASA's Third Rock Radio

Discovery powers the work of NASA. It also drives music lovers to the Internet in search of something less ordinary. The two came together in 2011 with the launch of NASA's Third Rock Radio, produced and published by Houston-based RFC Media LLC under a Space Act Agreement with the National Aeronautics and Space Administration, Washington, DC. LISTEN TO US →

SECTION 4

Appendix

This composite image of multiple exposures shows the progression of a partial solar eclipse over the Washington Monument, Monday, April 8, 2024, in Washington. A total solar eclipse swept across a narrow portion of the North American continent from Mexico's Pacific coast to the Atlantic coast of Newfoundland, Canada. A partial solar eclipse was visible across the entire North American continent along with parts of Central America and Europe.

PHOTO CREDIT

NASA/Bill Ingalls

Mensaje del Administrador

Es un placer presentar el Financiero de la Agencia (AFR) para el Año Fiscal 2024 de la Administración Nacional de Aeronáutica y el Espacio (NASA). Este reporte provee puntos importantes sobre nuestro estado financiero y desempeño que demuestra el compromiso de la Agencia de ser transparente en el uso de los contribuyentes estadounidense. NASA está comprometido en presentar datos financieros que sean confiable, preciso, transparente, y comprensivo para suportar las operaciones fiscales de la Agencia que estén de acuerdo con los Principios de Contabilidad Generalmente Aceptados (GAAP).

Seguimos prácticas de alta calidad para la presentación del reporte financieros, los cuales aseguran controles apropiado con eficiencia y efectivo de los manejos de los fondos de la Agencia. Bajo el liderazgo de La Oficina de la Directora de Finanzas (OCFO), NASA una vez más ha recibido una opinión de auditoria sin modificación en sus estados financieros del 2024 por 14º año consecutivo. Sin embargo, nuestros auditores independientes identificaron una debilidad material relacionada con los controles financieros, que fueron designados apropiadamente pero no funciono de manera efectiva. Estamos implementando procedimientos para mitigar esta debilidad. Los datos financieros y desempeños presentados en este reporte son completo y confiable.

Principales temas y objetivos estratégicos de la NASA

DESCUBRIR

Ampliar el conocimiento humano a través de nuevos descubrimientos científicos.

EXPLORAR

Extender la presencia humana a la Luna y hacia Marte para la exploración, el desarrollo y la utilización sostenibles a largo plazo.

INNOVAR

Catalizar el crecimiento económico e impulsar la innovación para abordar los desafíos nacionales.

AVANZAR

Mejorar las capacidades y operaciones para catalizar el éxito de las misiones actuales y futuras.

NASA ha establecido una visión audaz para el futuro, uno que está definida por innovación y exploración. NASA persigue esa visión a través inversiones, además de otras cosas, enviando a la humanidad hacia cosmos, haciendo ciencias a través de nuestro sistema solar y el universo, estudiando la Tierra, creando tecnología de vanguardia, construyendo la siguiente generación de transporte aéreo, y educando los futuros exploradores de nuestra nación. En la persecución de estas misiones, nosotros en NASA seguimos aprovechando nuestras relaciones con el sector privado y con los países alrededor del mundo. También nos esforzamos para refinar nuestros procesos internos para asegurar que nuestra Agencia opere de manera eficiente y efectiva, haciendo mejor uso de los recursos que se nos han confiado. Al maximizar el valor de cada dólar invertido en nuestras misiones y en nuestro trabajo, NASA continua el liderazgo a la vanguardia de la aeronáutica, ciencia, y exploración espacial.

En el Año Fiscal 2024, NASA rompió barreras e hizo lo que parecía imposible, posible. Continuamos haciendo grandes pasos para explorar nuevas costas cósmicas, avanzar en la exploración espacial, mejorar la seguridad y la eficiencia de los viajes aéreo a través de innovación, y proteger nuestro planeta por medio del monitoreo y el progreso científico.

Mediante la campaña de Artemis, estamos digiriendo la humanidad a su regreso a la Luna por primera vez después de un medio siglo. Vamos a explorar la Luna más que antes, por más tiempo, usando una nueva generación de ciencia y tecnología. Vamos en asociación con una amplia coalición de socios comerciales e internacionales. Llegaremos más allá, en la búsqueda de descubrir nuevas capacidades para vivir, aprender, inventar, y crear en otro mundo. Nuestra exploración lunar a través de Artemis nos dejara ver más allá para mandar los primeros Astronautas a Marte. En el Año Fiscal 2024, seguimos preparándonos para Artemis II, cual enviaremos a cuatro Astronautas alrededor de la Luna. Esta misión marcara el camino para Artemis III, en el cual dejaremos huellas en una parte de la Luna donde nadie ha visitado antes: le región del Polo Sur lunar. Además, en el Año Fiscal 2024, logramos nuevos avances mediante la iniciativa de Servicios Comerciales de Carga Útil Lunar de la NASA, tales como nuestra asociación con Intuitive Machines para lograr el primer aterrizaje suave exitoso en la Luna llevado a cabo por una empresa privada.

El Año Fiscal 2024, con nuestros socios internacionales, hemos mantenido operando el laboratorio espacial en orbita del mundo, la Estación Espacial Internacional (EEI). En la EEI, continuamos nuestro trabajo de descrubir nuevos informacion en nuestro investigacion e inovacion mientras trabajando con nuestro socios internacionales y comerciales. NASA continuara operando la EEI hasta el año 2030 mientras trabaja en la trancision a una plataforma de propriedad y operación commercial

CONTINÚA EN LA PÁGINA SIGUIENTE →

Mensaje del Administrador (CONTINUACIÓN)

en la orbita baja de la Tierra. Adicionalmente, en el Año Fiscal 2024, marcamos los lanzamientos de tripulaciones Crew-8 y Crew-9 de la NASA al EEI a bordo de cohetes de SpaceX. Estos lanzamientos representan solo unos de los pasos para avanzar nuestro Programa Tripulacion Comercial – nuestro programa para transportar Astronauticas hacia y desde la EEI en una manera segura, confiable, y gastos efectivo, a traves de asociaciones con la industria privada estadounidense.

En el Año Fiscal 2024, NASA ha construido sobre nuestro largo trabajo para estudiar nuestra Tierra como un sistema. La mayor parte de lo que sabemos sobre nuestro planeta cambiante viene de nuestra flota de más de dos docenas de satélites e instrumentos, y más de 60 años de observaciones sobre el clima. Compartimos nuestros datos de observaciones libremente and con toda la humanidad – y eso ayuda al mundo a tomar medidas, incluso frente al cambio climático. En el Año Fiscal 2024, entre otras cosas, avanzamos nuestro trabajo con el satélite del Radar de Apertura Sintética (NISAR, por sus siglas en inglés) de NASA y ISRO (Organización de Investigación Espacial de la India). Esta misión conjunta entre NASA y ISRO será el primer radar de este tipo en el espacio para mapear sistemáticamente la Tierra. NISAR utilizara dos frecuencias de radar diferentes para medir cambios del exterior de nuestro planeta, y profundizara nuestra compresión acerca de la deforestación, los desastres naturales, y el cambio climático, a través de otros signos vitales globales.

La primera “A” en NASA as para Astronáuticos. NASA continua las investigaciones para mejorar los viajes aéreos y hacerlos más sostenibles. Por ejemplo, en enero de 2024, NASA presento públicamente el avión supersónico silencioso, X-59 – el cual transformara la forma en que viajamos. Por 50 años, los Estados Unidos (U.S.) y otras naciones han prohibido los aviones supersónicos comerciales sobre tierra debido a la perturbación causada por explosiones sónicas. El avión X-59 quiere demostrar la habilidad de alcanzar velocidades supersónicas mientras generando un golpe más silencioso, revolucionando la industria de aviación, y haciendo un camino de acceso para los aviones comerciales en el futuro. Además, en el Año Fiscal 2024, también avanzamos el progreso con el Demostrador de Vuelo Sostenible X-66, el primer avión experimental enfocado específicamente en ayudar a U.S. a lograr cero emisiones netas de aviación para el Año 2050.

NASA está dedicada a participar, inspirar, y atraer a las futuras generaciones de exploradores. También estamos comprometido con la promoción en Ciencia, Tecnología, Ingeniero, y Matemáticas (STEM) para los estudiantes de diversos orígenes para que sigan intereses y una carrera en STEM e la industria espaciales. Para apoyar este objetivo, NASA lanzo su Plan Estratégico de Implementación para la Participación en STEM 2024-2026. Este plan apoya la estrategia en STEM de NASA y describe los esfuerzos sistémicos para apoyar la coordinación y ejecución de nuestro trabajo en STEM. Al continuar participando con los estudiantes, apoyando educadores y las instituciones educativas, y apoyando la diversidad, y accesibilidad en el campo STEM, NASA lucha por ayudar la próxima generación de pioneros y aventureros. Además, NASA brinda accesos a oportunidades para las comunidades desatendidas, ofreciendo perspectivas cruciales y diversas que son necesarias para llevarnos a la Luna, Marte y más allá.

Estoy profundamente conmovido por la fuerza laboral de la NASA, a quienes llamo los magos de la NASA. Todos los días realizan cosas extraordinarias en nombre del pueblo estadounidense y en beneficio de toda la humanidad. Nos destacamos por romper barreras que impiden obstruir la justicia, garantizando el acceso a las oportunidades para que las comunidades desatendidas participen en las perspectivas importantes y diversas que son necesarias para llevarnos a la Luna, Marte y más allá.

Nuestro espíritu pionero hace que NASA sea siempre el mejor lugar para trabajar dentro del gobierno federal. Estoy emocionada con los avances gigantes que viene - y con la celebración de los históricos éxitos de nuestra nación - mientras continuamos explorando lo desconocido en el aire y en el espacio, innovando en beneficio de la humanidad e inspirando al mundo a través del descubrimiento.

Atentamente,
Bill Nelson

Mensaje del Director Financiero

Es un placer acompañar con el Administrador Nelson en presentar el Año Fiscal 2024 Financiero de la Agencia (AFR) de la Administración Nacional de Aeronáutica y el Espacio (NASA). Este reporte refleja nuestro compromiso de avanzar la misión de NASA y servir al pueblo estadounidense a través de una gestión financiera efectivo y la supervisión de los recursos que han sido confiados a NASA. La Oficina de la Directora de Finanzas (OCFO) desempeña una parte crucial en el desarrollo de este reporte, garantizando una declaración de estados financieros precisa, transparente y oportuna. Además, la OCFO apoya a NASA en sus esfuerzos por mantener los más altos estándares de administración financiera, integridad, desempeño operativo, y sistemas y controles efectivos. Este estándar de excelencia ha sido reconocido una vez más en nuestros estados financieros del Año Fiscal 2024, que afirma una opinión de auditoria sin modificación por 14o año consecutivo. Esto confirma que los estados financieros de NASA son libres de errores materiales y han sido preparados de acuerdo con los Principios de Contabilidad Generalmente Aceptados de Estados Unidos (GAAP), y que nuestro sistema de controles internos funciona de manera efectivo.

Nuestros auditores independientes identificaron una debilidad material relacionada con los controles financieros, que fueron designados apropiadamente pero no funciono de manera efectiva. Estamos implementando procedimientos mejorados, incluyendo procesos de validación y control fortalecidos y más protocolos analíticos aumentados, para dirigir la condición y mitigar el riesgo de errores potenciales. Es importante notar que los auditores no revelo ningún caso de incumplimiento con la leyes y regulaciones.

Objetivos de la Oficina de la Directora de Finanzas

OBJETIVO I

Garantizar la administración de la inversión de los contribuyentes confiada a NASA para avanzar y lograr los objetivos estratégicos, las prioridades y las misiones de la Agencia.

OBJETIVO II

Dirigir y desarrollar una comunidad y unas capacidades analíticas sólidas que apoyen y empoderen la misión de la Agencia.

OBJETIVO III

Desarrollar y lograr la participación de la fuerza laboral empresarial para capacitar a NASA del futuro.

El equipo de OCFO ha avanzado varias iniciativas en todo el gobierno durante el año pasado, además de nuestros excelentes resultados en la auditoría. NASA ha realizado inversiones considerables para implementar el nuevo mandato federal para la contabilidad de los arrendamientos, asegurando que las transacciones se registran, concilian, y reportan con precisión de acuerdo con los requisitos establecidos por la Junta Asesora de Normas Federales de Contabilidad (FASAB). NASA ha completado los requisitos para la implementación del sistema de facturación G-Invoicing para alinear el sistema financiero de NASA con el portal de G-Invoicing del Departamento del Tesoro para permitir capacidades de transacción efectivas con sus socios comerciales. Además, NASA implementó el requisito de Salud y Desempeño Organizacional descrito por la Oficina de Administración y Presupuesto, desarrollando métricas para rastrear e informar la información de la salud interna y el desempeño externo de la NASA como Agencia.

En todo lo que hacemos, estamos comprometidos con la seguridad, la integridad, el trabajo en equipo, la excelencia, y la inclusión, como lo demuestran los miembros del equipo de OCFO honorado con los Premios de Honor de la Agencia 2023 y el Programa de Reconocimiento al Honor de la Agencia. Estos premios representan la forma más alta de reconocimiento de NASA por contribuciones excepcionales e impactos positivos tanto en NASA como en la organización de OCFO. Además, estos esfuerzos culminaron con el reconocimiento formal de la AGA, la cual otorgó por decima vez el Certificado de Excelencia en Informes de Contabilidad para el AFR del año fiscal 2023 de NASA, junto con el prestigioso Premio Mejor de su Clase. Estoy extremadamente orgullosa de la fuerza laboral de NASA y de la base fuerte que hemos construido juntos: este legado permitirá a NASA llevar adelante con confianza objetivos ambiciosos y convertir lo aparentemente inalcanzable en realidad.

Atentamente,

Margaret V. Schaus

Margaret Vo Schaus

Celebrating NASA 10+ Years of Excellence

NASA's high quality financial reporting and results are a direct reflection of its award-winning work environment. NASA's workforce is a diverse community that values teamwork and is united by a shared mission. The accomplishments featured in this year's AFR demonstrate NASA's legacy of excellence and innovation.

2023	2022	2021	2020	2019	2018
					
2017	**2016**	**2015**	**2014**	**2013**	**2012**
					

NASA has been named the "Best Place to Work in the Federal Government" among large agencies for 12 consecutive years, with #1 ranking since 2012.

NASA received its **10th Certificate of Excellence in Accountability Reporting (CEAR) Award** for its FY 2023 AFR from AGA. The CEAR award is the highest form of recognition in the Federal government financial community.

For the **13th consecutive year**, NASA received an **unmodified, or "clean,"** opinion from the Independent Auditors on its FY 2023 financial statements. NASA's financial statements and budgetary reporting have received the highest possible audit opinion, certifying that it adheres to Generally Accepted Accounting Principles for Federal agencies.

Certificate of Excellence in Accountability Reporting Award

AGA awarded NASA its prestigious CEAR Award and Best-in-Class Award, marking the **10th year** NASA has been recognized for its excellence in financial reporting.

Frank E. Petersen, III

Mr. Frank E. Petersen, III serves as NASA's Deputy Chief Financial Officer for Finance. In this role, Mr. Petersen oversees the Associate Chief Financial Officer for Policy and Systems (Financial Policy, Agency Financial Systems Office, and HQ Travel Office); Quality Assurance Division; and Financial Management Division. Mr. Petersen is responsible for the financial systems, financial policies and procedures, financial management, quality assurance, internal controls, OCFO risk management, and reporting of all Agency financial resources. Mr. Petersen is currently serving as AGA's National President for 2024 – 2025.

Glossary of Acronyms

A

ABC	Agency Baseline Commitment
ACO	Acceptance Checkout
AFR	Agency Financial Report
AFRC	Armstrong Flight Research Center
AI	Artificial Intelligence
AICPA	American Institute of Certified Public Accountants
AIVA	Advanced Imaging and Visualization of Astromaterials
AMP	Agency Master Plan
APEP	Atmospheric Perturbations around Eclipse Path
APMC	Agency Program Management Council
AR	Augmented Reality
ARC	Ames Research Center
ARMO	Agency Risk Management Officer
ARMWG	Agency Risk Management Working Group
ASAP	Aerospace Safety Advisory Panel
ASC	Accounting Standards Codification
ASC	Acquisition Strategy Council
ASM	Acquisition Strategy Meeting
ATV	Automated Transfer Vehicle
Ax-3	Axiom-3

C

CADRE	Cooperative Autonomous Distributed Robotic Exploration
CAIO	Chief Artificial Intelligence Officer
Caltech	California Institute of Technology
CAP	Climate Adaptation Plan
Carbon-I	Carbon Investigation
CDO	Chief Data Officer
CDR	Critical Design Review
CEAR	Certificate of Excellence in Accountability Reporting
CFM	Cryogenic Fluid Management
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CLD	Commercial LEO Destinations
CLDP	Commercial LEO Destinations Program
CLPS	Commercial Lunar Payload Services
CM	Crew Module
CoF	Construction of Facilities
CPMO	Chief Program Management Officer
CRV	Current Replacement Value
CSA	Canadian Space Agency
CSLI	CubeSat Launch Initiative
CSM	Crew and Service Module
CSRS	Civil Service Retirement System

D

DATA	Digital Accountability and Transparency Act
DEIA	Diversity, Equity, Inclusion, and Accessibility
DM&R	Deferred Maintenance and Repairs
DNA	Deoxyribonucleic Acid
DSN	Deep Space Network
DSOC	Deep Space Optical Communications

E

EC	Executive Council
ECC	Enterprise Central Component
ECLSS	Environmental Control and Life Support Systems
EDGE	Earth Dynamics Geodetic Explorer
EGS	Exploration Ground Systems
EMC	Electromagnetic Compatibility
EMI	Electromagnetic Interference
EO	Executive Order
EPA	Environmental Protection Agency
EPFD	Electrified Powertrain Flight Demonstrations
EPO	Enterprise Pricing Office
ERM	Enterprise Risk Management
ERP	Enterprise Resource Planning
ESCO	Energy Service Company
ESD	Earth Science Division
ESDMD	Exploration Systems Development Mission Directorate
ESE	Earth System Explorers
ESO	Earth System Observatory
ESPC	Energy Savings Performance Contract
ET	Eastern Time
EUL	Enhanced Use Lease
EVP	Employee Value Proposition
EY	Ernst & Young LLP

CONTINUED ON THE NEXT PAGE →

F

FAR	Federal Acquisition Regulation
FASAB	Federal Accounting Standards Advisory Board
FASB	Financial Accounting Standards Board
FBWT	Fund Balance with Treasury
FCA	Facility Condition Assessment
FECA	Federal Employees' Compensation Act
FERS	Federal Employees Retirement System
FEVS	Federal Employee Viewpoint Survey
FFMIA	Federal Financial Management Improvement Act
FFRDC	Federally Funded Research and Development Center
FIR	Far-Infrared
FMFIA	Federal Managers' Financial Integrity Act
FY	Fiscal Year

G

GAAP	Generally Accepted Accounting Principles
GAAS	Generally Accepted Auditing Standards
GAO	Government Accountability Office
GCAM	Grant and Cooperative Agreement Manual
GHG	Greenhouse Gas
GHGMMIS	GHG Measurement, Monitoring and Information System
GOES	Geostationary Operational Environmental Satellite
GPRAMA	Government Performance and Results Act Modernization Act
GRACE-C	Gravity Recovery and Climate Experiment-Continuity
GRC	Glenn Research Center
GSA	General Services Administration
GSFC	Goddard Space Flight Center
GTA	Government Task Agreements
GTAS	Government-wide Treasury Account Symbol Adjusted Trial Balance System
GUSTO	Galactic/Extragalactic ULDB Spectroscopic Terahertz Observatory

H

HALO	Habitation and Logistics Outpost
HLS	Human Landing System
HQ	Headquarters
HTV	H-II Transfer Vehicle

I

IMAP	Interstellar Mapping and Acceleration Probe
ISRO	Indian Space Research Organisation
ISS	International Space Station

J

JAXA	Japan Aerospace Exploration Agency
JEM	Japanese Experiment Module
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center

K

KSC	Kennedy Space Center

L

LaRC	Langley Research Center
LBFD	Low Boom Flight Demonstration
LEO	Low-Earth Orbit
LGBTQIA+	Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual
LN2	Liquid Nitrogen
LSP	Launch Services Program

M

M&R	Maintenance and Repairs
MCR	Mission Concept Review
ML2	Mobile Launcher 2
MSC	Mission Support Council
MSFC	Marshall Space Flight Center
MSR	Mars Sample Return
MSWG	Management System Working Group

N

N/A	Not Applicable
NAC	NASA Advisory Council
NASA	National Aeronautics and Space Administration
NASEM	National Academies of Sciences, Engineering, and Medicine
NEO	Near-Earth Object
NextStep	Next Space Technologies for Exploration Partnerships
NFS	NASA FAR Supplement
NHPA	National Historic Preservation Act
NISAR	NASA-ISRO Synthetic Aperture Radar
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NPD	NASA Policy Directive

CONTINUED ON THE NEXT PAGE →

NPR	NASA Procedural Requirements
NSSC	NASA Shared Services Center
NZT	New Zealand Time

O

OCFO	Office of the Chief Financial Officer
ODRM	Objectives Driven Risk Management
ODYSEA	Ocean Dynamics and Surface Exchange with the Atmosphere
OIG	Office of Inspector General
OMB	Office of Management and Budget
OP	Operating Plan
OSI	Office of Strategic Infrastructure
OSI-FRED	OSI Facilities and Real Estate Division

P

P.L.	Public Law
P3	Public-Private Partnerships
PACE	Plankton, Aerosol, Cloud, Ocean Ecosystem
PAM	Private Astronaut Mission
PDR	Preliminary Design Review
PIIA	Payment Integrity Information Act
PIO	Performance Improvement Officer
PMA	President's Management Agenda
PMR	Procurement Management Review
PP&E	Property, Plant, and Equipment
PREFIRE	Polar Radiant Energy in the Far-InfraRed Experiment
PRISM	Payloads and Research Investigations on the Surface of the Moon

Q

Q3	Quarter Three

R

R&D	Research and Development
RCM	Reliability Centered Maintenance
RNA	Ribonucleic Acid

S

SAT	Senior Assessment Team
SBR	Statement of Budgetary Resources
SES	Senior Executive Service
SFD	Sustainable Flight Demonstration
SFFAS	Statement of Federal Financial Accounting Standards
SLS	Space Launch System
SM	Service Module
SMD	Science Mission Directorate
SNC	Statement of Net Cost
SoA	Statement of Assurance
SPHEREx	Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer
SRR	System Requirements Review
SSC	Stennis Space Center
STEM	Science, Technology, Engineering, and Mathematics
STMD	Space Technology Mission Directorate
STRIVE	Stratosphere Troposphere Response using Infrared Vertically-Resolved Light Explorer

T

TAGSAM	Touch-and-Go-Sample-Acquisition-Mechanism
TEAM II	Teams Engaging Affiliated Museums and Informal Institutions
TMF	Technology Modernization Fund

U

U.S.	United States
U.S.C	United States Code
UESC	Utility Energy Service Contract
ULDB	Ultra-Long Duration Balloon
UNICORN	Unified Comprehensive Operational Risk Network
USDV	United States Deorbit Vehicle
USSGL	United States Standard General Ledger

V

VCLS Demo 2	Venture-Class Launch Services Demonstration 2
VIPer	Volume of Integrated Performance

X

xEVAS	Exploration Extravehicular Activity Services

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BACK COVER IMAGE

A Moonlit Moonwalk

NASA astronaut Kate Rubins places a sample marker in the soil before collecting a sample during a nighttime simulated moonwalk in the San Francisco Volcanic Field in Northern Arizona on May 16, 2024. A sample marker provides a photographic reference point for science samples collected on the lunar surface.

PHOTO CREDIT – NASA/Josh Valcarcel

SCAN ME

THANK YOU FOR YOUR INTEREST IN NASA'S FY 2024 AFR

We welcome your comments on how we can improve this report for our readers. Electronic copies of this report and prior years' reports are available through the **Agency's website**.

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