



# NATIONAL SCIENCE FOUNDATION

## **FY 2026 Budget Request to Congress**

**May 30, 2025**



## NOTES

### Table and Figure Notes

Numbers in the tables and figures may not sum to totals due to rounding.

### Common Acronyms Used in NSF's Budget Submission

#### Appropriation Accounts

- AOAM - Agency Operations and Award Management
- MREFC - Major Research Equipment and Facilities Construction
- NSB - National Science Board
- OIG - Office of Inspector General
- R&RA - Research and Related Activities

#### Directorates and Offices

- BFA - Office of Budget, Finance, and Award Management
- BIO - Directorate for Biological Sciences
- CISE - Directorate for Computer and Information Science and Engineering
- EDU - Directorate for STEM Education
- ENG - Directorate for Engineering
- GEO - Directorate for Geosciences
- GEO: OPP - Office of Polar Programs (a Sub-Activity within the Directorate for Geosciences)
- MPS - Directorate for Mathematical and Physical Sciences
- SBE - Directorate for Social, Behavioral, and Economic Sciences
- TIP - Directorate for Technology, Innovation, and Partnerships
- CRSP - Office of the Chief of Research Security Strategy and Policy
- OIRM - Office of Information and Resource Management
- OISE - Office of International Science and Engineering
- OIA - Office of Integrative Activities [organizational unit]
- IA - Integrative Activities [budget activity]
- EPSCoR - Established Program to Stimulate Competitive Research

#### National Science and Technology Council Crosscuts:

- CET - Clean Energy Technology
- NITRD - Networking and Information Technology Research and Development
- NNI - National Nanotechnology Initiative
- USGCRP - U.S. Global Change Research Program
- QIS - Quantum Information Science

#### NSF-Wide Investments

- GRFP - Graduate Research Fellowship Program
- IUSE - Improving Undergraduate STEM Education
- I-Corps™ - NSF Innovation Corps
- NRT - NSF Research Traineeship
- SaTC - Secure and Trustworthy Cyberspace

Other Frequently Used Acronyms

- STEM - science, technology, engineering, and mathematics
- R&D - research and development
- O&M - operations and maintenance
- AI - artificial intelligence
- Mid-scale RI - Mid-scale Research Infrastructure

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## NSF FY 2026 Budget Request to Congress

*The National Science Foundation Act of 1950 (Public Law 81-507) sets forth our mission: **"To promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..."***



The National Science Foundation's FY 2026 Budget Request of \$3.903 billion reflects a strategic alignment of resources in a constrained fiscal environment. NSF is prioritizing investments that complement private-sector R&D and offer strong potential to drive economic growth and strengthen U.S. technological leadership. This approach ensures public funding is directed toward areas where it can have the greatest national impact.

NSF support is vital to the U.S. research and development enterprise, to training the STEM workforce, and to cultivating access to scientific learning and resources. These investments will continue to spur the economic growth that keeps our Nation moving forward and support U.S. manufacturing competitiveness.

The allocation of funds reflects Administration policy to invest in programs that serve all Americans equally.

For over 75 years, NSF has advanced the frontiers of the full spectrum of science and engineering research and innovation. Tasked with keeping the U.S. at the leading edge of scientific and engineering discovery to the benefit of all, NSF funds research that generates new knowledge that provides a greater understanding of the world around us. NSF's long-term support for solutions-oriented research has fueled industries of the future, produced advancements for the American people, and created world-leading technologies.

NSF investments fuel groundbreaking discoveries, accelerate translational solutions, and expand participation in STEM fields. These efforts support a strong domestic workforce, bolster national security, and enhance U.S. global competitiveness in science and engineering. A new frontier of scientific discovery lies before us, defined by transformative technologies such as artificial intelligence, quantum computing, and advanced biotechnology. Breakthroughs in these fields have the potential to reshape the global balance of power, spark entirely new industries, and revolutionize the way we live and work. To secure our future, we must harness the full power of American innovation by empowering entrepreneurs, unleashing private-sector creativity, and reinvigorating our research institutions.

## CRITICAL ACTIVITIES PRIORITIZED IN THE BUDGET

**Artificial Intelligence (AI)**, including machine learning, autonomy, and related advances, (\$655.23 million) investments will bring together numerous fields of scientific inquiry—including computer and information science; cognitive science and psychology; economics and game theory; education research; engineering and control theory; ethics; linguistics; mathematics; and philosophy—to advance the frontiers of trustworthy AI, including advancing perception, learning, reasoning, recommendation, and action in the context of specific fields and economic sectors. NSF investments are needed to develop new foundational AI theory and implementation techniques, as well as novel AI methods that are inspired by use cases in specific application domains and contexts.

**Quantum Information Science (QIS)**, including quantum computing and simulation, (\$231.15 million) will advance fundamental understanding of uniquely quantum phenomena that can be harnessed for information processing, transmission, and measurement in ways that classical approaches do less efficiently, or not at all. Current and future applications of QIS differ from prior applications of quantum mechanics by using distinct properties that do not have classical counterparts. The development of new applications for QIS will lay the groundwork for one of the major technological revolutions of the 21<sup>st</sup> century.

**Directorate for Technology, Innovation, and Partnerships (TIP)** (\$350.0 million), including the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programs, is a strategic organizational tool for maintaining and expanding America's leadership role in science and technology. By accelerating commercialization, expanding the Nation's innovation base, and attracting and training American workers to power key technologies, TIP is a national security asset driving impact in key technology areas and national, societal, and geostrategic challenges.

## CONTINUED INVESTMENTS IN KEY AREAS

**Biotechnology**, including genomics and synthetic biology, (\$248.59 million) investments will support fundamental and translational research, infrastructure, and education to understand and harness biological processes for societal benefit.

**Advanced Manufacturing**, including robotics and sensing technologies, (\$110.10 million) investments will accelerate breakthroughs in manufacturing materials, technologies, and systems through fundamental and translational, multidisciplinary research that transforms manufacturing capabilities, methods, and practices.

**Microelectronics and Semiconductors**, including advanced computer hardware, (\$65.75 million) investments will address the microelectronics and semiconductor challenges facing our Nation due to technological and global trends, such as the end of Moore's Law and offshoring of semiconductor fabrication and manufacturing.

**Advanced Wireless**, including communications technology and immersive technology, (\$59.46 million) investments will bridge knowledge gaps and advance innovations in areas critical to future generations of communications technologies and networks, such as novel wireless devices, circuits, protocols, and systems; mobile edge computing; distributed machine learning and inference on



mobile devices; human-machine-network interactions; ultra-low-latency connections; and dynamic spectrum allocation and sharing, all while ensuring security for all users.

**Established Program to Stimulate Competitive Research (EPSCoR) Office** (\$107.70 million) provides strategic programs and opportunities that stimulate sustainable improvements to EPSCoR jurisdictions' R&D capacity and capability. EPSCoR aims to stimulate research that enhances jurisdictional competitiveness in NSF disciplinary and multidisciplinary research programs, especially those that drive economic growth and geographic diversity.

EPSCoR uses three investment strategies in pursuit of its goal to strengthen research capacity and competitiveness in eligible jurisdictions. These are:

- Research Infrastructure Improvement (RII) awards that support physical, human, and cyberinfrastructure development
- Co-Funding in partnership with NSF directorates and offices that support individual investigators and groups within EPSCoR jurisdictions
- Outreach activities and workshops that bring EPSCoR jurisdiction investigators together with program staff from across the Foundation to explore opportunities in emerging areas of science and engineering aligned with NSF strategic priorities and with jurisdictional science and technology goals

The **CyberCorps®: Scholarships for Service (SFS)** (\$21.71 million) program recruits and trains the next generation of cybersecurity professionals in order to develop a superior cybersecurity workforce for the Nation. Key goals for NSF are to increase the number of qualified cybersecurity candidates for cybersecurity positions and improve the national capacity for the education of cybersecurity professionals and research and development workforce.

**Historically Black Colleges and Universities-Undergraduate Program (HBCU-UP) and -Excellence in Research Program (HBCU-EiR)** (\$56.50 million in total). These programs enhance the quality of undergraduate STEM education and research and support projects that enable STEM and STEM education faculty to develop research capacity and conduct research at HBCUs.

The **Tribal Colleges and Universities Program (TCUP)** (\$7.11 million) provides awards to Tribal Colleges and Universities, Alaska Native-serving institutions, and Native Hawaiian-serving institutions to promote high quality STEM education, research, and outreach.

## **INVESTMENTS IN RESEARCH INFRASTRUCTURE (RI)**

From individual instruments to major research facilities, RI is foundational to the scientific endeavor and necessary for enabling ground-breaking discoveries and global leadership. RI is equally important in use-inspired research and technology development that meet national, societal, and geostrategic needs and challenges. Cutting-edge RI is also integral to attracting, developing, and training the next generation of STEM talent and inspiring those who will lead the next generation of advances in infrastructure. The skills required to design, operate, and maintain RI are critical for the long-term future and success of the Nation's science and technology enterprise. Key components of RI are:

**Major Facilities Operations and Maintenance (O&M)** (\$745.0 million) reflects a balance among multiple priorities. NSF carefully allocates resources between research grants and O&M costs for research infrastructure that supports the scientific discovery for which those grants are made. In addition to regular O&M needs to keep a facility functional, support for upgrades, significant periodic maintenance, and infrastructure renewal must also be addressed within Facilities O&M. NSF continues to explore ways to invest in research infrastructure, at all scales, to keep pace with changing technologies, increased demand by users, and expanding research opportunities.

**Mid-scale Research Infrastructure (Mid-scale RI)** (\$43.06 million total, comprising \$25.0 million in the agency-wide Track 2 program plus \$18.06 million in directorate-level programs), supports research infrastructure with a total project cost falling between the upper limit for the Major Research Instrumentation program at \$4.0 million and the Major Facility construction threshold at \$100.0 million. This dedicated funding line implements an agency-wide mechanism that includes upgrades to major facilities as well as stand-alone projects.

The **Major Research Instrumentation (MRI)** (\$20.0 million) program catalyzes new knowledge by helping STEM professionals acquire or develop the instrumentation needed for innovative research. MRI grants of up to \$4.0 million are provided across all NSF-supported research disciplines.

**Major Research Equipment and Facilities Construction (MREFC)** (\$251.0 million). Construction projects that require an investment of more than \$100.0 million are supported through NSF's MREFC Account. In FY 2026, funding continues construction of the Leadership-Class Computing Facility and the Antarctic Infrastructure Recapitalization project, as well as the Mid-scale Research Infrastructure - Track-2 program.

#### MREFC Account Funding, by Project

(Dollars in Millions)

	FY 2026 Request
Leadership-Class Computing Facility (LCCF)	\$201.00
Antarctic Infrastructure Recapitalization (AIR)	24.00
Mid-scale Research Infrastructure, Track 2	25.00
Dedicated Construction Oversight	1.00
<b>Total</b>	<b>\$251.00</b>

- The **Leadership-Class Computing Facility** (\$201.0 million) is envisioned as a distributed facility that will provide unique computational and data analytics capabilities, as well as critical software and services, for the Nation's science and engineering research community to enable discoveries that would not be possible otherwise. The project will deploy a range of education and outreach activities to nurture our Nation's future STEM workforce in data and computational science.
- NSF manages all U.S. Antarctic activities as a single, integrated program, making Antarctic research possible for scientists supported by NSF and other U.S. agencies. **The Antarctic Infrastructure Recapitalization** (\$24.0 million) program is a portfolio of infrastructure investments across the U.S. Antarctic stations.

- **Mid-scale Research Infrastructure - Track 2.** See discussion above.

**Design of Potential New Major Facility Construction Project.** Given the unaffordability of continuing funding two different multi-billion dollar telescopes, NSF will advance the Giant Magellan Telescope (GMT) into the Major Facility Final Design Phase, but the Thirty Meter Telescope (TMT) will not advance to the Final Design Phase and will not receive additional commitment of funds from NSF. NSF has received assurances from the GMT project that it can complete the final design phase without further investments. Moving into the final design phase does not guarantee that a project will be approved for construction, and doing so does not obligate the agency to provide any further funding. The FY 2026 Request supports continued design of a single telescope within the U.S. Extremely Large Telescope (ELT) program.

## **RESEARCH SECURITY STRATEGY AND POLICY**

NSF is expanding capabilities and competencies to protect the U.S. science and engineering enterprise through its Research Security Strategy and Policy activity. The August 2022 CHIPS and Science Act contained several research security provisions that NSF is implementing. NSF participation in discussions with the U.S. research community and with international colleagues and development of common frameworks for understanding research security are major components of the NSF Research Security activity. Specific activities include:

- As required by Section 10338 of the CHIPS and Science Act, NSF will support the Safeguarding the Entire Community of the U.S. Research Ecosystem (SECURE) Program, formerly the Research Security and Integrity Information Sharing and Analysis Organization, to empower the research community to identify and mitigate foreign interference that poses risks to the U.S.-funded research enterprise. The Program includes the SECURE-Center which will share information, tools and other services related to research security risks and provide training to the research community. In addition, the SECURE-Analytics award supports the analytics needs of the broader research community and works in close coordination with the SECURE-Center.
- The Research on Research Security (RoRS) Program will advance the understanding of the full scope, potential, challenges, and nature of the research on research security field through scholarly evidence. This includes assessment of the characteristics that distinguish research security from research integrity, improving the quantitative understanding of the scale and scope of research security risks, developing methodologies to assess the potential impact of research security threats, and assessing the additional research security risks in an innovation system that includes more use-inspired research rather than staying well within the bounds of fundamental research.

## **ORGANIZATIONAL EXCELLENCE - AGENCY OPERATIONS AND AWARD MANAGEMENT (AOAM)**

Of the \$3.903 billion funding that NSF is requesting in FY 2026, NSF requests \$355.0 million for AOAM, a decrease of \$93.0 million or -20.8 percent below FY 2024 Current Plan level for AOAM. This reduction is commensurate to the needs of NSF at the total FY 2026 Request level.

The AOAM account funds the staff and support services at NSF that enable research and operations to steward the taxpayer investment. Investments in the AOAM account provide the fundamental framework through which the Foundation's science and engineering research and education programs are administered, and by which NSF directly supports and responds to Congressional priorities and the Administration's management and performance priorities, including a research science and security framework necessary to the well-being of the NSF-funded scientific enterprise. Over the last several fiscal year budget requests, NSF reduced or held flat support services costs to accommodate the year-over-year increases in the fixed costs for staffing and rent while minimizing growth to the AOAM account in the Request.

Emphasizing the essential nature of the AOAM account in supporting the scientific enterprise at NSF, in FY 2026 NSF proposes two changes:

- Shifting the AOAM account from one-year to two-year budget authority to bring the availability into alignment with the program funds in the R&RA account
- Shifting budget activities with an agency-wide benefit from the AOAM account to the R&RA account, under Mission Support Services, to better align the funding for such activities with where their benefit accrues as well as to accommodate the reduced AOAM level in FY 2026

## HIGHLIGHTS

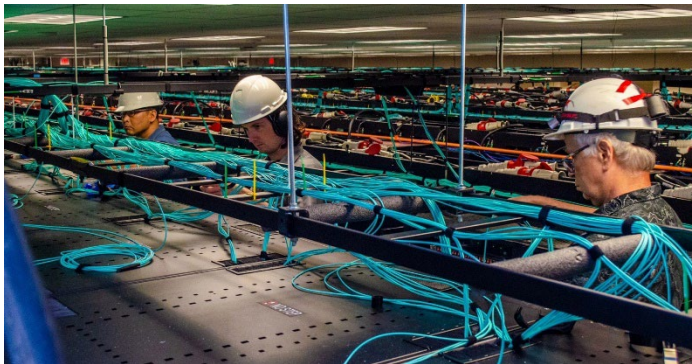
### Expeditions in Computing

NSF's Expeditions in Computing program supports large-scale, cutting-edge research projects poised to yield lasting impacts on society, the economy, and technological advancement. Projects funded by Expeditions are characterized by their ambition and potential for transformation, leveraging advances in computing and cyberinfrastructure to accelerate discovery and innovation across various science and engineering domains. Previous awards have covered topics from synthetic biology and behavioral neuroscience to computer vision, robotics, and quantum computing. NSF has awarded \$36.0 million to three projects with the potential to forge new pathways and revolutionize operating system design with machine learning. This investment will foster innovation by advancing computing performance and capability.



Expeditions projects focus on creating transformative technologies, methodologies and infrastructure that can be adopted by the broader research community, industry or society at large. *Credit: NSF.*

### Leadership-Class Computing Facility



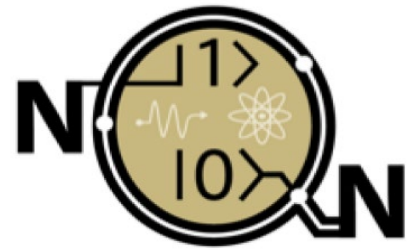
Texas Advanced Computing Center employees work on the network cabling at that will revolutionize computational research and development. *Credit: Texas Advanced Computing Center*

NSF begins construction on a new Leadership-Class Computing Facility (LCCF) at the Texas Advanced Computing Center at the University of Texas, Austin that will revolutionize computational research and development. Expected to be operational during 2026, the LCCF will deploy the largest academic supercomputer, Horizon, dedicated to open-scientific research in the NSF portfolio, enabling groundbreaking curiosity-driven and use-inspired research across all scientific disciplines. This cutting-edge facility will partner with four distributed science centers to leverage the

deep expertise within the nation's cyberinfrastructure ecosystem and ensure that researchers across the country have access to its computational resources and services. The LCCF and its partners will also oversee a wide range of education and public outreach activities to grow the future science and engineering workforce.

## NSF Announces \$20 Million Investment in Quantum Nanofabrication Infrastructure

NSF announced a nearly \$20.0 million award that will support the construction of a nanoscale fabrication facility at the University of Colorado Boulder to accelerate co-design and development of atomic-photonic quantum devices, positioning the U.S. as a global leader in quantum science and engineering. The new NSF National Quantum Nanofab (NQN) will enable quantum device fabrication, characterization, and packaging capabilities that are essential to advancing applications ranging from quantum computers and networks to atomic clocks, and advanced quantum sensors. Funded as part of NSF's Mid-Scale Research Infrastructure 1 (Mid-scale RI-1) program, NQN will be an open-access national facility for academic, government and industrial users.



**National Quantum Nanofab**

Logo for National Quantum Nanofab Facility. University of Colorado Boulder. *Credit: CU Boulder*

## NSF ERC Breaks Ground on Highway test bed to develop wireless charging for electric vehicles.

The Indiana Department of Transportation, Cummins, White Construction, and Purdue ceremoniously broke ground May 1, 2024, for a highway segment where Purdue engineers will test a system they designed to wirelessly provide power to a heavy-duty electric truck traveling at highway speeds. This project is part of the NSF Engineering Research Centers for advancing Infrastructure for Roadway Electrification.



Pictured from left are Mike Smith, Indiana Department of Transportation commissioner; Tim Frazier, vice president of research and technology at Cummins Inc.; Bill Lang, vice president of White Construction; Nadia Gkritza, Purdue professor of civil engineering and agricultural and biological engineering; Arvind Raman, John A. Edwardson dean of Purdue's College of Engineering; and Purdue University President Mung Chiang. *Credit: Kayla M Albert, Purdue University.*



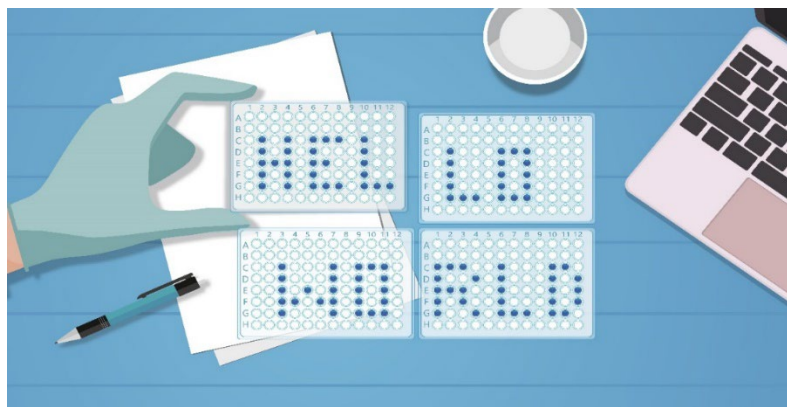
## National Artificial Intelligence Research Infrastructure Pilot

The National Artificial Intelligence Research Resource (NAIRR) envisions a collaborative national research infrastructure designed for responsible AI discovery and innovation. Launching the NAIRR Pilot marks the initial step in achieving this vision, aiming to enhance and broaden access to essential resources vital for advancing responsible AI research and innovation.



*Credit: NSF.*

## Accelerating Discovery Through AI-Assisted Chemical Synthesis



Conceptual representation of chemistry research conducted by AI. The work was led by Gabe Gomes at Carnegie Mellon University and supported by the U.S. National Science Foundation Centers for Chemical Innovation. *Credit: NSF.*

Supported by two NSF Centers for Chemical Innovation, researchers developed an AI-based system that successfully planned and executed real-world chemistry experiments using robotic lab equipment with minimal human direction. Their work was published in *Nature* and demonstrates the potential for AI to become a type of hyper-efficient lab partner that can assist human scientists in making more discoveries, faster.





## NSF SUMMARY TABLES

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**NATIONAL SCIENCE FOUNDATION SUMMARY TABLE**  
**FY 2026 BUDGET REQUEST TO CONGRESS**

(Dollars in Millions)

NSF by Account	FY 2024 Current Plan <sup>1</sup>	FY 2025 Estimate (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
BIO	\$789.59		\$224.89	-\$564.70	-71.5%
CISE	989.35		346.27	-643.08	-65.0%
EDU	1,154.31		288.43	-865.88	-75.0%
ENG	740.80		185.20	-555.60	-75.0%
GEO	1,577.08		873.57	-703.51	-44.6%
<i>GEO: OPP</i>	559.76		497.22	-62.54	-11.2%
<i>U.S. Antarctic Logistics Activities</i>	109.31		109.31	-	-
MPS	1,554.21		515.28	-1,038.93	-66.8%
SBE	290.29		94.00	-196.29	-67.6%
<i>NCSES</i>	74.07		44.00	-30.07	-40.6%
TIP	617.90		350.00	-267.90	-43.4%
<i>SBIR/STTR, including Operations</i>	251.78		108.47	-143.31	-56.9%
CRSP	13.50		10.00	-3.50	-25.9%
OISE	63.70		12.74	-50.96	-80.0%
IA	430.02		177.73	-252.29	-58.7%
U.S. Arctic Research Commission	1.75		1.15	-0.60	-34.3%
Mission Support Services	126.00		196.89	70.89	56.3%
<b>Research &amp; Related Activities<sup>1</sup></b>	<b>\$8,348.50</b>	<b>\$8,348.50</b>	<b>\$3,276.15</b>	<b>-\$5,072.35</b>	<b>-60.8%</b>
<b>Major Res. Equip. &amp; Fac. Construction</b>	<b>\$234.00</b>	<b>-</b>	<b>\$251.00</b>	<b>\$17.00</b>	<b>7.3%</b>
<b>Agency Operations &amp; Award Mgmt.</b>	<b>\$448.00</b>	<b>\$448.00</b>	<b>\$355.00</b>	<b>-\$93.00</b>	<b>-20.8%</b>
<b>Office of Inspector General</b>	<b>\$24.41</b>	<b>\$24.41</b>	<b>\$18.00</b>	<b>-\$6.41</b>	<b>-26.3%</b>
<b>National Science Board</b>	<b>\$5.09</b>	<b>\$5.09</b>	<b>\$3.00</b>	<b>-\$2.09</b>	<b>-41.1%</b>
<b>Total, NSF Discretionary Funding</b>	<b>\$9,060.00</b>	<b>\$8,826.00</b>	<b>\$3,903.15</b>	<b>-\$5,156.85</b>	<b>-56.9%</b>
CHIPS for America Workforce and Education Fund <sup>2</sup>	25.00	50.00	50.00	25.00	100.0%
STEM Education - H-1B Visa	138.93	138.93	150.46	11.53	8.3%
Donations	40.00	40.00	40.00	-	-
<b>Total, NSF Mandatory Funding</b>	<b>\$203.93</b>	<b>\$228.93</b>	<b>\$240.46</b>	<b>\$36.53</b>	<b>17.9%</b>
<b>Total, NSF Budgetary Resources</b>	<b>\$9,263.93</b>	<b>\$9,054.93</b>	<b>\$4,143.61</b>	<b>-\$5,120.32</b>	<b>-55.3%</b>

Totals exclude reimbursable amounts.

<sup>1</sup> Restatements for comparability includes the consolidation of the Directorate for STEM Education (EDU) and Mission Support Services within R&RA, and the establishment of the Office of the Chief of Research Security, Strategy, and Policy (CRSP) as a standalone Program Activity.

<sup>2</sup> As made available under Sec. 102(d)(2)(C) of Division A of the CHIPS and Science Act (P.L. 117-167).

## Summary Tables

### NSF BUDGET REQUESTS AND APPROPRIATIONS BY ACCOUNT: FY 2006 - FY 2026

(Dollars in Millions)

	Research & Related Activities (R&RA)		STEM Education (EDU) <sup>2</sup>		Major Research Equipment & Facilities Construction (MREFC) <sup>3</sup>		Agency Operations & Award Management (AOAM) <sup>4</sup>		Office of Inspector General (OIG)		Office of the National Science Board (NSB)		NSF, TOTAL	
Fiscal Year	Request	Appropriation	Request	Appropriation	Request	Appropriation	Request	Appropriation	Request	Appropriation	Request	Appropriation	Request	Appropriation
2006	4,333.49	4,339.21	737.00	796.69	250.01	190.88	269.00	247.06	11.50	11.35	4.00	3.95	5,605.00	5,589.14
2007	4,665.95	4,654.24	816.22	796.59	240.45	175.61	281.82	248.50	11.86	10.97	3.91	3.97	6,020.21	5,889.87
2008	5,131.69	4,841.73	750.60	765.60	244.74	220.74	285.59	281.79	12.35	11.43	4.03	3.97	6,429.00	6,125.26
2009	5,593.99	5,186.17	790.41	845.26	147.51	152.01	305.06	294.15	13.10	12.00	4.03	4.03	6,854.10	6,493.61
2009 ARRA	-	2,500.00	-	100.00	-	400.00	-	-	-	2.00	-	-	-	3,002.00
2009 Total	5,593.99	7,686.17	790.41	945.26	147.51	552.01	305.06	294.15	13.10	14.00	4.03	4.03	6,854.10	9,495.61
2010	5,733.24	5,563.92	857.76	872.76	117.29	117.29	318.37	300.00	14.00	14.00	4.34	4.54	7,045.00	6,872.51
2011	6,018.83	5,509.98	892.00	861.03	165.19	117.06	329.19	299.40	14.35	13.97	4.84	4.53	7,424.40	6,805.98
2012	6,253.54	5,689.00	911.20	829.00	224.68	197.06	357.74	299.40	15.00	14.20	4.84	4.44	7,767.00	7,033.10
2013	5,983.28	5,543.72	875.61	833.31	196.17	196.17	299.40	293.60	14.20	13.19	4.44	4.12	7,373.10	6,884.11
2014	6,212.29	5,808.92	880.29	846.50	210.12	200.00	304.29	298.00	14.32	14.20	4.47	4.30	7,625.78	7,171.92
2015	5,807.46	5,933.65	889.75	866.00	200.76	200.76	338.23	325.00	14.43	14.43	4.37	4.37	7,255.00	7,344.21
2016	6,186.30	5,989.68	962.57	878.97	200.31	218.31	354.84	357.00	15.16	15.16	4.37	4.37	7,723.55	7,463.49
2017	6,425.44	6,005.65	952.86	873.05	193.12	214.86	373.02	359.09	15.20	15.20	4.38	4.37	7,964.02	7,472.22
2018 <sup>5</sup>	5,361.65	6,334.48	760.55	902.00	182.80	182.80	328.51	328.51	15.01	15.20	4.37	4.37	6,652.89	7,767.36
2019	6,150.68	6,504.51	873.37	922.00	94.65	295.74	333.63	333.03	15.35	15.35	4.32	4.37	7,472.00	8,075.00
2020 <sup>6</sup>	5,662.96	6,789.80	823.47	942.55	223.23	243.23	336.89	357.75	15.35	16.50	4.10	4.50	7,066.00	8,354.33
2021 <sup>7</sup>	6,213.02	7,347.48	930.93	1,029.00	229.75	301.00	345.64	386.93	17.85	17.85	4.21	4.50	7,741.40	9,086.76
2022 <sup>8</sup>	8,139.71	6,999.52	1,287.27	1,149.46	249.00	265.52	468.30	424.90	20.42	19.00	4.60	4.60	10,169.30	8,863.00
2023 <sup>9</sup>	8,425.99	7,006.14	1,377.18	1,154.00	187.23	187.23	473.20	463.00	23.39	23.39	5.09	5.09	10,492.08	8,838.85
2023 DRS <sup>9</sup>	-	820.66	-	217.00	-	-	-	-	-	-	-	-	-	1,037.66
2023 Total <sup>9</sup>	8,425.99	7,826.80	1,377.18	1,371.00	187.23	187.23	473.20	463.00	23.39	23.39	5.09	5.09	10,492.08	9,876.51
2024 <sup>10</sup>	9,017.90	7,176.50	1,496.18	1,172.00	304.67	234.00	503.87	448.00	26.81	24.41	5.25	5.09	11,354.68	9,060.00
2025 <sup>11, 12</sup>	8,045.32	7,176.50	1,300.00	1,172.00	300.00	[234.00]	504.00	448.00	28.46	24.41	5.22	5.09	10,183.00	9,060.00
2026 Request <sup>13</sup>	3,276.15	TBD	-	-	251.00	TBD	355.00	TBD	18.00	TBD	3.00	TBD	3,903.15	TBD

Totals may not add due to rounding. Appropriations as shown are after supplemental appropriations, transfers, and reprogrammings.

<sup>1</sup> For a complete history visit [dellweb.bfa.nsf.gov/](http://dellweb.bfa.nsf.gov/)

<sup>2</sup> The STEM Education (EDU) account was previously known as Education and Human Resources (EHR) until FY 2023.

<sup>3</sup> The Major Research Equipment and Facilities Construction (MREFC) account was known as Major Research Equipment (MRE) until FY 2002.

<sup>4</sup> The Agency Operations and Award Management (AOAM) account was known as Salaries & Expenses (S&E) until FY 2008.

<sup>5</sup> FY 2018 appropriations include Additional Supplemental Appropriations for Disaster Relief Requirements Act of 2018 supplemental appropriations (P.L. 115-123), which provided NSF \$16.30 million in no-year funding to repair radio observatory facilities damaged by hurricanes that occurred during 2017.

<sup>6</sup> FY 2020 appropriations include Coronavirus Aid, Relief, and Economic Security Act (CARES Act) supplemental appropriations (P.L. 116-136), which provided NSF \$76.0 million in two-year funding (\$75.0 million to the R&RA account and \$1.0 million to the AOAM account) to prevent, prepare for, and respond to coronavirus, domestically or internationally, including to fund research grants and other necessary expenses. NSF subsequently transferred \$5.0 million from the R&RA account to the EHR account for these purposes.

<sup>7</sup> FY 2021 Appropriations include the \$600.0 million in American Rescue Plan Act of 2021 (ARP) (P.L. 117-2) supplemental two-year appropriations to fund or extend new and existing research grants, cooperative agreements, scholarships, fellowships, and apprenticeships, and related administrative expenses to prepare for, and respond to coronavirus.

<sup>8</sup> MREFC account level includes \$25.0 million in one-time funding for necessary expenses related to RCRV construction impacted by Hurricane Ida as provides in P.L. 117-43, the "Extending Government Funding and Delivering Emergency Assistance Act."

<sup>9</sup> Reflects the transfer of \$15.0 million of carryover within the R&RA account to the AOAM account completed in FY 2024. This does not affect funding provided by the Disaster Relief Supplemental Appropriations Act, 2023 (DRS).

<sup>10</sup> The FY 2024 Current Plan includes \$448.0 million of FY 2024 appropriated dollars and a transfer of \$15.0 million of FY 2023 carryover of appropriated dollars for total available funding in the FY 2024 Current Plan of \$463.0 million.

<sup>11</sup> Reflects the consolidation of mission support services for EDU and R&RA into R&RA starting in FY 2025.

<sup>12</sup> MREFC appropriated funds were not included in the emergency designation transmitted to the Committee on Appropriations on March 24, 2025, and are thus not available for expenditure.

<sup>13</sup> Reflects the proposed consolidation of the Directorate for STEM Education (EDU) within the Research and Related Activities (R&RA) Account.

## Summary Tables – 4

## NSF FUNDING PROFILE

The Funding Profile presents a high level, agency-wide estimate of proposal pressure, funding rates (or proposal “success”), and award statistics. These indicators are useful in gauging the relative impact of different funding levels.

*Statistics for Competitive Awards:* Competitive awards encompass the universe of NSF new activity each year. Examples include research grants, cooperative agreements, equipment grants, fellowships, and conferences.

*Statistics for Research Grant Awards:* Research Grant Awards are a sub-set of competitive awards. They are limited to research projects and exclude other categories of awards such as those for cooperative agreements, equipment grants, fellowships, and conferences.

- Number of Proposals is based on several factors, including past actual activity, planned competitions, and research trends within the various disciplinary communities. External factors, such as the state of the national economy and other sources of funding, also play a part.
- Number of Awards is also based on several factors, including estimated funding, and expected proposal pool.
- Funding Rate is the number of awards made during a year as a percentage of total proposals competitively reviewed. This indicates the probability of receiving an award when submitting proposals to NSF.
- Annualized Award Size shows the annual level of research grant awards provided to awardees by dividing the total dollars of each award by the number of years over which it extends.
- Average Duration is the length of awards in years.

NSF Funding Profile <sup>1</sup>			
	FY 2024		FY 2026
	Current	FY 2025	Request
	Plan	(TBD)	Estimate
	Estimate		
<b>Statistics for Competitive Awards</b>			
Number of Proposals	36,700		33,000
Number of Awards	9,600		2,300
Funding Rate	26%		7%
<b>Statistics for Research Grant Awards</b>			
Number of Research Grant Proposals	30,300		27,200
Number of Research Grant Awards	7,300		1,700
Funding Rate	24%		6%
Median Annualized Award Size	\$160,400		\$201,700
Average Annualized Award Size	\$208,500		\$217,800
Average Duration (years)	3.0		2.9

<sup>1</sup>Display excludes NSB, OIG, and staff offices.

### NUMBER OF PEOPLE INVOLVED IN NSF ACTIVITIES

NSF estimates that in FY 2026, about 90,000 people will be directly involved in NSF programs and activities, receiving salaries, stipends, participant support, and other types of direct involvement. Beyond these figures, NSF programs indirectly impact millions of people, reaching PreK-12 students and teachers, the general public, and researchers through activities including workshops; informal science activities such as museums, television, videos, and journals; outreach efforts; and dissemination of improved curriculum and teaching methods.

Number of People Involved in NSF Activities			
	FY 2024		FY 2026
	Plan	FY 2025	Request
	Estimate	(TBD)	Estimate
Senior Researchers	60,400		16,900
Other Professionals	14,400		4,100
Postdoctoral Associates	5,500		1,000
Graduate Students	41,500		12,400
Undergraduate Students	37,300		8,000
PreK-12 Teachers	42,900		8,200
PreK-12 Students	128,100		39,400
<b>Total Number of People</b>	<b>330,100</b>		<b>90,000</b>

**Senior Researchers** include scientists, mathematicians, engineers, and educators receiving funding through NSF awards. These include both researchers who are principal or co-principal investigators on research and education projects, and researchers working at NSF-supported centers and facilities.

**Other Professionals** are individuals who may or may not hold a doctoral degree or its equivalent, are considered professionals but are not reported as senior researchers, postdoctoral associates, or students. Examples are technicians, systems experts, etc.

**Postdoctoral Associates** are individuals who have received Ph.D., M.D., D.Sc., or equivalent and are not faculty members of the performing institution. These individuals are supported through funds included in research projects, centers, or facilities awards, as well as by postdoctoral fellowships.

**Graduate Students** include those compensated from NSF grant funds. NSF supports graduate students through NSF's fellowship and traineeship programs as well as research assistantships and funds to assist senior researchers or postdoctoral associates in performing research through awards for research projects, centers, or facilities. NSF provides support for approximately 25 percent of the U.S. science and engineering graduate students receiving federal funds and about four percent of the science and engineering graduate students in the U.S. overall.<sup>1</sup>

**Undergraduate Students** include students compensated from NSF grant funds who are enrolled in

<sup>1</sup> NCSES Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS) 2023 —Table 1-7: Detailed primary source of federal support for full-time graduate students in science, engineering, and health: 1975–2023 ([www.ncses.nsf.gov/pubs/nsf25317/table/1-7](http://www.ncses.nsf.gov/pubs/nsf25317/table/1-7))

technical colleges or baccalaureate programs. They may be assisting senior researchers or postdoctoral associates in performing research, or participating in NSF programs aimed at undergraduate students, such as Research Experiences for Undergraduates.

**PreK-12 Teachers** include teachers at elementary, middle, and secondary schools. These individuals actively participate in intensive professional development experiences in the sciences and mathematics.

**PreK-12 Students** are those attending elementary, middle, and secondary schools. They are supported through program components that directly engage students in science and mathematics experiences.

Summary Tables

**NSF ADMINISTRATION PRIORITIES AND CROSSCUTTING RESEARCH TOPICS SUMMARY  
FY 2026 BUDGET REQUEST TO CONGRESS**

(Dollars in millions)

	Advanced Manufacturing						Advanced Wireless				
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent		FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent
BIO	\$6.16		\$6.15	-\$0.01	-0.2%	BIO	-		-	-	N/A
CISE	41.62		14.57	-27.05	-65.0%	CISE	84.47		29.56	-54.91	-65.0%
EDU	6.00		-	-6.00	-100.0%	EDU	-		-	-	N/A
ENG	101.66		57.00	-44.66	-43.9%	ENG	22.10		11.00	-11.10	-50.2%
GEO Programs	-		2.00	2.00	N/A	GEO Programs	-		-	-	N/A
GEO: OPP	-		-	-	N/A	GEO: OPP	-		-	-	N/A
MPS	115.70		-	-115.70	-100.0%	MPS	15.30		3.00	-12.30	-80.4%
SBE	-		0.52	0.52	N/A	SBE	-		-	-	N/A
TIP	38.48		29.86	-8.62	-22.4%	TIP	21.52		15.90	-5.62	-26.1%
OISE	0.50		-	-0.50	-100.0%	OISE	-		-	-	N/A
IA	0.50		-	-0.50	-100.0%	IA	-		-	-	N/A
<b>Total, NSF</b>	<b>\$310.62</b>		<b>\$110.10</b>	<b>-\$200.52</b>	<b>-64.6%</b>	<b>Total, NSF</b>	<b>\$143.39</b>		<b>\$59.46</b>	<b>-\$83.93</b>	<b>-58.5%</b>

	Artificial Intelligence						Biotechnology				
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent		FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent
BIO	\$20.00		\$50.00	\$30.00	150.0%	BIO	\$136.50		\$130.00	-\$6.50	-4.8%
CISE	342.18		284.54	-57.64	-16.8%	CISE	6.27		2.19	-4.08	-65.1%
EDU	35.00		35.00	-	-	EDU	9.00		2.00	-7.00	-77.8%
ENG	77.80		83.19	5.39	6.9%	ENG	81.30		47.00	-34.30	-42.2%
GEO Programs	1.95		24.00	22.05	1130.8%	GEO Programs	7.30		13.00	5.70	78.1%
GEO: OPP	-		0.20	0.20	N/A	GEO: OPP	1.23		0.20	-1.03	-83.7%
MPS	73.07		90.07	17.00	23.3%	MPS	61.49		15.00	-46.49	-75.6%
SBE	12.42		15.00	2.58	20.8%	SBE	1.00		2.50	1.50	150.0%
TIP	72.23		72.23	-	-	TIP	48.64		36.70	-11.94	-24.5%
OISE	-		-	-	N/A	OISE	-		-	-	N/A
IA	1.00		1.00	-	-	IA	1.00		-	-1.00	-100.0%
<b>Total, NSF</b>	<b>\$635.65</b>		<b>\$655.23</b>	<b>\$19.58</b>	<b>3.1%</b>	<b>Total, NSF</b>	<b>\$353.73</b>		<b>\$248.59</b>	<b>-\$105.14</b>	<b>-29.7%</b>



**NSF ADMINISTRATION PRIORITIES AND CROSSCUTTING RESEARCH TOPICS SUMMARY**  
**FY 2026 BUDGET REQUEST TO CONGRESS**

(Dollars in millions)

	Microelectronics and Semiconductors						NSTC Crosscut Quantum Information Science				
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent		FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent
BIO	-		-	-	N/A	BIO	\$3.28		\$3.28	-	-
CISE	35.99		12.60	-23.39	-65.0%	CISE	18.11		18.11	-	-
EDU	-		2.00	2.00	N/A	EDU	4.00		4.00	-	-
ENG	38.00		22.60	-15.40	-40.5%	ENG	23.85		23.85	-	-
GEO Programs	-		-	-	N/A	GEO Programs	-		1.00	1.00	N/A
GEO: OPP	-		-	-	N/A	GEO: OPP	-		-	-	N/A
MPS	33.20		-	-33.20	-100.0%	MPS	152.86		152.86	-	-
SBE	-		-	-	N/A	SBE	-		-	-	N/A
TIP	35.38		28.55	-6.83	-19.3%	TIP	27.05		27.05	-	-
OISE	-		-	-	N/A	OISE	1.00		1.00	-	-
IA	-		-	-	N/A	IA	-		-	-	N/A
<b>Total, NSF</b>	<b>\$142.57</b>		<b>\$65.75</b>	<b>-\$76.82</b>	<b>-53.9%</b>	<b>Total, NSF</b>	<b>\$230.15</b>		<b>\$231.15</b>	<b>\$1.00</b>	<b>0.4%</b>

	NSTC Crosscut National Nanotechnology Initiative (NNI)						NSTC Crosscut Networking & Information Technology R&D (NITRD)				
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent		FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Change over Percent
BIO	\$39.95		\$34.00	-\$5.95	-14.9%	BIO	\$79.00		\$69.50	-\$9.50	-12.0%
CISE	13.67		-	-13.67	-100.0%	CISE	989.35		346.27	-643.08	-65.0%
EDU	2.50		-	-2.50	-100.0%	EDU	19.80		-	-19.80	-100.0%
ENG	179.50		90.00	-89.50	-49.9%	ENG	138.29		90.68	-47.61	-34.4%
GEO Programs	-		-	-	N/A	GEO Programs	20.95		24.00	3.05	14.6%
GEO: OPP	-		-	-	N/A	GEO: OPP	-		0.20	0.20	N/A
MPS	119.34		-	-119.34	-100.0%	MPS	217.53		90.07	-127.46	-58.6%
SBE	0.40		-	-0.40	-100.0%	SBE	29.75		12.86	-16.89	-56.8%
TIP	7.09		7.10	0.01	0.1%	TIP	270.14		186.76	-83.38	-30.9%
OISE	0.10		0.03	-0.07	-70.0%	OISE	-		-	-	N/A
IA	-		-	-	N/A	IA	1.00		1.00	-	-
<b>Total, NSF</b>	<b>\$362.55</b>		<b>\$131.13</b>	<b>-\$231.42</b>	<b>-63.8%</b>	<b>Total, NSF</b>	<b>\$1,765.81</b>		<b>\$821.34</b>	<b>-\$944.47</b>	<b>-53.5%</b>

Summary Tables - 9

Summary Tables

**NSF ADMINISTRATION PRIORITIES AND CROSSCUTTING RESEARCH TOPICS SUMMARY  
FY 2026 BUDGET REQUEST TO CONGRESS**

(Dollars in millions)

	NSTC Crosscut						NSTC Crosscut				
	Clean Energy Technology						U.S. Global Change Research Program				
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan			FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent				Amount	Percent	
BIO	\$55.00		-	-\$55.00	-100.0%	BIO	\$218.65		\$3.10	-\$215.55	-98.6%
CISE	37.18		-	-37.18	-100.0%	CISE	25.00		-	-25.00	-100.0%
EDU	-		-	-	N/A	EDU	-		-	-	N/A
ENG	181.40		3.67	-177.73	-98.0%	ENG	-		-	-	N/A
GEO Programs	-		-	-	N/A	GEO Programs	335.14		10.00	-325.14	-97.0%
GEO: OPP	-		-	-	N/A	GEO: OPP	160.54		11.91	-148.63	-92.6%
MPS	108.98		-	-108.98	-100.0%	MPS	5.57		-	-5.57	-100.0%
SBE	-		-	-	N/A	SBE	17.60		0.15	-17.45	-99.1%
TIP	49.09		-	-49.09	-100.0%	TIP	-		-	-	N/A
OISE	7.50		-	-7.50	-100.0%	OISE	7.50		-	-7.50	-100.0%
IA	-		-	-	N/A	IA	1.83		-	-1.83	-100.0%
Total, NSF	\$439.15		\$3.67	-\$435.48	-99.2%	Total, NSF	\$771.83		\$25.16	-\$746.67	-96.7%

## NSF PROGRAMS TO BROADEN PARTICIPATION (BP)

NSF's BP portfolio programs fall into three categories: (1) Focused; (2) Geographic, where BP is an explicit goal and 100 percent of total funding applies; and (3) Emphasis, where BP is one of many emphases, but not an explicit goal, and less than 100 percent of total program funding applies.

NSF PROGRAMS TO BROADEN PARTICIPATION (Dollars in Millions)				
	BP Percent Applied	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request
<b>Focused Programs</b>				
Advancing Informal STEM Learning (AISL)	100%	\$62.50		-
ADVANCE	100%	18.00		-
Alliances for Graduate Education & the Professoriate (AGEP)	100%	8.00		-
AGEP Graduate Research Supplements (AGEP-GRS)	100%	3.37		-
Broadening Participation in Biology Fellowships	100%	6.00		-
Broadening Participation in Engineering (BPE)	100%	7.02		-
Career-Life Balance (CLB)	100%	0.03		-
Centers of Research Excellence in Science & Technology (CREST)	100%	24.00		-
CISE Education and Workforce	100%	14.75		-
CISE Graduate Fellowships (CSGrad4US)	100%	8.50		-
CISE-MSI Research Expansion Program	100%	7.00		-
Disability and Rehabilitation Engineering (DARE)	100%	5.00		-
Eddie Bernice Johnson INCLUDES Initiative (INCLUDES Initiative)	100%	23.33		-
Enabling Partnerships to Increase Innovation Capacity (EPIIC)	100%	20.00		-
Excellence Awards in Science & Engineering (EASE)	100%	2.20		-
ExpandAI	100%	7.50		-
ExpandQISE	100%	18.50		-
Growing Research Access for Nation'ly Transformative Equity & Diversity (GRANTED)	100%	34.50		-
HBCU Excellence in Research (HBCU-EiR)	100%	25.00		20.00
Historically Black Colleges & Universities Undergrad Prog (HBCU-UP)	100%	36.50		36.50
Improving Undergraduate STEM Education (IUSE): CUE Program	100%	7.50		-
IUSE: Hispanic Serving Institutions (HSI) Program	100%	46.50		-
Louis Stokes Alliances for Minority Participation (LSAMP)	100%	49.50		-
MPS Ascending Postdoctoral Research Fellowships (MPS-Acend)	100%	8.25		-
MPS Partnerships for Research & Education	100%	18.36		-
NSF Scholarships in STEM (S-STEM)(H-1B) <sup>1</sup>	100%	[144.41]		[112.85]
Research and Mentoring for Postbaccalaureates in Biological Sciences (RaMP)	100%	-		-
SBE Build and Broaden	100%	6.00		-
SBE Postdoctoral Research Fellowships-Broadening Participation (SPRF-BP)	100%	1.50		-
Science of Broadening Participation	100%	1.50		-
Tribal Colleges & Universities Program (TCUP)	100%	16.50		7.11
<b>Subtotal, Focused Programs</b>		<b>\$487.31</b>		<b>\$63.61</b>
<b>Geographic Diversity Programs</b>				
EPSCoR	100%	\$250.00		\$107.70
<b>Subtotal, Geographic Diversity Programs</b>		<b>\$250.00</b>		<b>\$107.70</b>
<b>Emphasis Programs</b>				
Computer Science for All (CSforAll)	0%	\$14.84		-
Discovery Research PreK-12 (DRK-12)	0%	79.83		-
EDU Core Research	0%	58.02		-
Faculty Early Career Development Program (CAREER)	0%	229.55		-
Geosciences Disciplinary Education	0%	24.72		-
Geosciences Postdoctoral Fellowships	0%	6.56		-
Graduate Research Fellowship Program (GRFP)	0%	192.62		-
Improving Undergraduate STEM Education (IUSE)	0%	85.10		-
Innovative Tech Experiences for Students & Teachers (ITEST)(H-1B) <sup>1</sup>	17%	[40.13]		[6.25]
International Research Experiences for Students (IRES)	0%	7.46		-
Launching Early-Career Academic Pathways in the Math. and Phys. Sciences (MPS-LEAPS)	0%	6.98		-
NSF Innovation Corps Hubs Program (I-Corps)	0%	28.26		-
NSF Research Traineeship (NRT)	0%	32.56		-
Research Experiences for Teachers (RET) Sites in BIO, CISE, ENG	0%	7.33		-
Research Experiences for Undergrads (REU) - Sites and Supplements	0%	47.11		-
Robert Noyce Teacher Scholarship Program (NOYCE)	0%	48.78		-
STEM Ed Postdoctoral Research Fellowship Program	0%	6.83		-
<b>Subtotal, Emphasis Programs</b>		<b>\$876.54</b>		<b>-</b>
<b>Total, Broadening Participation Programs</b>		<b>\$1,613.85</b>		<b>\$171.31</b>

<sup>1</sup> Totals exclude H-1B Visa funded programs (S-STEM and ITEST).

**NATIONAL SCIENCE FOUNDATION  
FELLOWSHIPS, SCHOLARSHIPS, AND POSTDOCTORAL PROGRAMS  
FY 2026 BUDGET REQUEST TO CONGRESS**

(Dollars in Millions)

	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Fellowships and Scholarships</b>	<b>\$472.52</b>		<b>\$167.22</b>	<b>-\$305.30</b>	<b>-64.6%</b>
CyberCorps®: Scholarship for Service (SFS)	63.00		21.71	-41.29	-65.5%
Graduate Research Fellowship Program (GRFP)	284.52		127.29	-157.23	-55.3%
NSF Research Traineeship (NRT)	58.00		-	-58.00	-100.0%
NSF Scholarships in STEM (S-STEM) (H-1B) <sup>1</sup>	[144.41]		[112.85]	[-31.56]	[-21.9%]
Robert Noyce Scholarship (Noyce) Program	67.00		18.22	-48.78	-72.8%
<b>Postdoctoral Programs</b>	<b>\$65.03</b>		<b>\$5.62</b>	<b>-\$59.41</b>	<b>-91.4%</b>
Astronomy and Astrophysics Postdoctoral Fellowships	2.40		-	-2.40	-100.0%
Engineering Postdoctoral Fellowships (eFellows)	3.00		-	-3.00	-100.0%
Entrepreneurial Fellowships	4.12		4.12	-	-
Geosciences Postdoctoral Fellowships	10.80		-	-10.80	-100.0%
Mathematical Sciences Postdoctoral Research Fellowships	8.36		-	-8.36	-100.0%
MPS ASCEND Postdoctoral Research Fellowships	8.25		-	-8.25	-100.0%
Postdoctoral Research Fellowships in Biology (PRFB)	17.10		-	-17.10	-100.0%
SPRF-Broadening Participation	1.50		-	-1.50	-100.0%
SPRF-Fundamental Research	1.50		1.50	-	-
STEM Education Postdoctoral Research Fellowships	8.00		-	-8.00	-100.0%
<b>Total</b>	<b>\$537.55</b>		<b>\$172.84</b>	<b>-\$364.71</b>	<b>-67.8%</b>

<sup>1</sup> Totals exclude H-1B Visa funded programs (S-STEM).

**NATIONAL SCIENCE FOUNDATION**  
**RESEARCH INFRASTRUCTURE (RI) FUNDING, BY ACCOUNT AND ACTIVITY**  
**FY 2026 BUDGET REQUEST TO CONGRESS**  
(Dollars in Millions)

	FY 2024		FY 2025 (TBD)	FY 2026		Change over	
	FY 2024 Current Plan <sup>1</sup>	Current Plan RI Funding <sup>1</sup>		FY 2026 Request	Request RI Funding	FY 2024 Current Plan RI	
						Amount	Percent
BIO	\$789.59	<b>\$141.40</b>		\$224.89	<b>\$54.85</b>	-\$86.55	-61.2%
CISE	989.35	<b>234.15</b>		346.27	<b>96.19</b>	-137.96	-58.9%
EDU	1,154.31	-		288.43	-	-	N/A
ENG	740.80	<b>24.33</b>		185.20	<b>2.05</b>	-22.28	-91.6%
GEO	1,017.32	<b>473.58</b>		376.35	<b>247.57</b>	-226.01	-47.7%
GEO: OPP	559.76	<b>469.84</b>		497.22	<b>471.97</b>	2.13	0.5%
MPS	1,554.21	<b>415.67</b>		515.28	<b>241.90</b>	-173.77	-41.8%
SBE	290.29	<b>89.52</b>		94.00	<b>50.00</b>	-39.52	-44.1%
TIP	617.90	-		350.00	-	-	N/A
CRSP	13.50	-		10.00	-	-	N/A
OISE	63.70	<b>0.10</b>		12.74	<b>0.03</b>	-0.07	-70.0%
IA	430.02	<b>76.35</b>		177.73	<b>22.30</b>	-54.05	-70.8%
USARC	1.75	-		1.15	-	-	N/A
Mission Support Services	126.00	-		196.89	-	-	N/A
R&RA	\$8,348.50	<b>\$1,924.94</b>		\$3,276.15	<b>\$1,186.86</b>	-\$738.08	-38.3%
MREFC	\$234.00	<b>\$233.00</b>		\$251.00	<b>\$250.00</b>	\$17.00	7.3%
AOAM	\$448.00	-		\$355.00	-	-	N/A
OIG	\$24.41	-		\$18.00	-	-	N/A
NSB	\$5.09	-		\$3.00	-	-	N/A
<b>Total, NSF</b>	<b>\$9,060.00</b>	<b>\$2,157.94</b>		<b>\$3,903.15</b>	<b>\$1,436.86</b>	<b>-\$721.08</b>	<b>-33.4%</b>

<sup>1</sup> Restatement for comparability includes the consolidation of the Directorate for STEM Education (EDU) and Mission Support Services within R&RA, and the establishment of the Office of the Chief of Research Security, Strategy, and Policy (CRSP) as a standalone Program Activity.

## Summary Tables

### NATIONAL SCIENCE FOUNDATION RESEARCH INFRASTRUCTURE SUMMARY FY 2026 BUDGET REQUEST TO CONGRESS

(Dollars in Millions)

	FY 2024	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
	Current Plan			Amount	Percent
<b>Operations and Maintenance of Major Facilities</b>	<b>\$1,065.73</b>		<b>\$745.00</b>	<b>-\$320.73</b>	<b>-30.1%</b>
<b>Major Research Facilities Construction Investments</b>	<b>\$190.13</b>		<b>\$243.00</b>	<b>\$52.87</b>	<b>27.8%</b>
Construction, Acquisition, and Commissioning (MREFC) <sup>1</sup>	156.75		225.00	68.25	43.5%
Design Stage Activities <sup>2</sup>	33.38		18.00	-15.38	-46.1%
<b>Mid-scale Research Infrastructure<sup>3</sup></b>	<b>\$160.83</b>		<b>\$43.06</b>	<b>-\$117.77</b>	<b>-73.2%</b>
MREFC Mid-scale Research Infrastructure	76.25		25.00	-51.25	-67.2%
NSF-wide Mid-scale Research Infrastructure (R&RA)	40.05		-	-40.05	-100.0%
Directorate Midscale Research Infrastructure Programs	44.53		18.06	-26.47	-59.4%
<b>Major Research Instrumentation (MRI)</b>	<b>\$31.17</b>		<b>\$20.00</b>	<b>-\$11.17</b>	<b>-35.8%</b>
<b>Polar Logistical and Infrastructure Support<sup>4</sup></b>	<b>\$181.46</b>		<b>\$181.11</b>	<b>-\$0.35</b>	<b>-0.2%</b>
<b>CISE Network and Computational Resources Infrastructure and Services (NCRIS)</b>	<b>\$196.70</b>		<b>\$83.29</b>	<b>-\$113.41</b>	<b>-57.7%</b>
<b>Research Resources<sup>5</sup></b>	<b>\$211.10</b>		<b>\$63.02</b>	<b>-\$148.08</b>	<b>-70.1%</b>
BIO	60.90		6.00	-54.90	-90.1%
CISE	36.85		12.90	-23.95	-65.0%
GEO	66.15		15.26	-50.89	-76.9%
MPS	26.17		13.00	-13.17	-50.3%
SBE	15.05		6.00	-9.05	-60.1%
OPP	5.98		9.86	3.88	64.9%
<b>Other Research Infrastructure</b>	<b>\$121.04</b>		<b>\$58.38</b>	<b>-\$62.66</b>	<b>-51.8%</b>
<b>Subtotal, Research Infrastructure Support</b>	<b>\$2,158.16</b>		<b>\$1,436.86</b>	<b>-\$721.30</b>	<b>-33.4%</b>
Research Infrastructure Stewardship Offset	-0.22		-	0.22	-100.0%
<b>RESEARCH INFRASTRUCTURE TOTAL</b>	<b>\$2,157.94</b>		<b>\$1,436.86</b>	<b>-\$721.08</b>	<b>-33.4%</b>

<sup>1</sup> Construction, Acquisition, and Commissioning are for implementation support provided through the MREFC account. FY 2026 MREFC funding is included for the Antarctic Infrastructure Recapitalization program, the Leadership Class Computing Facility, and Mid-scale Research Infrastructure (shown on the MREFC Mid-scale RI line below).

<sup>2</sup> Design Stage Activities include support for potential next generation major facilities. This line reflects FY 2024 funding amounts of \$3.88 million for the Antarctic Research Vessel (ARV), \$9.5 million for Summit Station, \$7.0 million for the Next Generation Very Large Array (ngVLA), and \$13.0 million for Extremely Large Telescopes (ELT), and FY 2026 funding amounts of \$12.0 million for Summit Station, and \$6.0 million for ngVLA.

<sup>3</sup> NSF-wide Mid-scale Research Infrastructure is provided through both the R&RA account (total project cost is less than \$20.0 million) and the MREFC account (total project cost is greater than \$20.0 million).

<sup>4</sup> Polar Logistical and Infrastructure Support includes funding for Arctic Logistics; U.S. Antarctic Logistical Support Activities (USALS); and Polar Environment, Health, and Safety (PEHS).

<sup>5</sup> Funding for Research Resources includes support for the operation and maintenance of minor facilities, infrastructure and instrumentation, field stations, museum collections, etc.

## NSF AUTHORIZATIONS AND OTHER REPORTS

**For definitions of common acronyms used throughout NSF's FY 2026 Budget Request, see the NOTES found at the beginning of the entire document on pages iii-iv.**

### **Total NSF Funding**

Computer Science Education Research Report.....	Authorizations - 3
EPSCoR Report to Congress for Fiscal Year 2024.....	Authorizations - 6
CHIPS and Science Spend Plan for Fiscal Year 2026.....	Authorizations - 18
NSF Current Authorizations .....	Authorizations - 19





**U.S. NATIONAL SCIENCE FOUNDATION (NSF)**  
**COMPUTER SCIENCE EDUCATION RESEARCH CONGRESSIONAL REPORT**  
**IN COMPLIANCE WITH PUBLIC LAW 114-329:**  
**AMERICAN INNOVATION AND COMPETITIVENESS ACT, SEC. 310 (E)**

## **Summary**

The American Innovation and Competitiveness Act (ACA), 2017, Public Law 114-329, requires the U.S. National Science Foundation (NSF) to undertake specific activities regarding computer science education research. Specifically, in Sec. (310)(b), NSF is directed to award grants to "...eligible entities to research computer science education and computational thinking."

NSF's Computer Science for All (CSforAll) activities respond to this provision of PL 114-329. In 2018, NSF issued the first CSforAll solicitation, NSF 18-537, and in 2024, NSF issued an updated solicitation, NSF 24-555, with revised descriptions of four strands for proposals, three Research Practitioner Partnership (RPP) strands, and one Research strand. The Computer Science for All (CSforAll: Research and RPPs) program solicitation "...aims to provide (1) **high school teachers** with the preparation, professional development (PD) and ongoing support they need to teach rigorous computer science courses; (2) **preK-8 teachers** with the instructional materials and preparation they need to integrate CS and CT into their teaching; and (3) **schools and districts** with the resources needed to define and evaluate multi-grade pathways in CS and CT."

## **Metrics**

The development of metrics to evaluate the success of the program is required by Public Law 114-329. This report focuses on short-term and mid-term metrics.

### Report on the Success of the Program as Measured by the Short-Term Metrics

Short-term metrics focus on ensuring that the program is making awards in the four areas outlined in the law and that the awards address the goal of reaching the communities identified in the law while ensuring compliance with applicable Non-Discrimination Statutes and Regulations as detailed in the NSF Terms and Conditions. NSF considers 'short-term' metrics to be those that are observable on an annual basis.

During FY 2024, the program funded 13 new projects composed of 16 awards in 10 states to proposals submitted pursuant to NSF 24-555. These awards have goals that cover the first three research topics listed in Sec. 310 of the Act as outlined below. Because some awards have goals that span more than one of the research topics addressed in (b)(2) A (models of preservice preparation for teachers who will teach computer science and computational thinking), B (scalable and sustainable models of professional development and ongoing support for teachers), C (tools and models to support student success), and D (high quality learning opportunities), the number of projects sums to more than 13.

- 12 projects have research goals that address subsection (b)(2) A and (b)(2) B;
- 13 projects have research goals that address subsection (b)(2) C; and

- 13 projects have research goals that address subsection (b)(2) D

Taken as a group, these awards consider a range of opportunities to expand CS education and computational thinking. Examples of CSforAll supported efforts to address preservice preparations for teachers who will teach computer science and computational thinking, and/or professional development and ongoing support for teachers, can be found at the CSforAll: Research and RPPs program website.<sup>1</sup> These include methods for sustainable scaling using school and district networks, and regionally focused K-12 efforts. The geographic spread of these 13 CSforAll: Research and RPPs awarded projects is shown in the table below.

<b>Geographic Regions Served by FY24 CSforAll: Research and RPPs Projects</b>	
<b>U.S. State/Region</b>	<b>Number of Projects Serving</b>
Colorado	2
Florida	1
Hawaii	2
Illinois	1
Mississippi	1
National	2
Nevada	1
New Mexico	1
North Carolina	1
Oklahoma	1
South Carolina	1

#### Report on the Success of the Program as Measured by the Mid-Term Metrics

Mid-term metrics assess progress that individual projects can reasonably be expected to achieve within three years of award. Measurement of mid-term metrics is based on information contained in the projects' annual reports. Since we are reporting on FY 2024, mid-term metrics are given for the 32 projects comprised of 42 awards that NSF issued in FY 2021.

Based on the responses of the awardees, program staff assessed that 100 percent of projects awarded in FY 2021 have been making satisfactory progress for each year of the project duration. "Satisfactory progress" refers to criteria such as whether the stated goals of the project are being met; whether the major activities are in line with those planned in the original grant proposal; whether the opportunities for training and professional development are in line with those promised; and whether dissemination is occurring as planned.

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<sup>1</sup> Computer Science for All (CSforAll: Research and RPPs) | NSF - National Science Foundation: [www.nsf.gov/funding/opportunities/csforall-research-rpps-computer-science-all](https://www.nsf.gov/funding/opportunities/csforall-research-rpps-computer-science-all)

Of the 32 FY 2021 awarded projects, 6 projects were funded through the research strand and focused on building strategically instrumental, or “high leverage” knowledge about the learning and teaching of introductory computer science to support key CS and CT understandings and abilities for all students. These projects reported a total of 36 publications in the form of journal articles, juried conference papers, and other conference presentations/papers. The remaining projects voluntarily included information about number of educators reached – the 26 CSforAll RPP awarded projects from FY 2021 reported a total of approximately 706 educators reached.

Report on the Success of the Program as Measured by the Longer-Term Metrics

In FY 2023, NSF identified a contractor to carry out the “Evaluation of CSforAll RPPs Long-term Outcomes”, which focuses on longer-term (5 years or more) outputs and outcomes associated with the 73 Researcher Practitioner Partnerships (RPPs) funded under NSF’s CSforAll RPPs initiative in FY 2017, FY 2018, and FY 2019. In FY 2024, NSF program staff worked with contractors to identify potential metrics for documenting longer-term outcomes of CSforAll: Research and RPPs projects. In FY 2025, the program expects to select metrics that will be used to assess the collective success of the first five years of CSforAll: Research and RPPs projects.

**NATIONAL SCIENCE FOUNDATION (NSF)  
ESTABLISHED PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)  
REPORT TO CONGRESS FOR FISCAL YEAR 2024**

This report summarizes fiscal year (FY) 2024 NSF funding to institutions and entities in EPSCoR jurisdictions, as required by the following enacted legislation:

- Public Law 111-358 – America COMPETES Reauthorization Act of 2010 Sec. 517 (42 U.S.C. 1862p-9), as amended by:
- Public Law 114-329 - American Innovation and Competitiveness Act (AICA) Sec. 103(d)(1)(D) and
- Public Law 117-167 - Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act Title III Sec. 10325 (a)(3)(F) (42 U.S.C. 19014)

Specifically, report details responsive to the AICA include:

- (1) a description of the program strategy and objectives;
- (2) a description of the awards made in the previous fiscal year including:
  - (A) the total amount made available, by jurisdiction, under EPSCoR;
  - (B) the total amount of agency funding made available to all institutions and entities within each EPSCoR jurisdiction;
  - (C) the efforts and accomplishments to more fully integrate the EPSCoR jurisdictions in major agency activities and initiatives;
  - (D) the percentage of EPSCoR reviewers from EPSCoR jurisdictions;
  - (E) the number of programs or large collaborator awards involving a partnership of organizations and institutions from EPSCoR and non-EPSCoR jurisdictions; and
- (3) an analysis of the gains in academic research quality and competitiveness, and in science and technology human resource development, achieved by the program over the last 5 years.

Report details responsive to the CHIPS and Science Act include:

- (1) the Foundation's implementation of Sec. 10325(a)(3);
- (2) progress in building research capacity, including both infrastructure and personnel, in EPSCoR jurisdictions, including at Historically Black Colleges and Universities, Tribal Colleges or Universities, minority-serving institutions, and emerging research institutions; and
- (3) if the Foundation does not meet the requirement described in subparagraph (A), an explanation relating thereto and a plan for compliance in the following fiscal year and remediation.

**American Innovation and Competitiveness Act (P.L. 114-329)**

**1. EPSCoR Strategies and Objectives (42 USC 1862p-9(d)(1))**

EPSCoR's strategies and objectives in FY 2024 were aligned with its mission and programmatic goals, as described in the FY 2023 report. Specifically, the mission of EPSCoR is "to enhance research competitiveness of targeted jurisdictions (states, territories, commonwealths) by strengthening Science, Technology, Engineering and Mathematics (STEM) capacity and capability."

In FY 2024, EPSCoR used three investment strategies in pursuit of its goal to strengthen research capacity and competitiveness in eligible jurisdictions. These investment strategies were: (i) Research Infrastructure Improvement (RII) awards that support physical, human, and cyberinfrastructure development; (ii) Co-Funding in partnership with NSF directorates and offices that support individual investigators and groups within EPSCoR jurisdictions; and (iii) Outreach activities and workshops that

bring EPSCoR jurisdiction investigators together with program staff from across the Foundation to explore opportunities in emerging areas of science and engineering aligned with NSF strategic priorities and with jurisdictional science and technology goals.

*Research Infrastructure Improvement (RII)*

In FY 2024, EPSCoR RII programs were instrumental in helping to build jurisdictional capability and capacity. In FY 2024, EPSCoR RII programs spanned five active funding opportunities.

- EPSCoR RII Program: Track-1: The RII Track-1 program was archived in FY 2024, with the final cohort of awards made in May 2024. Awards provided up to \$4 million per year for up to five years. They were intended to improve the research competitiveness of jurisdictions by improving their academic research infrastructure in areas of science and engineering supported by NSF and critical to the jurisdiction's science and technology initiative or plan.
- EPSCoR RII Program: EPSCoR Collaborations for Optimizing Research Ecosystems (E-CORE): E-CORE responds directly to input from recent national studies and legislation with a focus on the transformation of a jurisdiction's research ecosystem.<sup>1,2,3</sup> In FY 2024, E-CORE supported the strengthening of jurisdiction-wide research ecosystems by fostering interconnected networks and building research infrastructure to promote research capacity and competitiveness aligned with jurisdictional priorities. These awards provided up to \$8 million for up to four years, with a renewal opportunity for up to an additional \$8 million over up to four years.
- EPSCoR RII Program: EPSCoR Research Incubators for STEM Excellence (E-RISE): E-RISE supported the incubation of research teams and products in a scientific topical area that links to research priorities identified in a jurisdiction's approved Science and Technology (S&T) Plan. In FY 2024, E-RISE encouraged collaborative, hypothesis-driven research and workforce development to improve competitiveness in a selected STEM field. These awards provided up to \$7 million for up to four years, with a renewal opportunity for up to an additional \$4.5 million over up to three years.

Together, E-CORE and E-RISE replaced the archived RII Track-1 program and provided expanded opportunities for STEM capacity-building activities in EPSCoR jurisdictions.

- EPSCoR RII Focused EPSCoR Collaborations (FEC) Program: FEC (formerly known as EPSCoR RII Track-2) built interjurisdictional collaborative teams of EPSCoR investigators in scientific focus areas consistent with NSF and national research priorities. FY 2024 awards provided up to \$1 million per year for up to four years as collaborative awards between two EPSCoR jurisdictions or up to \$1.5 million per year for up to four years to a consortium of three or more EPSCoR jurisdictions.
- EPSCoR RII: EPSCoR Research Fellows (ERF): ERF (formerly known as EPSCoR RII Track-4) provided opportunities for early career, non-tenured, and tenured assistant/associate professor faculty to further develop their individual research potential through extended collaborative visits to the nation's premier private, governmental, or academic research centers. Through these visits in FY 2024, Fellows learned new techniques, benefited from access to unique equipment and facilities, and shifted their research toward transformative new directions. The experience gained through the fellowship is intended to provide a foundation for research collaborations that span the

<sup>1</sup> Envisioning the Future of NSF EPSCoR report, <https://new.nsf.gov/funding/initiatives/epscor/future-nsf-epscor>

<sup>2</sup> Government Accountability Report, <https://www.gao.gov/assets/gao-22-105043.pdf>

<sup>3</sup> Exploratory analysis and conceptual framework for examining research competitiveness, <https://nsf-gov-resources.nsf.gov/2022-06/EPSCoR%20Base%20Period%20Final%20Report%20-%20%20%28508%20Compliant%29.pdf>

recipient's entire career. These benefits to the Fellows are also expected to, in turn, enhance the research capacity of their institutions and jurisdictions.

*Co-funding*

The EPSCoR co-funding mechanism seeks to supplement support for researchers and institutions in EPSCoR jurisdictions through partially funding some meritorious proposals submitted to NSF programs. Proposals selected for co-funding have been merit reviewed and recommended for award but could not be funded without the combined support of the funding directorate(s) and EPSCoR co-funding. FY 2024 co-funding leveraged EPSCoR investment and facilitated participation of EPSCoR scientists and engineers in NSF-wide programs and initiatives.

*Workshops and Outreach*

In FY 2024, EPSCoR also funded workshops, conferences, and other community-based activities to explore opportunities in emerging areas of science and engineering, and to share best practices in strategic planning, communication, cyberinfrastructure, evaluation, and other areas of importance to EPSCoR jurisdictions. In addition, EPSCoR supported outreach travel that enabled NSF staff from all directorates and offices to work with the EPSCoR research community on NSF opportunities, priorities, programs, and policies. This travel better acquainted NSF staff with the science and engineering accomplishments, ongoing activities and new directions and opportunities in research and education in EPSCoR jurisdictions.

*EPSCoR Strategic Data*

In FY 2024, EPSCoR launched the EPSCoR Data Outcomes Collection System (EDOCS), which helps track project and programmatic progress in relation to EPSCoR's goals and objectives. EDOCS also helps the program to standardize the depth and breadth of information collected from funded EPSCoR RII projects and will be used to measure capacity-building efforts within the research competitiveness evaluation framework for the program. This system collected data for RII Track-1 and RII FEC in FY 2024.

**2. Awards Made in Previous Fiscal Year (42 U.S.C. 1862p-9(d)(2))**

*NSF Funding Made Available, by Jurisdiction, under EPSCoR (42 U.S.C. 1862p-9(d)(2)(A)).*

In FY 2024, NSF EPSCoR invested a total of \$268.24 million in support of its programmatic activities. Within total FY 2024 funding, \$201.22 million (75.0 percent) was directed to 180 new RII awards, \$66.64 million (24.8 percent) to 298 co-funded awards, and \$381,000 (0.1 percent) to outreach activities and two workshop awards. The table below details the investments from EPSCoR resources and EPSCoR investments in co-funding actions.

**FY 2024 EPSCoR Funding by Jurisdiction**

(Dollars in Millions)

EPSCoR Jurisdiction	RII Program	Outreach & Workshops	EPSCoR Co-funding	EPSCoR Total
AK	\$4.74	-	\$0.82	\$5.56
AL	11.35	-	4.93	16.27
AR	3.62	-	1.71	5.33
DE	2.02	0.10	3.42	5.54
GU	3.52	-	-	3.52
HI	6.37	-	1.41	7.78
IA	7.27	-	3.63	10.90
ID	8.88	-	2.92	11.80
KS	1.98	-	3.32	5.30
KY	11.21	-	2.51	13.72
LA	19.72	-	5.71	25.44
ME	12.15	-	0.55	12.70
MS	10.78	-	4.11	14.88
MT	10.16	-	3.57	13.72
ND	5.67	-	0.57	6.24
NE	2.38	-	4.26	6.64
NH	4.51	-	1.28	5.80
NM	16.13	-	2.15	18.29
NV	8.56	-	2.26	10.82
OK	7.21	-	3.16	10.36
PR	3.58	-	1.27	4.85
RI	5.03	-	1.11	6.14
SC	7.26	-	5.00	12.26
SD	10.08	0.20	1.62	11.90
VI	-	-	-	-
VT	6.29	-	0.99	7.29
WV	5.05	-	2.40	7.46
WY	1.36	-	1.96	3.33
Admin	4.33	0.08	-	4.42
<b>Total</b>	<b>\$201.22</b>	<b>\$0.38</b>	<b>\$66.64</b>	<b>\$268.24</b>

*Total NSF Funding Made Available in all EPSCoR Jurisdictions (42 U.S.C. 1862p-9(d)(2)(B)).*

In FY 2024, NSF invested a total of \$1,306.13 million in support of EPSCoR jurisdictions. The table below details NSF investments in EPSCoR jurisdictions including research support, STEM Education, and major research equipment funding.

<b>FY 2024 NSF Funding</b>	
(Dollars in Millions)	
<b>EPSCoR Jurisdiction</b>	<b>NSF Funding</b>
AK	\$48.14
AL	95.81
AR	33.10
DE	61.75
GU	4.17
HI	60.23
IA	66.67
ID	41.73
KS	60.79
KY	48.01
LA	87.03
ME	32.73
MS	67.57
MT	40.15
ND	36.63
NE	52.80
NH	33.06
NM	64.40
NV	39.57
OK	44.79
PR	19.85
RI	57.35
SC	114.67
SD	24.42
VI	2.54
VT	21.23
WV	28.00
WY	18.97
<b>Total</b>	<b>\$1,306.13</b>

*Integration of EPSCoR Jurisdictions in Major Activities and Initiatives of the Foundation (42 U.S.C. 1862p-9(d)(2)(C)).*

In FY 2024, all EPSCoR programmatic activities targeted integration and assimilation of EPSCoR jurisdictions into the research and education programs of the Foundation. RII awards promoted the coordination and integration of recipient jurisdictions into major NSF programmatic activities. Additionally, EPSCoR consulted and engaged NSF disciplinary program officers (POs) in merit review processes and post-award evaluations, such as site visits and reverse site visits (RSVs). Site visits and RSVs are intended to provide additional project oversight by allowing jurisdictions to report on the progress of their RII projects in relation to their stated goals and the programmatic terms and conditions. Disciplinary POs assisted in the identification of reviewers for RII merit review panels, served as site visit and RSV observers, and provided knowledge about the ongoing activities within the



directorates that could be leveraged to sustain RII efforts after the performance period of the EPSCoR award.

In FY 2024, National, regional, and jurisdictional meetings of the EPSCoR community facilitated grantee interactions with NSF leadership to learn about the Foundation's strategic priorities and funding opportunities. Participation by EPSCoR researchers and educators in the merit review process across all disciplinary domains of the Foundation, in Committees of Visitors (COV) activities, in external advisory (Federal Advisory Committee Act) committees, and in disciplinary workshops that shape new activities were also vital to this integration.

Outreach to EPSCoR jurisdictions by NSF staff promoted integration of the EPSCoR community into mainstream NSF programs, as did co-funding of awards with the disciplinary programs of the Foundation. Through the EPSCoR outreach investment strategy, EPSCoR facilitated opportunities for researchers and educators from EPSCoR jurisdictions to meet with NSF staff. In these meetings, the EPSCoR participants were provided with information on NSF strategic priorities, funding opportunities, and major Foundation activities and initiatives.

In FY 2024, EPSCoR promoted engagement of the EPSCoR community in NSF and other national activities. Examples are:

- Hosted the 2024 EPSCoR Annual Principal Investigator (PI) Meeting on May 20-21, where the EPSCoR community and NSF staff shared effective practices in research, strategic planning, communication, evaluation, and other areas of importance to EPSCoR jurisdictions and NSF. In addition to plenary presentations, the meeting included program-specific breakout sessions for PIs and an NSF Open House showcasing activities and funding opportunities in all eight NSF disciplinary directorates, the NSF Policy Office, and the Division of Grants and Agreements. Every EPSCoR jurisdiction was represented at this meeting, which had nearly 300 non-NSF participants (in-person and virtual).
- Encouraged researchers, faculty, and other stakeholders in EPSCoR jurisdictions to participate in NSF committee and review panels across NSF (e.g., advisory committees, committee of visitors, site visits, merit review panels). For example, in FY 2024, 24.2 percent of membership on NSF advisory committees were from EPSCoR jurisdictions.
- Invested \$47.02 million in FY 2024 funding for the inaugural E-RISE and E-CORE awardees. Together, these awards encompass 58 funded institutions, including 37 emerging research institutions, 29 primarily undergraduate institutions, and 14 minority-serving institutions.
- Supported fourteen new RII Focused EPSCoR Collaborations (FEC) awards. FY 2024 awards represent a total EPSCoR investment of approximately \$78 million over the four-year award duration.
- Supported 63 RII EPSCoR Research Fellows (ERF) awards, representing a total EPSCoR investment of \$16.74 million over the two-year award duration.
- Launched the EPSCoR Graduate Fellowship Program (EGFP) to enhance the capacity and competitiveness of EPSCoR jurisdictions by providing funding to support graduate students in EPSCoR jurisdictions. EGFP leveraged the NSF Graduate Fellowship Program (GRFP) by providing funding for applicants who received the distinction of GRFP Honorable Mention to obtain financial support to pursue their graduate education at an institution in an EPSCoR jurisdiction.
- Invested approximately \$4.1 million in support of Campus Cyberinfrastructure (CC\*) awards to EPSCoR jurisdictions. The CC\* program invested in coordinated campus-level networking and cyberinfrastructure improvements, innovation, integration, and engineering for science

- applications and distributed research projects.
- Committed \$1.85 million to fund awards related to acquisition of major research instrumentation and equipment. These fundamental infrastructure-building awards will help to build STEM capacity in EPSCoR jurisdictions.
- Provided \$21.82 million for 71 CAREER awards for early-career faculty in EPSCoR jurisdictions. The NSF CAREER program in FY 2024 supported early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization.
- Hosted an “Exploring EPSCoR Ecosystems” workshop, bringing together approximately 300 EPSCoR stakeholders to discuss strategies for further developing their jurisdictional STEM capacity through the new E-RISE RII and E-CORE RII programs, and the role of the jurisdictional science and technology committees within this framework.
- Convened two meetings with the EPSCoR Interagency Coordinating Committee (EICC) to share relevant program information and identify opportunities for maximizing jurisdictional impact.
- Funded a Workshop for Artificial Intelligence-powered Materials Discovery, leveraging AI to address critical societal challenges like global food shortages and climate change. This workshop brought together approximately 200 researchers from nine EPSCoR jurisdictions and 40 key leaders in AI, engineering, materials science, physical science, and data science.

*EPSCoR Reviewers (42 U.S.C. 1862p-9(d)(2)(D)).*

EPSCoR collects demographics of all reviewers who evaluate proposals submitted to EPSCoR RII programs. In FY 2024, there were 455 reviewers. Of these, 123, or 27 percent were from EPSCoR jurisdictions.

*EPSCoR Collaborations and Partnerships (42 U.S.C. 1862p-9(d)(2)(E)).*

All RII awards involved collaborations among scientists and engineers in EPSCoR jurisdictions. EPSCoR collected data on RII Track-1 and FEC awardees’ partnerships and collaborations via the EPSCoR Data Outcomes Collection System (EDOCS) in FY 2024. EDOCS modules for E-CORE, E-RISE, and ERF were developed in FY 2024 and data on their outcomes, including collaborations and partnerships, will be available in FY 2025. In FY 2024, RII Track-1 and FEC participants developed 767 institutional collaborations within EPSCoR jurisdictions; 702 institutional collaborations between EPSCoR jurisdictions and non-EPSCoR jurisdictions; and 221 collaborations between institutions in EPSCoR jurisdictions and in foreign countries. These collaborative efforts highlight the vast network of institutional involvement among EPSCoR jurisdictions and their partners in RII Track-1 and FEC projects. Of these 1,690 catalyzed partnerships, 50 (3.0 percent) were with national laboratories and 60 (3.6 percent) were with industry partners.

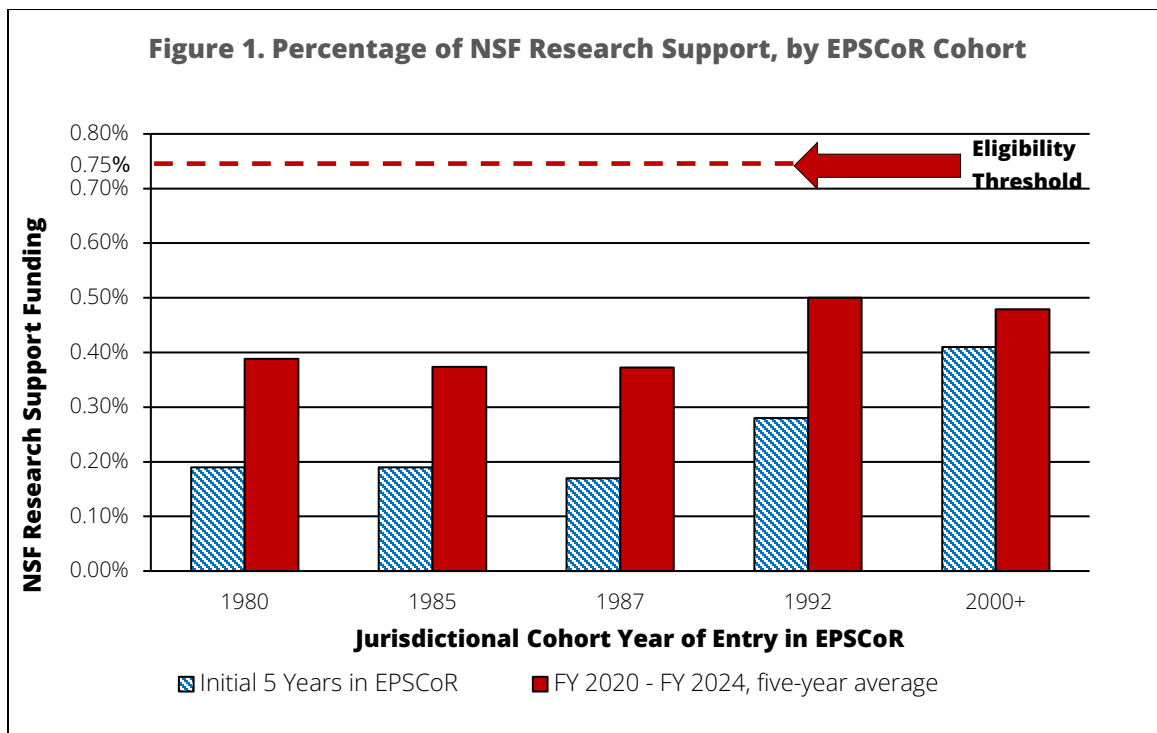
Among the 298 awards co-funded by EPSCoR in FY 2024, 269 involved collaborative research between multiple institutions. Of those 269 collaborative awards, 126 (46.8 percent) were collaborations between investigators from institutions in EPSCoR and non-EPSCoR jurisdictions.

### **3. Analysis of Gains Over Last 5 Years**

*An analysis of the gains in academic research quality and competitiveness, and in science and technology human resource development, achieved by the program over the last 5 fiscal years (42 U.S.C. 1862p-9(d)(3)).* The CHIPS and Science Act of 2022 (P.L. 117-167, Sec.10325(a)(3)(H)(i)) suspended inclusion of new or graduation of existing EPSCoR jurisdictions through FY 2027. However, EPSCoR continued to collect data related to eligibility as a measure of a jurisdiction’s ability to obtain NSF funding. Historically, a

jurisdiction was eligible to participate in EPSCoR programs if its level of NSF funding was equal to or less than 0.75 percent of the total NSF budget over the most recent five-year period, excluding NSF funding to other federal agencies and EPSCoR RII and workshop/conference funding. Jurisdictions above 0.75 percent but less than 0.80 percent were allowed to remain EPSCoR-eligible for up to five years. Given EPSCoR's aim to stimulate research that is fully competitive in NSF's disciplinary and multidisciplinary research programs, increases in the ability to capture NSF research funds serve as a proxy for gains in research competitiveness.

Figure 1 (below) shows the average annual amount of NSF research funds given to each cohort for the initial five years (hatched bars) and the most recent five years (solid bars) of their participation in NSF EPSCoR. A cohort is defined as the group of states or jurisdictions that entered EPSCoR within a given fiscal year. For example, the 1980 cohort consists of the initial five states that qualified for EPSCoR at that time. For this summary, the 2000+ cohort consists of jurisdictions that entered EPSCoR in FY 2000 or later and are still EPSCoR-eligible for RII competitions. Former EPSCoR jurisdictions Missouri, Tennessee, and Utah are excluded because they were not EPSCoR-eligible in FY 2024.



Each cohort shows an increase in competitiveness over the periods of participation. For example, the 1980 cohort (Arkansas, Maine, Montana, South Carolina, West Virginia) shows a 104 percent increase in NSF research funding over the past 44 years of EPSCoR activity. The 1985 cohort (Alabama, Kentucky, Nevada, North Dakota, Oklahoma, Puerto Rico, Vermont, and Wyoming) demonstrates a 97 percent increase during its 39 years of EPSCoR participation. The 1987 cohort (Idaho, Louisiana, Mississippi, and South Dakota) shows a 119 percent increase over the past 37 years, whereas the 1992 cohort (Kansas and Nebraska) has a 79 percent increase in competitiveness over its 32 years of EPSCoR involvement. In general, currently eligible jurisdictions participating in EPSCoR since FY 2000 entered into the program at a higher level of NSF research funding than the previous cohorts. For the 2000+ cohort (Alaska, Delaware, Guam, Hawaii, Iowa, New Hampshire, New Mexico, Rhode Island, and

the Virgin Islands), there has been a small, yet demonstrable 17 percent increase in research funding.

<b>Percentage of NSF Funding, by Jurisdiction and EPSCoR Cohort</b>			
	Initial 5 Years in EPSCoR <sup>1</sup>	Most Recent 5 Year Period (FY 2020-2024) <sup>2</sup>	Percent Change Over Time
<b>1980 Cohort</b>	0.19%	0.39%	104%
Arkansas	0.10%	0.34%	240%
Maine	0.27%	0.26%	-4%
Montana	0.13%	0.44%	238%
South Carolina	0.41%	0.68%	66%
West Virginia	0.07%	0.22%	214%
<b>1985 Cohort</b>	0.19%	0.37%	97%
Alabama	0.33%	0.91%	176%
Kentucky	0.22%	0.40%	82%
Nevada	0.14%	0.39%	179%
North Dakota	0.06%	0.24%	300%
Oklahoma	0.30%	0.48%	60%
Puerto Rico	0.15%	0.23%	53%
Vermont	0.10%	0.14%	40%
Wyoming	0.20%	0.20%	0%
<b>1987 Cohort</b>	0.17%	0.37%	119%
Idaho	0.08%	0.36%	350%
Louisiana	0.36%	0.64%	78%
Mississippi	0.16%	0.32%	100%
South Dakota	0.09%	0.17%	89%
<b>1992 Cohort</b>	0.28%	0.50%	79%
Kansas	0.34%	0.52%	53%
Nebraska	0.22%	0.48%	118%
<b>2000+ Cohort</b>	0.41%	0.48%	17%
Alaska	0.55%	0.65%	18%
Delaware	0.41%	0.55%	34%
Guam	0.02%	0.01%	-50%
Hawaii	0.56%	0.64%	14%
Iowa	0.71%	0.73%	3%
New Hampshire	0.44%	0.39%	-11%
New Mexico	0.58%	0.65%	12%
Rhode Island	0.70%	0.65%	-7%
Virgin Islands	0.00%	0.04%	400%

<sup>1</sup> Percentages based on eligibility guidelines at the time of entry into the EPSCoR program.

<sup>2</sup> Percentages based on current eligibility guidelines.

*Additional EPSCoR Impacts – FY 2024*

This section provides FY 2024 EPSCoR RII Track-1 and FEC science and technology outputs of academic research capacity, human resource development, and the demographics of participants.

The following table demonstrates quantifiable outputs of NSF EPSCoR's RII Track-1 and FEC programs in FY 2024. This information clarifies the gains in academic research capacity and competitiveness, as defined by publications, leveraged grants, and patents, all strong indicators of economic development. The number and valuation of grants awarded encompass all federal, private industry, and private foundation awards across the U.S. for all active projects. These leveraged grants help to build on EPSCoR-funded research and drive academic capacity and capability across EPSCoR jurisdictions.

<b>FY 2024 RII Track-1 and Track-2 Aggregate of EPSCoR Outputs<sup>1</sup></b>			
	Track-1	FEC	Total
Number of Active Awards	31*	68*	99
Publications	1,049	1,057	2,106
Grants Awarded	391	377	768
Value of Grants Awarded (Dollars in Millions)	\$312.00	\$566.52	\$878.52
Patents Awarded	4	2	6
Patents pending	24	3	27

<sup>1</sup> Data is self-reported by each project through annual reports and aggregated for the program, by year.

\* Some jurisdictions have multiple RII Track-1 awards, since there is an allowable 6-month overlap for expiring and new awards. Of the 68 active RII FEC awards, one had not yet submitted data for the reporting period.

The table below indicates EPSCoR's ongoing support of human resources in STEM in the RII Track-1 and FEC program. The number of faculty and students involved in these projects signifies strong commitment by NSF and the jurisdictions in strengthening jurisdictional human capital in science and engineering research and education.

<b>FY 2024 RII Track-1 and RII FEC Human Resource Development<sup>1</sup></b>			
	Track-1	FEC	Total
Faculty Supported	1,215	685	1,900
Post-Docs Supported	130	157	287
Graduate Students Supported	880	686	1,566
Undergraduates Supported	841	416	1,257
New Faculty Hired	29	9	38
Graduate Degrees Conferred	116	82	198
Undergraduate Degrees Conferred	102	80	182

<sup>1</sup> Data is self-reported by each project through annual reports and aggregated for the program, by year.

### **Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act (P.L. 117-167)**

The CHIPS and Science Act reiterated the ongoing importance of investments in EPSCoR jurisdictions and encouraged the development of new programs throughout NSF responsive to EPSCoR jurisdictions' and the Nation's discovery, innovation, and training goals. NSF activities in response to the CHIPS and Science Act will have sustainable positive impact, which will be reflected in each future EPSCoR annual report.

#### **1. Foundation's implementation of Sec. 10325(a)(3)**

In FY 2024, NSF's implementation strategy of the provisions in Section 10325(a)(3) of the CHIPS and Science Act was multi-faceted and organized around two strategies aligned with the intent of the legislation of "prioritizing funding and activities that enable sustainable growth in the competitiveness of EPSCoR jurisdictions". The strategies were as follows:

1. Develop or grow NSF funding opportunities that support new or enhanced research capacity building approaches to promote sustainable research infrastructure advancements at institutions in EPSCoR jurisdictions.
2. Enhance and track EPSCoR-relevant knowledge sharing within NSF and expand external outreach to institutions and organizations in EPSCoR jurisdictions.

To implement the provisions in Sec 10325(a)(3), a cross-cutting leadership and management structure was used. At the agency level, NSF's executive leadership team provided strategic direction in activities and efforts to support implementation of the two aforementioned strategies. Additionally, the NSF EPSCoR Strategy, Engagement, and Consultation (ESEC) Working Group, comprised of representatives from NSF's directorates and offices, coordinated the agencywide implementation plan process for directorates and offices. NSF has created internal resources available to all NSF staff to monitor the agency's progress toward achieving annual spending targets.

#### **2. Building Research Capacity in EPSCoR jurisdictions at Minority-serving Institutions and Emerging Research Institutions**

For FY 2024, NSF's progress in building research capacity at minority-serving institutions (MSIs), including Historically Black colleges and universities (HBCUs) and tribal colleges and universities, as well as emerging research institutions (ERIs) in EPSCoR jurisdictions is provided in the table below.

**NSF's FY 2024 Support of Emerging Research Institutions and Minority-Serving Institutions  
in EPSCoR Jurisdictions<sup>1,2</sup>**

(Dollars in Millions)

	FY 2024			
	Award Funding	Proposals Evaluated	Awards Funding	Funding Rate
All Institutions of Higher Education (IHE) <sup>3</sup>	\$6,753.27	35,324	9,443	27%
All EPSCoR IHEs <sup>3</sup>	\$1,193.72	5,335	1,661	31%
All ERIs	\$1,233.04	9,116	2,300	25%
All MSIs	\$1,173.77	6,190	1,636	26%
All HBCUs	\$141.05	686	210	31%
All Tribal Colleges	\$25.60	34	18	53%
ERIs in EPSCoR Jurisdictions	\$271.51	1,215	381	31%
MSIs in EPSCoR Jurisdictions	\$189.50	665	232	35%
HBCUs in EPSCoR Jurisdictions	\$42.43	173	63	36%
Tribal Colleges in EPSCoR Jurisdictions	\$18.55	22	11	50%

<sup>1</sup> Figures sourced from *NSF by the Numbers* - <https://new.nsf.gov/about/about-nsf-by-the-numbers>

<sup>2</sup> Data retrieved on January 7, 2025

<sup>3</sup> IHEs filter excludes: federal, individuals, industry, other, and small business.

### 3. Foundation's Compliance with EPSCoR Funding Targets from CHIPS and Science Act

For FY 2024, NSF had two CHIPS and Science Act directed funding targets:

- 16 percent "of the amounts appropriated to the Foundation for research and related activities, and science, mathematics, and engineering education and human resources programs, excluding those amounts made available for polar research and operations support (and operations and maintenance of research facilities), shall be awarded to EPSCoR institutions."
- 18 percent "of the amounts appropriated to the Foundation for scholarships (including at community colleges), graduate fellowships and traineeships, and postdoctoral awards shall be used to support EPSCoR institutions."

NSF's EPSCoR funding targets for total award funding and scholarships, fellowships, traineeships, and postdoctoral awards are calculated using a consistent and replicable methodology that will enhance NSF's ability to monitor and provide oversight in the agency's progress to meeting the funding targets in a given fiscal year.

As previously noted in the report, NSF's total FY 2024 funding to EPSCoR jurisdictions was \$1,306.13 million representing an EPSCoR jurisdiction investment rate of 19.6 percent. This exceeds NSF's FY 2024 CHIPS and Science Act funding target of 16.0 percent. The investments include the one-time funding provided for implementation of the Research and Development, Competition, and Innovation Act that was available for obligation in FYs 2023 and 2024.

With regard to the funding target of 18 percent for scholarships, fellowships, traineeships and postdoctoral awards, NSF exceeded this target and achieved an investment rate of 18.6 percent in FY 2024. This target is based on NSF's programs where NSF controls funding for scholarships, graduate fellowships and traineeships, and postdoctoral awards.

**National Science Foundation**  
**Creating Helpful Incentives to Produce Semiconductors and Science Act (CHIPS) FY 2026**  
**Spend Plan**

**NSF CHIPS Funding in FY 2026**

(Dollars in millions)

Research and Related Activities (R&RA) Account	\$50.00
<b>Total CHIPS and Science Act Funding</b>	<b>\$50.00</b>

**Overview**

As part of Creating Helpful Incentives to Produce Semiconductors and Science Act (CHIPS) (P.L. 117-167), Congress provided the U.S. National Science Foundation (NSF) with \$200 million over five years to establish a fund “for microelectronics workforce development activities.” NSF previously transmitted plans that described initial investments in workforce development, including scalable partnerships with the private sector, that would enhance the skilled semiconductor design and manufacturing workforce.

In FY 2026, NSF will continue to leverage the CHIPS for America Workforce and Education Fund to train new semiconductor researchers, practitioners, technicians, engineers, and educators, fulfilling a key need of the semiconductor industry through FY 2027 and beyond.

**Legislative Language**

Creating Helpful Incentives to Produce Semiconductors and Science Act (CHIPS), Public Law 117-167

*SEC. 102. CREATING HELPFUL INCENTIVES TO PRODUCE SEMICONDUCTORS (CHIPS) FOR AMERICA FUND.*

*(d) CREATING HELPFUL INCENTIVES TO PRODUCE SEMICONDUCTORS (CHIPS) FOR AMERICA'S WORKFORCE AND EDUCATION FUND.—*

*(1) ESTABLISHMENT.—There is established in the Treasury of the United States a fund to be known as the “Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Workforce and Education Fund” (referred to in this subsection as the “Fund”) for the National Science Foundation for microelectronics workforce development activities to meet the requirements under section 9906 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (15 U.S.C. 4656).*

*(2) APPROPRIATION.—In addition to amounts otherwise available for such purposes, there is appropriated to the Fund established in subsection (d)(1), out of amounts in the Treasury not otherwise appropriated—*

- (A) For fiscal year 2023, \$25,000,000, to remain available until expended;*
- (B) for fiscal year 2024, \$25,000,000, to remain available until expended;*
- (C) for fiscal year 2025, \$50,000,000, to remain available until expended;*
- (D) for fiscal year 2026, \$50,000,000, to remain available until expended; and*
- (E) for fiscal year 2027, \$50,000,000, to remain available until expended.*



## NSF Authorizations and Other Reports

### NATIONAL SCIENCE FOUNDATION CURRENT AUTHORIZATIONS (Dollars in Millions)

LEGISLATION	FY 2024 Plan	FY 2025 Request	FY 2026 Request	FY 2024	FY 2025	FY 2026
<b>National Science Foundation Act of 1950, P.L. 81-507<sup>1</sup></b>				<i>within limits of funds made available for this purpose within the limits of available appropriations to make such expenditures as may be necessary within the limit of appropriated funds utilize appropriations available</i>		
<b>CHIPS and Science Act, P.L. 117-167 - see table below</b>				<i>see table below</i>		
<b>SBIR and STTR reauthorized through 2025 at current levels under the SBIR and STTR Extension act of 2022, P.L. 117-183</b>						
<i>Small Business Innovation Research (SBIR) Program<sup>2</sup></i>	<b>\$215.72</b>	<b>\$240.57</b>	<b>\$93.38</b>	3.20% of research funds in 2023, 2024 and 2025		
<i>Small Business Technology Transfer (STTR) Program<sup>2</sup></i>	<b>\$30.56</b>	<b>\$33.14</b>	<b>\$12.94</b>	0.45% of research funds in 2023, 2024, and 2025		
<b>National Earthquake Hazards Reduction Program Reauthorization Act of 2018, P.L. 115-307</b>	<b>\$50.00</b>	<b>\$52.00</b>	<b>\$19.50</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<i>Amends the Earthquake Hazards Reduction Act of 1977 to expand activities under the National Earthquake Hazards Reduction Program to include: (1) gathering information on community resilience (i.e., the ability of a community to prepare for, recover from, and adapt to earthquakes); (2) publishing a systematic set of maps of active faults and folds, liquefaction susceptibility, susceptibility for earthquake-induced landslides, and other seismically induced hazards; and (3) continuing the development of the Advanced National Seismic System, including earthquake early warning capabilities.</i>						
<i>With respect to earthquake hazard reduction activities, the bill revises or expands the duties of: (1) the Interagency Coordinating Committee on Earthquake Hazards Reduction, (2) the National Institute of Standards and Technology (NIST), (3) the Federal Emergency Management Agency (FEMA), (4) the U.S. Geological Survey (USGS), and (5) the National Science Foundation.<sup>3</sup></i>						
<b>National Quantum Initiative Act, P.L. 115-368</b>				<i>(Does not authorize appropriations)</i>		
<i>Authorizes the National Science Foundation to carry out a basic research and education program on quantum information science and engineering, and award grants for the establishment of at least 2 but not more than 5 Multidisciplinary Centers for Quantum Research and Education up to \$10 million each for each of fiscal years 2019 through 2023.</i>	*	*	*			
<b>National Defense Authorization Act for Fiscal Year 2021, P.L. 116-283</b>						
<i>Sec 5401(f) Establishes the National Science Foundation Pilot Program of Grants for Research in Rapidly Evolving, High Priority Topics to assess the feasibility and advisability of awarding grants for the conduct of research in rapidly evolving, high priority topics using funding mechanisms that require brief project descriptions and internal merit review, and that may include accelerated external review.<sup>4</sup></i>	*	*	*	\$1,004.82	\$1,055.06	\$0.00

## NSF Authorizations and Other Reports

### NATIONAL SCIENCE FOUNDATION CURRENT AUTHORIZATIONS

(Dollars in Millions)

LEGISLATION	FY 2024 Plan	FY 2025 Request	FY 2026 Request	FY 2024	FY 2025	FY 2026
<b>H.R. 8810 - National Landslide Preparedness Act, P.L. 116-323</b>				\$11.00	\$0.00	\$0.00
<i>Provide grants, on a competitive basis, to State, territorial, local, and Tribal governments to research, map, assess, and collect data on landslide hazards within the jurisdictions of those governmentsFor each of fiscal years 2021 through 2024 there is authorized to be appropriated to the National Science Foundation, \$11,000,000 to carry out this section.</i>	*	*	*			
<b>H.R. 4704 - Advancing Research to Prevent Suicide Act, P.L. 116-339</b>						(Does not authorize appropriations)
<i>Directs NSF to award competitive, merit-reviewed grants to institutions of higher education (or their consortia) to support multidisciplinary, fundamental research with potential relevance to suicide, including potential relevance to prevention and treatment.</i>	*	*	*			
<i>In awarding such grants, the NSF shall encourage applications submitted by early career researchers, including doctoral students and postdoctoral researchers, to promote the researchers' development.</i>						
<b>S. 2904 Identifying Outputs of Generative Adversarial Networks (IOGAN) Act, P.L. 116-258</b>						(Does not authorize appropriations)
<i>Sec. 3 Directs National Science Foundation, in consultation with other relevant Federal agencies, shall support merit reviewed and competitively awarded research on manipulated or synthesized content and information authenticity,</i>	*	*	*			
<b>H.R. 3153 - Expanding Findings for Federal Opioid Research and Treatment Act, P.L. 116-335</b>						(Does not authorize appropriations)
<i>Sec. 2 Directs National Science Foundation, in collaboration withNational Institutes of Health shall support merit-reviewed and competitively awarded research on the science of opioid addiction.</i>	*	*	*			
<b>S. 153 - Supporting Veterans in STEM Careers Act, P.L. 116-115</b>						(Does not authorize appropriations)
<i>Sec. 3 Directs National Science Foundation through the research and education activities of the Foundation, encourage veterans to study and pursue careers in STEM and computer science, in coordination with other Federal agencies that serve veterans.</i>	*	*	*			
<b>H.R. 7776 - James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, PL 117-347</b>						(Does not authorize appropriations)
<i>Sec. 5913 (c) Distributed Ledger Technology Research, which directs NSF to make awards to support distributed ledger technology research, subject to the availability of appropriations.</i>	*	*	*			
<b>S. 3949 - Trafficking Victims Prevention and Protection Reauthorization Act of 2022, PL 117-348</b>						(Does not authorize appropriations)
<i>Sec. 124 directs the National Science Foundation to support merit-reviewed and competitively awarded research on the impact of online social media platforms on the maintenance or expansion of human trafficking.</i>	*	*	*			

\* - NSF only reports actual amounts in the Authorizations Table.

<sup>1</sup> Organic legislation establishing NSF.

<sup>2</sup> SBIR and STTR are reauthorized through September 30, 2025.

<sup>3</sup> Authorizes \$54.0 million for the National Earthquake Hazards Reduction Program at NSF for each of fiscal years FY 2019 through FY 2023.

<sup>4</sup> Authorizes appropriation of funds for the Pilot Program of Grants for Research in Rapidly Evolving, High Priority Topics. Outyear funding is \$1,004,820,000 for fiscal year 2024; and \$1,055,060,000 for fiscal year 2025.

**CHIPS and Science Act of 2022 Authorized Levels**

Sec. 10303 Authorization of Appropriations

	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>
Mid-scale RI-1	\$55.00	\$60.00	\$70.00	\$75.00	\$80.00
TIP Directorate	1,500.00	3,350.00	3,550.00	3,800.00	4,100.00
Unspecified Funding	7,495.00	8,640.00	9,230.00	9,925.00	10,520.00
<b>Research &amp; Related Activities</b>	<b>\$9,050.00</b>	<b>\$12,050.00</b>	<b>\$12,850.00</b>	<b>\$13,800.00</b>	<b>\$14,700.00</b>
NOYCE	73.70	80.40	87.10	93.80	100.50
NSF Research Traineeship (NRT)	59.50	64.91	70.32	75.73	81.14
GRFP	416.30	454.14	491.99	529.83	567.68
Cybercorps SFS	70.00	72.00	78.00	84.00	90.00
Fellowships, traineeships, per section 10393	350.00	800.00	900.00	950.00	1,000.00
STEM Teacher Corps Pilot (pg. 393)	60.00	60.00	60.00	60.00	60.00
Sec. 5 Auth. of Approps. (pg. 410)	150.00	150.00	150.00	150.00	150.00
Unspecified Funding	770.50	818.55	862.59	906.64	950.68
<b>STEM Education</b>	<b>\$1,950.00</b>	<b>\$2,500.00</b>	<b>\$2,700.00</b>	<b>\$2,850.00</b>	<b>\$3,000.00</b>
Mid-scale RI-2	76.25	80.00	85.00	90.00	100.00
<b>MREFC</b>	<b>\$249.00</b>	<b>\$355.00</b>	<b>\$370.00</b>	<b>\$372.00</b>	<b>\$375.00</b>
<b>AOAM</b>	<b>\$620.00</b>	<b>\$710.00</b>	<b>\$750.00</b>	<b>\$770.00</b>	<b>\$800.00</b>
<b>OIG</b>	<b>\$23.39</b>	<b>\$26.61</b>	<b>\$31.11</b>	<b>\$34.61</b>	<b>\$38.11</b>
<b>NSB</b>	<b>\$5.09</b>	<b>\$5.32</b>	<b>\$5.56</b>	<b>\$5.81</b>	<b>\$6.07</b>
<b>Total, NSF</b>	<b>\$11,897.48</b>	<b>\$15,646.93</b>	<b>\$16,706.67</b>	<b>\$17,832.42</b>	<b>\$18,919.18</b>



## NSF-WIDE INVESTMENTS

**For definitions of common acronyms used throughout NSF’s FY 2026 Budget Request, see the NOTES found at the beginning of the entire document on pages iii-iv.**

Artificial Intelligence.....	NSF-Wide Investments - 3
Quantum Information Science .....	NSF-Wide Investments - 5
Advanced Manufacturing .....	NSF-Wide Investments - 7
Advanced Wireless .....	NSF-Wide Investments - 9
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Microelectronics and Semiconductors.....	NSF-Wide Investments - 12
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### **Major Research Equipment and Facilities Overview..... MREFC - 1**

Antarctic Infrastructure Recapitalization.....	MREFC - 4
Leadership-Class Computing Facility .....	MREFC - 14
Mid-scale Research Infrastructure Track 2 .....	MREFC - 20

### **Major Facilities Overview..... Facilities - 1**



## ARTIFICIAL INTELLIGENCE (AI)

<b>Artificial Intelligence Funding<sup>1</sup></b>			
(Dollars in Millions)			
	FY 2024		
	Current	FY 2025	FY 2026
	Plan	(TBD)	Request
BIO	\$20.00		\$50.00
CISE	342.18		284.54
EDU	35.00		35.00
ENG	77.80		83.19
GEO Programs	1.95		24.00
GEO: OPP	-		0.20
MPS	73.07		90.07
SBE	12.42		15.00
TIP	72.23		72.23
IA	1.00		1.00
<b>Total</b>	<b>\$635.65</b>		<b>\$655.23</b>

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

AI is advancing rapidly and is increasingly demonstrating its potential to significantly transform our lives. NSF has a long and rich history of supporting AI research, setting the stage for today's widespread use of AI technologies in a range of sectors, from manufacturing to healthcare to transportation, as well as the nation's security and defense. NSF's ability to bring together numerous fields of scientific inquiry uniquely positions the agency to play a pivotal role in expanding the frontiers of AI and further cementing the Nation's leadership in this area as envisioned in the recent White House Executive Order on *Removing Barriers to American Leadership in Artificial Intelligence*.<sup>1</sup> NSF supports fundamental and translational research, education, and research infrastructure including cyberinfrastructure and AI test beds that collectively strengthens our ability to harness AI to power discovery, innovation, and economic growth.

In FY26, NSF's AI investments will focus on three intertwined components:

*Fundamental and Translational AI Research:* Sustain long-term investments in fundamental and translational AI research that will give rise to transformational technologies and, in turn, breakthroughs across all areas of science and engineering and across all sectors of society.

Recent Requests for Information (RFI) on the *Development of an Artificial Intelligence (AI) Action Plan*<sup>2</sup> and the *Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D)*

<sup>1</sup> <https://www.whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/>

<sup>2</sup> <https://www.federalregister.gov/documents/2025/02/06/2025-02305/request-for-information-on-the-development-of-an-artificial-intelligence-ai-action-plan>

*Strategic Plan*<sup>3</sup> emphasize the role of fundamental research in maintaining America's technological leadership and ensuring that AI development serves broad public interests rather than being driven solely by near-term market forces. In alignment with these priorities, NSF will support foundational research in AI, including machine learning (ML) and deep learning, natural language technologies, computer vision, human-AI interaction, AI algorithms, explainability and robustness of AI-based decision-making, the interplay of AI and cybersecurity, next-generation hardware (including semiconductors and microelectronics) and software accelerators for efficient AI, software engineering for developing reliable AI-based programs, AI-native networking, robotics, and smart and autonomous systems. NSF will also support use-inspired and translational research that links AI innovation with science and the economy, including in the fields of agriculture, manufacturing, biotechnology, transportation, and health.

Central to NSF's investments in fundamental research will be continued support for the National AI Research Institutes program that was initiated in FY 2019 to create national hubs for universities, federal and local agencies, industry, and nonprofits to advance use-inspired AI research in key areas addressing grand challenges. Additionally, NSF will continue advances in use-inspired and translational research through initiatives like the NSF Regional Innovation Engines (NSF Engines), NSF Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR), and NSF Innovation Corps (NSF I-Corps™).

*Education and Workforce Development:* Develop AI systems that enhance learning for all and grow the next generation of talent to advance the U.S. AI R&D workforce, including those applying AI solutions and those working on or alongside AI systems. Equally important, as highlighted in the White House Executive Order on *Advancing Artificial Intelligence Education for American Youth*,<sup>4</sup> is NSF's investment in education research, which grows the human capital and institutional capacity needed to nurture the next generation of AI researchers and practitioners as well as the AI technology that can be used to support learning more broadly.

*Access to Data and Advanced Computing Research Infrastructure and Testing Platforms:* The RFI on the *Development of a 2025 National AI R&D Strategic Plan* calls out "infrastructure support for the AI research and development community" as a priority area. NSF will therefore continue to support the National Artificial Intelligence Research Resource (NAIRR) pilot, which provides access to advanced computing, cloud computing, data and networking resources, and serves as a proof of concept for a potential fully operational NAIRR. The full NAIRR is envisioned as a national infrastructure that will drive US AI innovation and discovery by supporting fundamental and translational research and training the next generation of AI-ready workforce to use these critical resources. NSF-supported resources will allow testing the readiness of AI methods and systems for real-world settings.

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<sup>3</sup> [www.federalregister.gov/documents/2025/04/29/2025-07332/request-for-information-on-the-development-of-a-2025-national-artificial-intelligence-ai-research](https://www.federalregister.gov/documents/2025/04/29/2025-07332/request-for-information-on-the-development-of-a-2025-national-artificial-intelligence-ai-research)

<sup>4</sup> [www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/](https://www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/)



## QUANTUM INFORMATION SCIENCE (QIS)

### Quantum Information Science Funding<sup>1</sup>

(Dollars in Millions)

	FY 2024		
	Current	FY 2025	FY 2026
	Plan	(TBD)	Request
BIO	\$3.28		\$3.28
CISE	18.11		18.11
EDU	4.00		4.00
ENG	23.85		23.85
GEO	-		1.00
MPS	152.86		152.86
TIP	27.05		27.05
OISE	1.00		1.00
<b>Total</b>	<b>\$230.15</b>		<b>\$231.15</b>

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

QIS research will advance fundamental understanding and exploitation of uniquely quantum phenomena that can be harnessed for information processing, transmission, and measurement in ways that classical approaches do less efficiently, or not at all. The development of new applications for QIS will lay the groundwork for one of the major technological revolutions of the 21<sup>st</sup> century. Building upon more than three decades of exploration and discovery-oriented research, NSF investments in QIS will continue to propel the Nation forward as a leading developer of quantum technology. NSF investments are a key component of the Administration's focus on critical and emerging industries.

NSF's QIS investments build upon the agency's long-standing and continuing foundational, use-inspired, and translational activities in QIS, including more recent opportunities for interdisciplinary teams, centers, and targeted workforce development efforts. NSF Investments will continue to enable key work in all the major areas of quantum computing, communications, sensing, networking, artificial intelligence, and simulation. Special attention as to how these areas connect with each other will accelerate development in all of them and lead to advances in quantum computers, quantum networks, and quantum-based metrology. Also of interest are novel approaches for building the quantum computing stack as well as hybrid approaches that combine quantum and classical computing, and post-quantum cryptographic algorithms designed to be secure against attacks from both classical and quantum computers. Collaboration with fields beyond the core of QIS will identify end users of new quantum technologies and help establish the market for new tools and applications, from cybersecurity to biotechnology. Ultimately, this work will allow quantum technology to become established on a sound footing and play a recognizable role in advancing the U.S. economy.

Consistent with and crucial to its mission, NSF will form new or expand existing partnerships with other federal agencies, private industry, foundations, national laboratories, and existing centers to leverage NSF's investments in QIS research and education. In addition, international cooperation with like-minded countries is critical to ensure that discoveries, and their resulting technologies, provide

for economic growth and national security. NSF will continue to provide funding opportunities for QIS researchers, enabling access to industry-built quantum computing platforms and to support international collaboration efforts.

In FY 2026, NSF will continue to support the design and implementation phases of the National Quantum Virtual Laboratory (NQVL), which was initiated with a pilot phase in FY 2023. The NQVL is a community-wide test bed designed to facilitate the translation of research results emerging from fundamental science and engineering into breakthrough technologies, while at the same time emphasizing and advancing the scientific and technical value of this work. The NQVL aims to develop and utilize use-inspired and application-oriented quantum technologies through multi-sectoral collaborations spanning academia and industry. Through a new competition, NSF will sustain its investment in the Quantum Leap Challenge Institutes (QLCIs). The QLCIs are large-scale interdisciplinary research projects motivated by major challenges at the frontiers of QIS. QLCIs are expected to catalyze breakthroughs on important problems underpinning QIS, for example, in the focus areas of quantum computation, quantum communication, quantum simulation and/or quantum sensing. At the same time, QLCIs will nurture a culture of discovery, provide workforce development opportunities in the context of cutting-edge research, and demonstrate value-added research translation. As an indispensable part of the overall effort in QIS, NSF will continue foundational investments in individual investigator programs and disciplinary-specific centers.

## ADVANCED MANUFACTURING

Advanced Manufacturing Funding <sup>1</sup>			
(Dollars in Millions)			
	FY 2024		
	Current	FY 2025	FY 2026
	Plan	(TBD)	Request
BIO	\$6.16		\$6.15
CISE	41.62		14.57
EDU	6.00		-
ENG	101.66		57.00
GEO Programs	-		2.00
MPS	115.70		-
SBE	-		0.52
TIP	38.48		29.86
OISE	0.50		-
IA	0.50		-
<b>Total</b>	<b>\$310.62</b>	<b>-</b>	<b>\$110.10</b>

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

Manufacturing is essential to almost every sector of the U.S. economy, spurring growth by increasing productivity, making new products available to the marketplace, and opening new industries. Advanced manufacturing uses innovative technologies to create safe and secure products and processes with higher performance, fewer resources, and/or new capabilities. NSF's investments in Advanced Manufacturing research and education lead to useful methods and products that can increase U.S. prosperity, competitiveness, security, and quality of life.

NSF aims to transform U.S. manufacturing capabilities, methods, and practices through the development of new materials, technologies and systems. Our approach builds upon and contributes to related investments in biotechnology, microelectronics and semiconductors, quantum technologies, artificial intelligence, robotics, communications and sensing, and other key technologies.

NSF has three goals in Advanced Manufacturing:

- *Advanced manufacturing research:* Support groundbreaking discoveries in advanced manufacturing that lead to products and processes with higher performance, new capabilities, better safety, heightened security and privacy, and the use of fewer and more sustainable resources.
- *Workforce development:* Attract, educate, train, and reskill/upskill diverse workers, from K-12 to college and industry, across the Nation, for the manufacturing workforce of the future.
- *Translation to practice:* Leverage partnerships with other sectors to enable the translation of research results to the market and society.

In FY 2026, NSF's Advanced Manufacturing investment will support:

- *Advanced manufacturing research.* NSF investments will speed the discovery of new methods, processes, analyses, tools, or equipment for new or existing manufacturing products, supply-

chain components, or chemicals and materials, including replacements for environmentally harmful mainstay materials. NSF will also support research on manufacturing of novel materials, AI-enabled digital twins for manufacturing, and resilient and distributed manufacturing infrastructure to make any product anywhere, anytime, in any quantity.

- *Workforce development.* To prepare a competitive advanced manufacturing workforce across the U.S., NSF will invest in STEM education at all levels and across settings. These investments include curriculum development and faculty training, internships and hands-on student research experiences, access to fabrication and manufacturing facilities, recruitment and retention efforts, and coordination and facilitation of partnerships.
- *Translation to practice.* NSF speeds translation of fundamental discoveries in advanced manufacturing into products and processes in collaboration with the private sector. In addition, NSF coordinates with other agencies and connects them to universities and community colleges.

## ADVANCED WIRELESS RESEARCH

<b>Advanced Wireless Funding<sup>1</sup></b>			
(Dollars in Millions)			
	FY 2024		
	Current	FY 2025	FY 2026
	Plan	(TBD)	Request
CISE	\$84.47		\$29.56
ENG	22.10		11.00
MPS	15.30		3.00
TIP	21.52		15.90
<b>Total</b>	<b>\$143.39</b>		<b>\$59.46</b>

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

Advanced wireless networks and systems provide the backbone that connects users, devices, applications, and intelligent services that will continue to enrich America's economy, health and security. Next-generation (NextG) wireless networked systems spur innovation and enable the development of new markets, products, and services, thereby contributing to economic growth. NSF-supported advanced wireless research will innovate in areas critical to future generations of wireless networks and offer new insights capable of making wireless communication faster, smarter, more secure, resilient, and affordable.

In FY 2026, NSF will support foundational research enabling conception, exploration, and development in edge, cellular and hybrid, mobile, vehicular, airborne, underwater, machine to machine, satellite, Internet of Things (IoT), and quantum wireless networks. Topics include new wireless devices, circuits, protocols, and systems for "6G" and beyond, AI-native networks, emerging physical layer technologies, network architectures, hardware and high frequency capabilities, fine-grained and real-time dynamic spectrum allocation and sharing, integration of wireless communications and sensing, mobile sensing and edge computing, and intelligent integrated satellite-terrestrial networks.

AI will be deeply embedded in NextG networks, potentially transforming how they are designed, managed, and utilized. NSF will invest in foundational research and vertical-driven technology development, demonstration, and translation activities that will lead to leaps in performance and capabilities of NextG advanced intelligent network systems that span the user-edge-core-cloud continuum. This includes research to address emerging issues in innovative higher-layer services that can be enabled by wireless communications, such as wireless localization, augmented reality, remote healthcare, disaster response, smart agriculture, and education and training.

## BIOTECHNOLOGY

Biotechnology Funding <sup>1</sup> (Dollars in Millions)			
	FY 2024		
	Current	FY 2025	FY 2026
	Plan	(TBD)	Request
BIO	\$136.50		\$130.00
CISE	6.27		2.19
EDU	9.00		2.00
ENG	81.30		47.00
GEO Programs	7.30		13.00
GEO: OPP	1.23		0.20
MPS	61.49		15.00
SBE	1.00		2.50
TIP	48.64		36.70
IA	1.00		-
<b>Total</b>	<b>\$353.73</b>		<b>\$248.59</b>

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

NSF investments in biotechnology accelerate scientific discovery and enable the use of living things to create goods and services that benefit society. Whether the focus is lifesaving medicines, previously offshored supply chain chemicals, or self-healing materials, advances built on the discovery, use, and alteration of living things and their components will benefit the U.S. economy and transform fields as diverse as medicine, manufacturing, agriculture, and defense. Biotechnology R&D, along with a highly trained domestic biotechnology workforce, will be essential to power AI-driven innovations and growth in the U.S. biotechnology industry, both of which will enhance America's economic prosperity.

In FY 2026, NSF biotechnology funding will support these priorities:

**National Security:** Thanks to advances in biological sciences and AI, biotechnology is poised to be an engine of innovation for decades. However, foreign competitors like China have continued to make significant investments in biotechnology innovation that threaten the U.S.' ability to compete in the global bioeconomy.<sup>1</sup> To safeguard the U.S. economy and biosecurity, NSF will invest in biotechnology R&D to ensure that the U.S. outcompetes and out-innovates China and other adversarial nations. NSF will do this through investments in core programs in life sciences, biotechnology, bioengineering, and biomanufacturing that span all Directorates at NSF and all manufacturing readiness levels from discovery to translation. NSF will also partner with like-minded nations in priority areas such as biodiversity, biofoundries, synthetic biology, and quantum sensing in biology.

**Defense:** NSF biotechnology investments will support defense applications via innovations in adaptive and self-healing materials; advances in distributed, on-demand, and remote biomanufacturing; and sentinel organisms that sense and respond to threats in the environment. Many biotechnology innovations developed for defense can also have space exploration and commercial applications.

<sup>1</sup>[www.biotech.senate.gov/final-report/chapters/executive-summary/](http://www.biotech.senate.gov/final-report/chapters/executive-summary/)

**Reshoring Supply Chain:** Between 75 and 90 percent of U.S. drug manufacturing relies on active pharmaceutical ingredients (APIs) manufactured outside the U.S., causing significant supply chain vulnerabilities. NSF investments in biotechnology and biomanufacturing of critical supply chain biochemical and biologic APIs will address National priorities for increased domestic production of critical medicines.<sup>2</sup> NSF investments will also explore the untapped potential in developing biotechnological routes to critical mineral recovery, either from recycled waste or from dilute deposits, such as the offshore deposits prioritized by the Administration.<sup>3</sup> This supply chain reshoring from NSF supported biotechnology advances will contribute to job creation, economic growth, and security.

**Economic Prosperity:** U.S. economic prosperity is dependent upon innovations that lead to new technologies and industries. Often, those innovations are the result of NSF's discovery-driven research. Targeted programs in biotechnology are paving the way for new medicines, enhanced food production, novel material development, and new, unorthodox technologies such as biocomputing, information storage, and electricity storage. NSF programs that explore nature's biodiversity are uncovering a treasure trove of innovations that could lead to novel biotechnology-based solutions in all sectors of the U.S. economy. NSF's continued investments in physical infrastructure, discovery life sciences research, and workforce development are essential elements in a bioeconomy ecosystem that increasingly promotes collaboration between federal investments and the private sector, as facilitated by NSF technology transfer programs.

**AI Ready Biological Data to Fuel Innovation:** The earliest products of AI and biotechnology to reach the market have been designed proteins, a feat enabled by decades of investment of carefully standardized and curated protein structure data archived in the Protein Data Bank.<sup>4</sup> To achieve the promise of AI enabled design in life sciences, there needs to be robust investment in AI ready biological data. NSF investments in AI-ready biological data include synthesis centers, biofoundries and programmable cloud labs, NEON, and core life sciences programs that enable the collection of data on proteins, cells, and organisms that span the diversity of life. These investments will also enable innovators to find biological solutions that leverage innovations from evolution. NSF's partnership with NIST on bioeconomy standards also supports the development of AI ready biological data. A biotechnology-AI prize, administered by NSF with partners in philanthropy and the private sector, will address the presidential priority of AI training for everyone.<sup>5</sup> Such training will engage young people, improve educational outcomes and bioliteracy, and provide the next generation with the tools to become part of the biotechnology workforce.

**Workforce:** Growth in U.S. biotechnology industries will require expansion of a skilled biotechnology workforce. NSF will invest in workforce training at all levels including community colleges, experiential learning, research experiences for undergraduates and teachers, and support for graduate and postdoctoral student training. A skilled domestically trained workforce is essential for the U.S. to reshore the biotechnology and biomanufacturing sector and create thriving industries that will enhance American prosperity.

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<sup>2</sup>[www.whitehouse.gov/presidential-actions/2025/05/regulatory-relief-to-promote-domestic-production-of-critical-medicines/](https://www.whitehouse.gov/presidential-actions/2025/05/regulatory-relief-to-promote-domestic-production-of-critical-medicines/)

<sup>3</sup>[www.whitehouse.gov/presidential-actions/2025/04/unleashing-americas-offshore-critical-minerals-and-resources/](https://www.whitehouse.gov/presidential-actions/2025/04/unleashing-americas-offshore-critical-minerals-and-resources/)

<sup>4</sup> [www.pdb.org/](https://www.pdb.org/)

<sup>5</sup>[www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/](https://www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth/)

## MICROELECTRONICS AND SEMICONDUCTORS

### Microelectronics and Semiconductor Funding<sup>1</sup>

(Dollars in Millions)

	FY 2024		
	Current	FY 2025	FY 2026
	Plan	(TBD)	Request
CISE	\$35.99		\$12.60
EDU	-		2.00
ENG	38.00		22.60
MPS	33.20		-
TIP	35.38		28.55
<b>Total</b>	<b>\$142.57</b>		<b>\$65.75</b>

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

Semiconductors and microelectronics are critical components enabling cell phones, personal computers, cars, appliances, and many other technologies we rely upon every day. They underpin transportation, communications, cybersecurity, healthcare, manufacturing, information technology, and other preeminent U.S. industries. They are also essential to U.S. leadership in areas such as artificial intelligence and quantum computing. NSF investments in Microelectronics and Semiconductor research and education help grow U.S. innovation and keep the nation competitive and secure.

NSF's overarching objectives are to develop new paradigms in semiconductor capabilities and to grow the corresponding national workforce necessary to keep pace with industrial and research needs. Our approach in Microelectronics and Semiconductors will help overcome scientific barriers in essential technologies such as advanced computing; artificial intelligence; distributed mobile processing platforms; internet of things; quantum communication, computing, and sensing; advanced communications; advanced manufacturing; and biological-semiconductor interfaces.

NSF has four goals in Microelectronics and Semiconductors:

- Support research and development of new, secure, high-performance devices and systems that offer improved security, functionality, and energy-efficiency and enable AI, computing, quantum, and other key technologies.
- Investigate and implement methods and techniques to integrate new classes of devices into microelectronic circuits for diverse platforms. Microelectronic devices are fabricated by integrating transistors with numerous other components that work with different physical principles. The need to bring various components—electrical, optical, magnetic, and quantum—into a microelectronic circuit necessitates the investigation of new co-design, packaging, and testing methodologies.
- Create a semiconductor and microelectronics R&D ecosystem. This ecosystem will enable researchers and trainees to fabricate novel transistors and devices and to integrate component technologies into systems using heterogeneous integration techniques. The ecosystem will connect user facilities to fabricate devices in the laboratory, advanced methods for semiconductor manufacturing, and partnerships with industry to translate laboratory-generated ideas into foundry-fabricated prototypes.



- Grow a competitive workforce across the U.S. and provide experiential learning and training opportunities in partnership with industry to support the ecosystem, from researchers to technicians, theorists to experimentalists, and entrepreneurs to practitioners.

In FY 2026, NSF's Microelectronics and Semiconductors investment will support:

- Research in foundational principles: NSF will invest in multidisciplinary research using novel and sustainable materials with specially designed physical properties to create new classes of high-performance semiconductors for microelectronic devices.
- Methods for integrating devices into diverse platforms: NSF will invest in fundamental and use-inspired research, as well as research infrastructure, to investigate and implement new methods for device integration and novel architectures, including the integration of classical computing with quantum computing and other paradigms.
- Microelectronics ecosystem: NSF will invest in semiconductor manufacturing and lifecycle optimization research, lab-to-fab opportunities, and research infrastructure to translate benchtop microelectronics and semiconductors research into fabrication and manufacturing.
- Workforce development: Across the U.S. NSF will invest in STEM education at all levels and across settings. These investments include curriculum development and faculty training, infrastructure access, recruitment and retention efforts, expanding pathways to careers in semiconductor manufacturing and design, and coordination and facilitation of partnerships.

**SPECTRUM INNOVATION INITIATIVE (SII)**

Spectrum Innovation Initiative Funding <sup>1</sup>		
(Dollars in Millions)		
FY 2024		
Current	FY 2025	FY 2026
Plan	(TBD)	Request
\$15.30		\$3.00

<sup>1</sup> Funding displayed may have overlap with other topics and programs.

SII drives cutting-edge research and development that will prepare the next generation of American talent to maintain U.S. leadership in this critical economic sector. SII builds upon NSF's long history of funding groundbreaking spectrum-related advancements by making spectrum science investments in cross-cutting, multidisciplinary, and translational areas. SII is designed to "fill the gaps" in driving more efficient, intelligent, and dynamic use of the limited spectrum resource that is essential to a wide range of critical sectors, from national security to billion-dollar industries. SII leverages formal partnerships with regulatory agencies and center-scale efforts on transformational issues and technologies, including artificial intelligence/machine learning (AI/ML)-native next-generation mobile devices and networks, edge AI, distributed learning, and integrated sensing and communication. SII has served as an important means to bring together government, academic, and commercial stakeholders toward developing mutually beneficial solutions on multiple spectrum coexistence issues.

In FY 2026, SII will continue to evaluate national priorities and direct programmatic efforts toward the highest-impact activities. SII will enable use of the electromagnetic spectrum for science purposes, including passive/receive-only uses of the spectrum such as weather forecasting, space weather monitoring, and observations used for maintenance of the Celestial Reference Frame underpinning high-precision GPS. SII will continue to strengthen academic spectrum innovation and education with a focus on AI-driven spectrum management. Further integration of AI will enable dynamic sharing and access of limited spectrum, resolve interference problems automatically, and drive other use-inspired technological innovations in response to national challenges. SII will also further other aspects of fundamental research in spectrum science and engineering.

## NATIONAL SCIENCE FOUNDATION CENTERS

NSF supports a variety of centers programs that contribute to the Foundation's mission and vision. Centers exploit opportunities in science, engineering, and technology in which the complexity of the research program or the resources needed to solve the problem require the advantages of scope, scale, duration, equipment, facilities, and students. Centers are a principal means by which NSF fosters interdisciplinary research.

NSF Centers							
Dollars in Millions							
	Program Initiation	Number of Centers in FY 2024	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan Amount	Percent
Artificial Intelligence Research Institutes	2020	22	\$52.28		\$40.88	-\$11.40	-21.8%
Biology Integration Institutes	2020	18	39.54		10.00	-29.54	-74.7%
Centers for Analysis & Synthesis	1995	3	6.28		4.75	-1.53	-24.4%
Centers for Chemical Innovation	1998	8	26.80		14.00	-12.80	-47.8%
Engineering Research Centers	1985	20	82.58		37.68	-44.90	-54.4%
Materials Centers	1994	20	57.31		30.00	-27.31	-47.7%
NSF Regional Innovation Engines	2023	10	43.45		13.88	-29.57	-68.1%
Quantum Leap Challenge Institutes	2020	5	14.57		25.00	10.43	71.6%
Science & Technology Centers	1987	18	70.89		24.49	-46.40	-65.5%
Spectrum Innovation Initiative Centers	2021	1	4.28		-	-4.28	N/A

### About NSF Centers Programs

#### Artificial Intelligence Research Institutes – multi-directorate

The FY 2026 Request of \$40.88 million will support 22 AI Institutes, five AI Institutes awarded in FY 2020, nine in FY 2021, six in FY 2023 and two in FY 2024. In addition, five AI Institutes (two awarded in FY 2020, two in FY 2021, and one in FY 2023) are wholly funded by the U.S. Department of Agriculture National Institute of Food and Agriculture (USDA NIFA). Each institute is typically funded at up to \$4.0 million per year for up to five years. The National AI Research Institutes program, a multisector collaboration among government, industry, and academia, supports multidisciplinary advances on challenges in both foundational and use-inspired AI research. Each funded institute has three missions: (1) to advance fundamental knowledge of AI; (2) to advance use-inspired work on using AI to solve real-world problems of importance to the U.S. economy; and (3) to grow the U.S. AI workforce and build pathways for students. They serve as nexus points for academic, government, and industry interaction, and integrate research with the development of the next-generation AI workforce. A key motivation for the program is to maintain and grow U.S. leadership and competitiveness in AI at a time when other nations are making significant investments in the field.

The National AI Research Institutes program is led by CISE and includes contributions from all NSF directorates along with external partners, including federal agencies and industry.

#### Biology Integration Institutes – BIO

The FY 2026 Request of \$10.0 million is expected to support up to 8 Biology Integration Institutes (BII). The BII program supports collaborative teams of researchers investigating frontier questions about life that span multiple disciplines within and beyond the biological sciences. The goal is to foster creative integration of fields using innovative experimental, theoretical, and modeling approaches, including those that make use of artificial intelligence, to discover underlying principles operating across multiple levels of living systems. Each institute focuses on a central, compelling biological question and addresses that question through unique research themes that include fundamental and use-inspired work. This research advances discovery and understanding in the life sciences and expands capabilities in biotechnology to modify and utilize living systems. Outcomes from BII awards will foster innovation and applications that benefit U.S. national security and health and inspire new biotechnologies and applications to drive economic growth.

#### Centers for Analysis and Synthesis – BIO

The FY 2026 Request of \$4.75 million for Centers for Analysis and Synthesis is expected to provide continuing support (\$2.25 million) for a center in environmental data science and (ESIIL), awarded in FY 2022 and (\$2.50 million) for a center in molecular and cell biology (NCEMS), awarded in FY 2024. ESIIL develops teams, concepts, resources, and expertise to enable effective and coordinated efforts to answer broad scientific questions that emerge at interfaces between biological and environmental sciences, including natural hazards, invasive species, land use change, biodiversity loss, and ecosystem services. The center leverages data provided by the National Ecological Observatory Network (NEON), Long-Term Ecological Research (LTER), and other observatories and databases. NCEMS plays a catalytic role in advancing integrated knowledge on the workings of cells, metabolism, information processing, growth, senescence, proliferation, and differentiation by analyzing and synthesizing diverse molecular and cellular data. The center investigates questions including those about disordered and misfolding proteins, neurodegenerative processes, and genomic adaptation. Both centers involve the application of artificial intelligence/machine learning (AI/ML) and other computational tools and provide training in AI/ML to enable the future workforce to use these tools.

#### Centers for Chemical Innovation – MPS

The FY 2026 Request of \$14.0 million will fund up to six Phase II Centers for Chemical Innovation (CCI). The multi-institutional research centers are designed to respond rapidly to emerging research opportunities and national priorities. They produce transformative research and new innovations and tackle major long-term chemical research challenges in the process. The CCIs also serve as a nexus for industry, higher education, and national laboratories, and effectuate knowledge transfer to industry and the commercialization of their discoveries and new technologies. The themes of the CCIs are varied and include Administration priorities such as AI, QIS, biotechnology, and advanced manufacturing.

#### Engineering Research Centers – ENG

The FY 2026 Request for \$37.68 million will partially support the 16 current Engineering Research Centers (ERC). The ERC program establishes collaborative, ground-breaking research partnerships between universities and industry to push the frontiers of engineering research, accelerate technological development, and cultivate a globally competitive engineering workforce. The centers advance AI, biotechnology, quantum technology, manufacturing, microelectronics and semiconductors, and other national priorities.

ERC technologies spearhead new products, fields and industries that benefit U.S. security, prosperity, and quality of life. For example, past ERCs pioneered disk drives, cloud computing, robotic surgery, synthetic biology, and chip fabrication, and current ERCs are building the quantum internet, turning waste into fertilizer, and developing smart, localized manufacturing.

Since 1985, ERCs have produced more than 2,800 invention disclosures, 47,500 publications, 950 patents, 1,400 licenses, and 250 spinoffs. Providing hands-on, real-world experience, they have educated nearly 15,000 students for the technology workforce.

#### Materials Centers – MPS

The FY 2026 Request level of \$30.0 million is expected to support up to 10 Materials Research Science and Engineering Centers (MRSEC). MRSECs function as hubs for solving complex grand-challenge materials problems requiring broad multidisciplinary expertise within the physical sciences and engineering to understand materials phenomena, exploit materials properties, and to create and discover new materials. Research in materials science is inherently interdisciplinary and the MRSEC program is a prime example of convergent research encompassing physics, chemistry, mathematics, biology, materials science, and engineering. Through collaborative efforts involving academics, industry, national laboratories experts, and international and educational partners, MRSECs advance materials research and education in the United States, and in many cases are international leaders.

#### NSF Regional Innovation Engines – TIP

The FY 2026 Request level of \$13.88 million will support a portfolio of about 10 NSF Regional Innovation Engines (NSF Engines). The NSF Engines program constitutes a bold new initiative that is catalyzing regional innovation ecosystems throughout the United States, spurring economic growth and job creation by bringing together the science and technology research enterprise with regional-level resources, experts, and populations to accelerate key technologies. NSF is investing in use-inspired research, translational research, entrepreneurship, and workforce development to nurture and grow new regional industries, positioning regions as national and global leaders in specific areas. This initiative, the single largest *broad* investment in place-based research, innovation, and workforce development in generations, will ensure America's competitiveness and security for decades to come. Each NSF Engine is anticipated to be funded at up to \$160 million over up to ten years, subject to progress relative to performance milestones and availability of funds; the funds requested here are to provide essential services to maintain the program as a whole, not to invest in the NSF Engines themselves.

NSF Engines are actively advancing key technologies such as advanced manufacturing, advanced wireless, AI, biotechnology, QIS, and semiconductors, including the intersection of food and agriculture, critical infrastructure, and water management. They are bringing together multiple disciplines, institutions, and sectors, including organizations and industries that have not previously engaged with NSF. They are balancing technical and geographic (i.e., local and regional challenges, capabilities) innovation; incentivizing partnerships between NSF, other federal agencies, academia, industry, nonprofits, state, local, and tribal governments, civil society, and communities of practice; and serving as hubs for NSF's broader portfolios of investment in their respective areas of focus. In just the first year of the inaugural cohort of 10 NSF Engines spanning more than 450 distinct organizations, an NSF investment of \$150 million has been matched by more than \$1 billion in commitments by state governments, the private sector, and other investors.

Quantum Leap Challenge Institutes – MPS

The FY 2026 Request level of \$25.0 million will support up to five Quantum Leap Challenge Institutes (QLCI). The QLCIs are large-scale interdisciplinary research projects motivated by major challenges at the frontier of quantum information science, engineering and technology (QISET). Each Institute is expected to catalyze breakthroughs on important problems underpinning QISET, including quantum computation, quantum communication, quantum simulation and/or quantum sensing. These rapidly developing fields have seen several discoveries and breakthroughs. However, many foundational and technological challenges must be overcome before the full potential of QISET can be realized. The QLCI's goal is to support timely and bold research agendas aimed at making breakthroughs on one of these clearly identified and compelling challenges within a five-year period. QLCIs are expected to: engage an intellectually diverse community in the pursuit of identified challenges; develop cohesive, collaborative, and national-scale approaches to research in quantum information science, engineering and technology; and enable the development of a well-trained workforce with strong cross-disciplinary skill sets needed for American Leadership in Quantum.

Science and Technology Centers: Integrative Partnerships – multi-directorate

The FY 2026 Request level of \$24.49 million will support between 13 and 14 existing Science and Technology Centers (STC). These include STCs from the FY 2016, FY 2021, and FY 2023 cohorts. Currently, STC awards are for five years, with possible renewal for an additional five years, or ten years total. In FY 2024, a solicitation for a new STC class was issued to replace the sunseting 2016 cohort.

The STC program advances interdisciplinary discovery by integrating cutting-edge research, education and workforce development, and targeted knowledge transfer. STCs help place the U.S. at the vanguard of S&E discovery by pursuing exceptionally innovative, complex projects that require large-scale, long-term awards. STCs create new scientific paradigms, establish new scientific disciplines, and develop transformative technologies with the potential for broad scientific and societal impact.

Administration priorities are supported through existing STC awards including quantum acoustics (NewFoS), optoelectronics (IMOD), the design and manufacturability of complex, nanostructured materials (COMPASS), the application of AI to Earth system modeling (LEAP), developing more efficient management of phosphorous in agriculture (STEPS), and combining synthetic biology, advanced imaging, and computational modeling to develop a predictive model of a whole cell (QCB).

**Spectrum Innovation Initiative: National Center for Wireless Spectrum Research (SII-Center) – MPS**

The FY 2026 Request level of zero dollars will conclude operations of the SII-Center program. See the full *Spectrum Innovation Initiative* narrative in the NSF-Wide chapter for more information.

**Estimates for Centers Participation in 2024**

	Number of Participating Institutions <sup>1</sup>	Number of Partners <sup>2</sup>	NSF Current Plan (\$ in millions)	Leveraged Support (\$ in millions) <sup>3</sup>	Number of Participants <sup>4</sup>
Artificial Intelligence Research Institutes	326	547	\$52.28	\$41	N/A
Biology Integration Institutes	827	286	39.54	N/A	5,573
Centers for Analysis & Synthesis	160	95	6.28	N/A	545
Centers for Chemical Innovation	74	80	26.80	8	670
Engineering Research Centers	665	278	82.58	86	3,409
Materials Centers	155	110	57.31	18	3,000
NSF Regional Innovation Engines	90	478	43.45	1,000	N/A
Quantum Leap Challenge Institutes	117	63	14.57	-	965
Science & Technology Centers	297	325	70.89	45	2,643
Spectrum Innovation Initiative Centers	31	57	4.28	-	1,129

<sup>1</sup> Academic institutions participating in activities at the centers.

<sup>2</sup> Number of non-academic participants, including industry, states, and other federal agencies at the centers.

<sup>3</sup> Estimated of funding for centers from sources other than NSF.

<sup>4</sup> Estimated number of people who use center resources, not just persons directly support by NSF.

**Centers Supported by NSF in FY 2024**

<b>Center</b>	<b>Institution</b>	<b>State</b>
<b>Artificial Intelligence Research Institutes</b>		
Artificial Intelligence for Environmental Sciences (AI2ES)	U of Oklahoma	OK
Institute for Foundations of Machine Learning	U of Texas, Austin	TX
Institute for Student-AI Teaming	U of Colorado, Boulder	CO
Molecule Maker Lab Institute (MMLI): An AI Institute for Molecular Discovery, Synthetic Strategy, & Mfg.	U of Illinois, Urbana-Champaign	IL
AI Research Institute for Fundamental Interactions	MIT	MA
AI Institute for Collaborative Assistance and Responsive Interaction for Networked Groups (AI-CARING)	Georgia Tech	GA
AI Institute for Learning-enabled Optimization at Scale	U of California-San Diego	CA
AI Institute for Advances in Optimization	Georgia Tech	GA
AI Institute for Intelligent CyberInfrastructure with Computational Learning in the Environment (ICICLE)	Ohio State	OH
AI Institute for Future Edge Networks and Distributed Intelligence (AI-EDGE)	Ohio State	OH
AI Institute for Edge Computing Leveraging Next Generation Networks (Athena)	Duke	NC
AI Institute in Dynamic Systems	U of Washington	WA
AI Institute for Engaged Learning	North Carolina State	NC
AI Institute for Adult Learning and Online Education	Georgia Tech	GA
AI Institute for Inclusive Intelligent Technologies for Education (INVITE)	U of Illinois, Urbana-Champaign	IL
AI Institute for Transforming Education for Children with Speech and Language Processing Challenges	SUNY at Buffalo	NY
AI Institute for Agent-based Cyber Threat Intelligence and Operation	U of California, Santa Barbara	CA
AI Institute for Societal Decision Making (AI-SDM)	Carnegie-Mellon	PA
Institute for Trustworthy AI in Law and Society (TRAILS)	U of Maryland, College Park	MD
AI Institute for Artificial and Natural Intelligence	Columbia U	NY
NSF-Simons AI Institute for Cosmic Origins	U of Texas, Austin	TX
NSF-Simons AI Institute for the Sky (SkAI Institute)	Northwestern	IL
<b>Biology Integration Institutes</b>		
Behavioral Plasticity Research Institute (BPRI)	Baylor College of Medicine	TX
Emergent Ecosystem Responses through Genes-to-Systems Institute (EMERGE)	Ohio State	OH
Advancing Spectral biology in Changing Environments to understand Diversity (ASCEND)	U of Minnesota, Twin Cities	MN
Genomics and Eco-evolution of Multi-scale Symbioses Institute (GEMS)	U of Illinois, Urbana-Champaign	IL
Host-Virus Evolutionary Dynamics Institute (HVEDI)	U of Arkansas	AR
Mechanisms of Cellular Evolution	Arizona State	AZ
New Roots for Restoration	Donald Danforth Plant Sci. Ctr.	MO



Uncovering mechanisms of amphibian resilience to global change from molecules to landscapes	U of Pittsburgh	PA
Emergent Mechanisms in Biology of Robustness, Integrations & Organization (EMBRIO)	Purdue	IN
Regional OneHealth Aerobiome Discovery Network	Colorado State	CO
Institute for Symbiotic Interactions, Teaching, and Education in the Face of a Changing Climate (INSITE)	U of California, Merced	CA
Life without water: protecting macromolecules, cells, and organisms during desiccation and rehydration across kingdoms of life	Carnegie Institution of Washington	DC
Discovering the mechanisms and evolution of aging differences between females and males (IISAGE)	U of Alabama, Birmingham	AL
Predicting the global host-virus network from molecular foundations	Georgetown	DC
Integrative Movement Sciences Institute	U of California, Irvine	CA
Integration Across Scales and Biological Systems	U of Florida	FL
Embedding Molecular Biology in Ecosystem Research in an era of increasing wildfire and drought (EMBER)	U of Idaho	ID
Evolving Meta-Ecosystems in the Arctic	Woodwell Climate Res. Ctr. Inc.	WA
<b>Centers for Analysis and Synthesis<sup>1</sup></b>		
Socio-Environmental Synthesis Center (SESYNC)	U of Maryland	MD
Enviro. Data Science Innovation and Inclusion Lab (ESIIL)	U of Colorado, Boulder	CO
National Synthesis Center for Emergence in the Molecular and Cellular Sciences (MCB SC)	Pennsylvania State U	PA
<b>Centers for Chemical Innovation (Phase II awards only)<sup>2</sup></b>		
NSF Center for Sustainable Nanotechnology (CSN)	U of Wisconsin	WI
NSF Center for Sustainable Polymers (CSP)	U of Minnesota	MN
NSF Center for Aerosol Impacts on the Chemistry of the Environment (CAICE)	U of California, San Diego	CA
NSF Center for Genomically Encoded Materials (CGEM)	U of California, Berkeley	CA
NSF Center for Synthetic Organic Electrochemistry (CSOE)	U of Utah	UT
NSF Center for the Chemistry of Molecularly Optimized Networks (MONET)	Duke	NC
The Center for Computer Aided Synthesis (C-CAS)	U of Notre Dame	IN
The NSF Center for the Mechanical Control of Chemistry (CMCC)	Texas A&M	TX
<b>Engineering Research Centers</b>		
Advanced Self-Powered Systems of Integrated Sensors and Technologies (ASSIST)	North Carolina State	NC
Bio-mediated and Bio-inspired Geotechnics (CBBG)	Arizona State	AZ
Engineering Research Center for Innovative and Strategic Transformation of Alkane Resources (CISTAR)	Purdue	IN

<sup>1</sup> SESYNC is operating on no-cost extensions. No funds were obligated for the centers in FY 2024.

<sup>2</sup> Smaller, developmental Phase I awards do not meet the criteria as formal NSF Centers and so are not captured here.

## NSF Centers

Engineering Research Center for Precise Advanced Technologies and Health Systems for Underserved Populations (PATHS-UP)	Texas A&M	TX
Nanosystems Engineering Research Center for Directed Multiscale Assembly of Cellular Metamaterials with Nanoscale Precision (CELL-MET)	Boston College	MA
Nanotechnology Enabled-Water Treatment System	Rice	TX
ERC for Cell Manufacturing Technologies (CMaT)	Georgia Institute of Tech	GA
Optimization for Electro-thermal Systems (POETS)	U of Illinois	IL
ERC for Human Augmentation Via Dexterity (HAND)	Northwestern	IL
ERC for Environmentally Applied Refrigerant Technology Hub (EARTH)	U of Kansas	KS
ERC for Transformation of American Rubber through Domestic Innovations for Supply Security (TARDISS)	Ohio State	OH
ERC for Carbon Utilization Redesign through Biomanufacturing-Empowered Decarbonization (CURB)	Washington University	MO
ERCfor Quantum Networks (CQN)	U of Arizona	AZ
ERC for the Internet of Things for Precision Agriculture (IoT4Ag)	U of Pennsylvania	PA
ERC for Advancing Sustainability Through Powered Infrastructure for Roadway Electrification (ASPIRE)	Utah State U	UT
ERC for Adv Tech for Preservation of Biological Systems (ATP-Bio)	U of Minnesota	MN
ERC for Precision Microbiome Engineering (PreMiEr)	Duke	NC
ERC for Smart Streetscapes (CS3)	Columbia	NY
ERC for Advancing Sustainable and Distributed Fertilizer Production (CASFER)	Texas Tech	TX
ERC for Hybrid Autonomous Manufacturing Moving from Evolution to Revolution (ERC-HAMMER)	Ohio State	OH

## Materials Centers

Brandeis Bioinspired Soft Materials Center	Brandeis	MA
Center for Advanced Materials and Manufacturing	U of Tennessee	TN
Center for Complex and Active Materials	U of California, Irvine	CA
Center for Dynamics and Control of Materials	U of Texas, Austin	TX
Center for Emergent Materials	Ohio State	OH
Center for Hybrid, Active and Responsive Materials	U of Delaware	DE
Center for Materials Innovations at Michigan	U of Michigan	MI
Center for Multifunctional Materials	Northwestern	IL
Center for Nanoscale Science	Pennsylvania State	PA
Chicago Materials Research Centers	U of Chicago	IL
Columbia Center for Precision Assembly of Superstratic and Superatomic Solids	Columbia	NY
Harvard Materials Research Center	Harvard	MA
Illinois Materials Research Center	U of Illinois, Urbana-Champaign	IL

Laboratory for Research on the Structure of Matter	U of Pennsylvania	PA
Materials Research Science and Engineering Ctr at UCSB	U of California, Santa Barbara	CA
Materials Research Science and Engineering Center	U of California, San Diego	CA
Materials Research Science and Engineering Center	U of Minnesota	MN
Princeton Center for Complex Materials	Princeton	NJ
UW Molecular Engineering Materials Center	U of Washington	WA
Wisconsin Materials Research Center	U of Wisconsin	WI
<b>NSF Engines</b>		
Central Florida Semiconductor Innovation Engine	ICAMR, Inc.	FL
NSF ASCEND Engine in Colorado and-Wyoming	Rocky Mtn Innovation Init. Inc.	CO
Great Lakes Water Innovation Engine	Current	IL
Louisiana Energy Transition Engine	Louisiana State	LA
North Carolina Textile Innovation and Sustainability Engine	Industrial Commons	NC
North Dakota Advanced Agriculture Technology Engine	North Dakota State	ND
Paso del Norte Defense and Aerospace Innovation Engine	U of Texas, El Paso	TX
Piedmont Triad Regenerative Medicine Engine	Wake Forest U	NC
Southwest Sustainability Innovation Engine	Arizona State	AZ
Upstate New York Energy Storage Engine	SUNY, Binghamton U	NY
<b>Quantum Leap Challenge Institutes</b>		
Quantum Systems through Entangled Science and Engineering	U of Colorado, Boulder	CO
Hybrid Quantum Architectures and Networks	U of Illinois, Urbana-Champaign	IL
Challenge Institute for Quantum Computation	U of California, Berkeley	CA
Quantum Sensing for Biophysics and Bioengineering	U of Chicago	IL
Robust Quantum Simulation	U of Maryland, College Park	MD
<b>Science and Technology Centers</b>		
Biology with X-Ray Free Electron Lasers	SUNY, Buffalo	NY
Center for Braiding Indigenous Knowledges and Science	U of Massachusetts, Amherst	MA
Center for Brains, Minds, and Machines: The Science and the Technology of Intelligence	MIT	MA
Center for Bright Beams	Cornell	NY
Center for Cellular Construction	U of California, San Francisco	CA
Center for Chemical Currencies of a Microbial Planet	Woods Hole Ocean. Inst	MA
Center for Complex Particle Systems	U Michigan	MI
Center for Engineering MechanoBiology	U of Pennsylvania	PA
Center for Integrated Quantum Materials	Harvard	MA
Center for Integration of Modern Optoelectronic Materials on Demand	U of Washington	WA
Center for Learning the Earth with Artificial Intelligence and Physics	Columbia	NY
Center for New Frontiers of Sound (NewFoS)	U of Arizona	AZ
Center for OLDest Ice EXploration	Oregon State U	OR
Center for Quantitative Cell Biology	U of Illinois, Urbana-Champaign	IL

## *NSF Centers*

Center for Research on Programmable Plant Systems	Cornell	NY
Center for Science of Information	Purdue	IN
S&T Center on Real-Time Functional Imaging	U of Colorado	CO
S&Ts for Phosphorus Sustainability Center	North Carolina State	NC
<b>Spectrum Innovation Initiative</b>		
Spectrum X – An NSF Spectrum Innovation Center	U of Notre Dame	IN

**MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION  
ACCOUNT (MREFC)**

**\$251,000,000**

**Major Research Equipment and Facilities Construction Funding**  
(Dollars in Millions)

FY 2024	FY 2025 Estimate	FY 2026 Request	Change over FY 2024 Enacted	
			Amount	Percent
\$234.00	-	\$251.00	\$17.00	7.3%

**Overview**

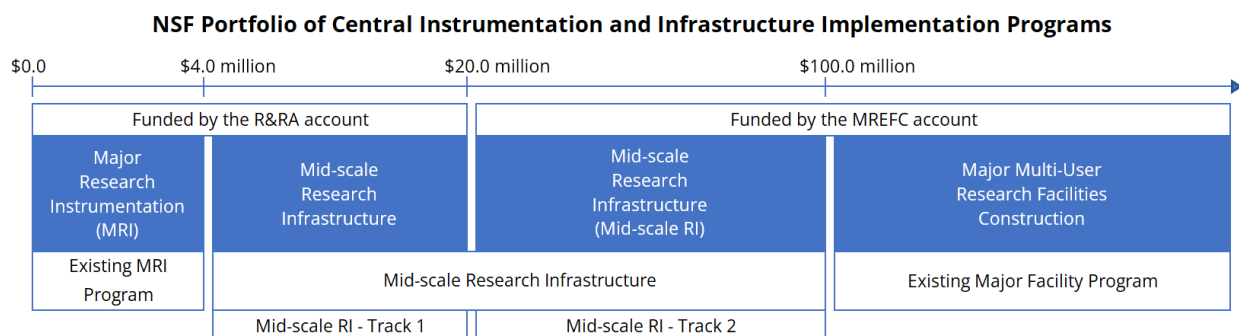
The MREFC account supports the acquisition, construction, and commissioning of major facilities and larger mid-scale research infrastructure that provide unique capabilities at the frontiers of science and engineering. Initial development and design of potential future major facilities and post-construction operations and maintenance are funded through the R&RA account.

**MREFC Account Funding, by Project**  
(Dollars in Millions)

	FY 2026 Request
Antarctic Infrastructure Recapitalization (AIR)	\$24.00
Leadership-Class Computing Facility (LCCF)	201.00
Mid-scale Research Infrastructure, Track 2	25.00
Dedicated Construction Oversight	1.00
<b>Total</b>	<b>\$251.00</b>

Modern and cutting-edge research infrastructure is critical to maintaining U.S. international leadership in science and engineering. The future success of entire fields of research depends upon access to new generations of powerful research tools. Over time, these tools are becoming larger and more technically complex and often have significant information technology or cyberinfrastructure components. To be considered for MREFC funding, NSF requires that a major multi-user research facility (major facility) project represent an exceptional opportunity to enable research and education. The project should be transformative in nature, with the potential to shift the paradigm in scientific understanding. The major facility projects included in this budget request meet these criteria as affirmed by NSF and National Science Board review. The mid-scale research infrastructure projects funded through this budget line are evaluated separately from major facilities as described in a distinct section below.

## Major Research Equipment and Facilities Construction Account



The graphic above summarizes NSF's centralized instrumentation and infrastructure programs. Information presented in this chapter focuses on the items funded at levels above \$20.0 million, through the MREFC account. All Mid-scale Research Infrastructure (RI) – Track 2 (Mid-scale RI-2) investments are managed as a single portfolio, with projects selected from submissions to a dedicated program solicitation that are evaluated using NSF's merit review process. The NSF-established funding envelopes for Mid-scale RI-2 projects and major facilities construction projects are consistent with definitions in the 2017 American Innovation and Competitiveness Act (AICA), as amended by the National Defense Authorization Act (NDAA) for FY 2021.

In FY 2026, NSF requests a total of \$251.0 million to support mid-scale research infrastructure, and continued construction on two ongoing major facility projects: Antarctic Infrastructure Recapitalization (AIR) and the Leadership-Class Computing Facility (LCCF). For more information on each major facility project, see the individual narratives later in this chapter.

### Major Facilities

Since FY 2009, major facility projects funded through the MREFC account have been subject to NSF's "no cost overrun" policy. To implement this policy, NSF processes and procedures assure the development of realistic and well-supported total project cost estimates so that approved budgets for the award recipient are sufficient to accomplish the project's scientific objectives. The current policy, as published in NSF's Research Infrastructure Guide (RIG), requires that: (1) the total project cost estimate when exiting the preliminary design phase includes adequate contingency to cover foreseeable risks manageable by the recipient; (2) any cost increases not covered by contingency be accommodated first by reductions in scope, with any significant scope reductions reviewed by NSF prior to implementation; and (3) if the project is approved to continue and further scope reductions become too detrimental to science, then the first 10 percent of any cost increase must be covered by the sponsoring directorate through R&RA funding. NSF holds the risk to total project cost for unforeseen events that are beyond the recipient's control. The COVID-19 pandemic, for example, constituted such an unforeseen event for all major facility construction projects. NSF policy allows for both authorization of management reserve and re-baselining, with a subsequent increase in total project cost, to address the consequences of such unforeseen events.

### Mid-scale Research Infrastructure

AICA required the agency to develop a strategy for supporting research infrastructure with a total project cost above the upper limit for the MRI program (\$6.0 million including cost sharing) and below the lower threshold for a major facility project, which was then \$70.0 million. NSF assessed community

demand via a Request for Information<sup>1</sup> that resulted in the submission of approximately \$10 billion in ideas for projects in the cost range of \$20.0–\$100.0 million. After evaluating that community input, existing funding (or award) mechanisms, and implementation options, NSF included a dedicated funding line within the MREFC account beginning in FY 2020 for research infrastructure projects in the \$20.0–\$70.0 million range. Projects between \$6.0 and \$20.0 million in total project cost are addressed by individual directorates and through an NSF-wide program (Mid-scale RI-1) that draws its heritage from the NSF-wide MRI program. The CHIPS and Science Act of 2022 waives the required cost-sharing for the MRI program for a period of five years, effectively lowering the maximum award amount to \$4.0 million. Thus, NSF has lowered the threshold for Mid-scale RI-Track 1 proposals to \$4.0 million in response, starting with solicitation NSF 22-637. The upper limit for Mid-scale RI-2 was increased to \$100.0 million in FY 2021 to align with the lower threshold for a major facility project, as specified in the FY 2021 NDAA that amended the original AICA definition. This funding line supports upgrades to major facilities as well as stand-alone projects. A more detailed description of Mid-scale RI-2 can be found in the dedicated narrative.

### **Dedicated Construction Oversight**

All major facility projects funded through the MREFC account undergo periodic cost, schedule, and risk reviews as required by the RIG and the terms and conditions of the cooperative agreements or contracts governing the projects. NSF policies and routine reporting are designed to ensure timely and reliable tracking of progress, including monitoring of project schedule and cost (*via* Earned Value Management metrics) and use of contingency, ensuring that program managers and recipients have timely information to provide sufficient oversight and management authority, respectively, to meet project objectives.

Enhanced oversight of the construction stage includes mandatory incurred cost audits, Earned Value Management System surveillance, and independent cost estimates of re-baseline proposals, as well as other audits and reviews based on NSF's annual major facility portfolio risk assessment. These efforts are conducted by NSF and are generally not attributable to a specific project at the time of budget formulation, nor are they part of the total project cost developed and managed by the recipient. To properly support and transparently account for these efforts, actual costs and future estimates for Dedicated Construction Oversight are shown separately from the costs of individual projects in the MREFC account table above.

Oversight of the mid-scale research infrastructure portfolio is more flexible and is tailored to the technical nature and complexity of each project. All mid-scale research infrastructure projects funded through the MREFC account are required to provide a detailed Project Execution Plan for review. The RIG discusses the detailed oversight requirements, and available range of oversight practices, which depend on characteristics such as the technical scope, type and mix of work performed, and assessment of the technical and programmatic risks.

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<sup>1</sup> NSF 18-013: Dear Colleague Letter: Request for Information on Mid-scale Research Infrastructure. Available at [nsf.gov/pubs/2018/nsf18013/nsf18013.jsp](https://www.nsf.gov/pubs/2018/nsf18013/nsf18013.jsp)

**ANTARCTIC INFRASTRUCTURE RECAPITALIZATION (AIR)****\$24,000,000****Requested MREFC Funds**

(Dollars in Millions)

	FY 2026 Request
Antarctic Infrastructure Recapitalization	\$24.00

**Brief Description**

The AIR program is a portfolio of investments in facilities and infrastructure across U.S. Antarctic Program (USAP) stations and gateways that will assure safety, enhance efficiency, increase resilience, and support USAP's continued scientific leadership on the continent. As discussed below, FY 2022 funding supported the newly re-baselined Antarctic Infrastructure Modernization for Science project (AIMS) and initial activities within the broader recapitalization portfolio of NSF's Antarctic infrastructure under the AIR program.

Previously funded AIMS construction continues, with a focus on meeting the most critical near-term need, the Lodging Building. The \$60.0 million enacted in FY 2023 and FY 2024 and the \$24.0 million in the FY 2026 Request are exclusively for funding of activities within the AIR program.

**Baseline History**

In 2011, the Office of Science and Technology Policy and NSF convened a Blue Ribbon Panel (BRP) to conduct a review of NSF facilities and operations supporting science in Antarctica to ensure that those facilities could enable scientific opportunities articulated by an earlier National Research Council (NRC) report, *Future Science Opportunities in Antarctica and the Southern Ocean*.<sup>1</sup> The BRP report, *More and Better Science in Antarctica Through Increased Logistical Effectiveness*,<sup>2</sup> made numerous recommendations to maintain and enhance USAP's ability to support world-class science in Antarctica.

NSF responded to the BRP report by immediately addressing issues of safety, implementing operational efficiencies that resulted in a rapid return on investment, and developing long-term infrastructure plans for each of the three year-round U.S. stations: Palmer, Amundsen-Scott South Pole, and McMurdo. The AIMS project resulted from recommendations in the McMurdo Station Master Plan. The AIR program will continue to refine and carry forward long-term plans for all three USAP stations.

The AIR program will meet critical science needs while engaging the research community and other stakeholders broadly in an ongoing infrastructure renewal program that will keep the U.S. at the forefront of Antarctic research. AIR will assure safety, enhance efficiency and sustainability, increase resilience, and fulfill NSF's mandate to facilitate continued U.S. leadership on the continent.

The AIR program comprises a portfolio of investments that improve general-purpose USAP

<sup>1</sup> [www.nap.edu/catalog/13169/future-science-opportunities-in-antarctica-and-the-southern-ocean](http://www.nap.edu/catalog/13169/future-science-opportunities-in-antarctica-and-the-southern-ocean)

<sup>2</sup> [www.nsf.gov/geo/opp/usap\\_special\\_review/usap\\_brp/rpt/index.jsp](http://www.nsf.gov/geo/opp/usap_special_review/usap_brp/rpt/index.jsp)



infrastructure including facilities, utilities, equipment, and vehicle fleet equipment. This critical infrastructure supports all fields of science. Investments are prioritized across all USAP locations, and acquisition strategies are tailored to individual activities.

### **Project Status**

Construction of the Vehicle Equipment and Operations Center (VEOC) and Lodging facility resumed in the FY 2023 field season under the newly revised AIMS baseline schedule, following significant delays resulting from the COVID-19 pandemic. In FY 2024, NSF placed construction of VEOC on hold and required that the construction site be placed in a safe and stable condition, allowing a focus on completing the Lodging facility. Unfunded components of the original AIMS project will be evaluated and considered for inclusion in the AIR program in future years. Construction of the Lodging facility has progressed steadily, with enclosure of the building achieved in January 2025. Interior work will be conducted during the Austral winter of 2025, with beneficial occupancy of the building anticipated in March 2026.

The AIR program is being managed as a portfolio of investments guided by station master plans developed with robust engagement from across the science community and with inter-agency partners. Activities are prioritized by a Capital Investment Review Board (CIRB) as conditions and requirements change, which allows the program to be responsive to the research community, proactive in mitigating risks, and well-positioned to take advantage of opportunities as they arise. Details for individual AIR projects, including status, are outlined in the *Cost and Schedule* section below.

### **Meeting Intellectual Community Needs**

- The need for upgrades in many components of Antarctic infrastructure was informed by the 2011 NRC report and the 2012 BRP report. Additionally, the critical need to flexibly support a broad range of Antarctic research was further affirmed in a 2015 NRC report, *A Strategic Vision for NSF Investments in Antarctic and Southern Ocean Research* and in the 2022 follow-on mid-term assessment.<sup>3,4</sup>
- Members of the research community participated in development and refinement of requirements during the planning and design stages for AIMS, as well as in design reviews.
- Community engagement was intrinsic to the development of the McMurdo and Palmer Station master plans—critical documents that describe the future desired state of the respective stations and inform the AIR Program—and will again be sought in routine updates to the plans for each station. Similarly, community input is being integrated into the development of the South Pole master plan, which was completed in draft form for public comment in Spring 2024 and is anticipated to be final by summer 2025.
- The research community, through the proposal submission and merit review process, informs focus areas for logistics support. For example, through this process, the case was made to defer closing the West Antarctic Ice Sheet Divide field camp until the completion of the Thwaites Glacier project, from which it was based.

<sup>3</sup> [www.nap.edu/catalog/21741/a-strategic-vision-for-nsf-investments-in-antarctic-and-southern-ocean-research](http://www.nap.edu/catalog/21741/a-strategic-vision-for-nsf-investments-in-antarctic-and-southern-ocean-research)

<sup>4</sup> [nap.nationalacademies.org/read/26338/chapter/1](http://nap.nationalacademies.org/read/26338/chapter/1)

## Governance Structure and Partnerships

### NSF Governance Structure

The AIR program is managed by GEO and implemented by the OPP Antarctic Infrastructure and Logistics (AIL) section. NSF tailors oversight of AIR to the scope and complexity of the individual project based on the best practices outlined in NSF's Research Infrastructure Guide, which includes the use of independent cost estimates where appropriate, routine status reports at the program and activity level, and periodic reviews of the portfolio by internal and external experts. The AIR program is overseen by NSF's Chief Officer for Research Facilities and by a CIRB that includes representatives from OPP's AIL, Antarctic Sciences section, Polar Safety and Occupational Health group, and NSF's MPS directorate, as well as representatives from the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration (NOAA), and military partners.

### Partnerships and Other Funding Sources

NOAA is partnering with NSF to support upgrading satellite weather/communications data down/uplink facilities. That project is separate from, but will complement, AIR in modernizing McMurdo Station and facilitating future communication improvements.

## Cost and Schedule

The table below shows active and near-term planned investments in the AIR program portfolio, not in any implied order of importance. These investments are multi-year projects that are in different stages of implementation. The projects and their respective stages of implementation will be updated in future budget narratives as appropriate. Scheduling these investments will be dynamic, depending on a combination of CIRB prioritization and complex logistical considerations.

McMurdo Pier Project	Status: Execution
<u>Mission Need:</u> McMurdo, South Pole Station, and field camps are all reliant on resupply vessels that bring food, fuel, equipment, and materials each January. Vessels have historically offloaded at McMurdo via an ice pier in Winter Quarters Bay where materials are then trucked, traversed, or flown to their destination. The ice pier has failed five times in the past 10 years, requiring the last-minute deployment of temporary offload solutions that are costly and inefficient.	
<u>Project Scope:</u> This project will construct and deploy a barge-type structure that will be moored off McMurdo and can be used reliably and efficiently year after year, significantly reducing program risk.	
Project Status: In FY 2024, a rebaseline review of the McMurdo Pier Project was held after the U.S. Army Corps of Engineers presented higher-than-anticipated bids for the project. During the FY 2025 season, in collaboration with Antarctica New Zealand and the U.S. Navy, pile templates were anchored and all 12 pile holes were drilled and secured. Piles, pile caps, and pre-cast concrete for bridge ramps were delivered to McMurdo. The project will be completed in FY 2027.	

<b>South Pole Critical Infrastructure Remediation- Phase 1</b>	Status: Execution
<u>Mission Need:</u> Ice shelf movement and snow accumulation are crushing utilities supporting the vehicle maintenance facility and the safety escape hatches in the long underground utility tunnel at the South Pole Station. In addition, the fresh water well is coming to the end of its useful life.	
<u>Project Scope:</u> Phase 1 remediates garage arches being crushed by the weight of snow. This project will extend the useful lifespan of the garage by an estimated six years.	
<u>Project Status:</u> Work began in FY 2023 and is planned for completion in FY 2026.	
<b>McMurdo Power Plant Switchgear Controls Upgrade</b>	Status: Execution
<u>Mission Need:</u> Control systems manage eight generators and three wind turbines that provide power for McMurdo Station as well as New Zealand's Scott Base. The system has no redundancy, is unreliable, and has frequent outages.	
<u>Project Scope:</u> New software will eliminate outages related to control errors and support future generator replacements. The upgrade will enable an increase in monitoring and remote diagnostics and will resolve information technology security vulnerabilities.	
<u>Project Status:</u> Work began in FY 2023 and is planned for completion in FY 2027.	
<b>South Pole Blue Building Lifting System and the Atmospheric Research Observatory (ARO) Raise</b>	Status: Execution
<u>Mission Need:</u> South Pole Station's Blue Buildings (the IceCube Lab, the Dark Sector Lab that houses the South Pole telescope, Martin A. Pomerantz Observatory (MAPO) with its attached Background Imaging of Cosmic Extragalactic Polarization (BICEP) array, and the ARO) are being buried in snow and, without action, will become unusable.	
<u>Project Scope:</u> This project will lift ARO and provide a "proof of principle" for lifting the remaining structures. Lifting the buildings will extend their useful lifespan by 20 years and drastically reduce annual snow management workload.	
<u>Project Status:</u> Work began in FY 2024 and is planned for completion in FY 2027.	
<b>Traverse Improvements and Expansion – Phase 1</b>	Status: Execution
<u>Mission Need:</u> The South Pole Traverse (SPoT) delivers approximately 100,000 gallons of fuel to the South Pole Station each year at a fraction of the cost of airlifting the fuel. SPoT-2 modules, such as the mobile kitchen and crew quarters, were acquired in 2003, have traveled over 60,000 miles, and are failing structurally and electrically.	
<u>Project Scope:</u> Phase 1 refreshes the SPoT operational traverse modules to ensure continued fuel and cargo delivery to South Pole Station.	

<u>Project Status:</u> Work began in FY 2024 and is planned for completion in FY 2026.	
<b>Fleet and Equipment Refresh</b>	Status: Execution
<u>Mission Need:</u> More than two-thirds of the USAP fleet, which includes cargo and passenger transport vehicles, snowmobiles, loaders, light tracked utility vehicles, and light trucks, is beyond end-of-life, in some cases by decades. Air Traffic Control and mobile communications equipment is also aging and at increasing risk of failure.	
<u>Project Scope:</u> This first investment makes upgrades to operational equipment, such as cranes, forklifts, and fire apparatus, as well as replaces the fleet of science-support snowmobiles with newer, more fuel-efficient models.	
<u>Project Status:</u> Work began in FY 2024 and is planned to continue with annual investments.	
<b>Doppler Weather Radar</b>	Status: Execution
<u>Mission Need:</u> Successful and safe flight operations rely on accurate and timely weather information. McMurdo does not have any Doppler weather radar capabilities.	
<u>Project Scope:</u> This project will deploy Doppler weather radar to McMurdo, greatly enhancing weather forecasting capabilities which, in turn, improve the level of science support possible with USAP flight operations.	
<u>Project Status:</u> Work began in FY 2024 and is planned for completion in FY 2028.	
<b>Tactical Air Navigation Upgrade</b>	Status: Execution
<u>Mission Need:</u> Tactical Air Navigation (TACAN) systems are critical for providing bearing and distance guidance and non-precision landing approach capability at McMurdo. The current TACAN is beyond end-of-life, and parts are no longer available, so refurbishment is not possible.	
<u>Project Scope:</u> This project will replace the McMurdo TACAN with a new, modern system.	
<u>Project Status:</u> Work began in FY 2024 and is planned for completion in FY 2028.	
<b>South Pole Critical Infrastructure Remediation – Phase 2</b>	Status: Execution
<u>Mission Need:</u> Ice shelf movement and snow accumulation are crushing utilities supporting the vehicle maintenance facility and the safety escape hatches in the long underground utility tunnel at the South Pole Station. In addition, the fresh water well is coming to the end of its useful life.	
<u>Project Scope:</u> Phase 2 installs a new rodwell fresh water well and outfall, required for water production and waste storage, respectively.	
<u>Project Status:</u> Work began in FY 2024 and is planned for completion in FY 2030.	

<b>Station and Field Communication Improvements</b>	Status: Planning
<u>Mission Need:</u> USAP uses a combination of mobile radios and HF radios for on-station and station-to-field communication including emergency and flight operations.	
<u>Project Scope:</u> This project replaces these systems to better support science and operations.	
<b>Environmental Satellite Ground System</b>	Status: Planning
<u>Mission Need:</u> Environmental satellite ground systems are crucial for weather forecasting and flight planning. They are also essential for safe aviation, station operations, and science support. The current McMurdo and Palmer Station systems, Tera Scan, are at or beyond end-of-life.	
<u>Project Status:</u> This project will replace the McMurdo and Palmer systems, providing modern weather forecasting tools that ensure compatibility with new and future weather satellites.	
<b>McMurdo Airfield Power System</b>	Status: Planning
<u>Mission Need:</u> More efficient airfield equipment and facilities have lowered power demand, making the existing generators oversized, inefficient, and obsolete.	
<u>Project Scope:</u> This project replaces generators with more efficient units that are easier to maintain, and for which spare parts are readily available.	
<b>Heavy Science Traverse Platform</b>	Status: Planning
<u>Mission Need:</u> The existing Heavy Science Traverse, used to haul scientific drilling equipment to remote areas of Antarctica, is aging and difficult to maintain.	
<u>Project Scope:</u> This project will deploy new, more efficient, and reliable traverse equipment with expanded geographic reach, reducing reliance on costly airlift.	
<b>McMurdo Station Utility Modernization</b>	Status: Planning
<u>Mission Need:</u> Existing McMurdo Station outside plant infrastructure (e.g., potable and fire protection water requirements, electrical, heat loop, sewer, fuel services, IT communications cable and conduits) is degraded, prone to failure, costly to maintain, and will not support future facilities.	
<u>Project Scope:</u> This project upgrades outside plant utilities, builds a new water storage tank, and installs a fire-water booster pump.	

<b>South Pole Satellite Communications Upgrade</b>	Status: Planning
<u>Mission Need</u> : The mainland link to South Pole Station satellite communication has restricted access to the currently available and future satellites.	
<u>Project Scope</u> : This project replaces that ground station with a new antenna, tripling bandwidth.	
<b>South Pole Satellite Communications Transformation</b>	Status: Planning
<u>Mission Need</u> : The mainland link to South Pole Station satellite communication has restricted access to the currently available and future government owned and operated satellites.	
<u>Project Scope</u> : This project installs infrastructure to capitalize on commercially available proliferated low earth orbit satellite constellations serving the Antarctic continent.	
<b>Ross Island Wind Energy Feeder</b>	Status: Planning
<u>Mission Need</u> : As New Zealand upgrades the wind turbines at nearby Scott Base from 990 kW production to 3 MW production, McMurdo Station has an opportunity to capitalize on excess production on the combined McMurdo/Scott Base grid when available.	
<u>Project Scope</u> : This project installs appropriately sized resilient infrastructure to carry greater electrical supply directly to the McMurdo power plant.	
<b>Sea Ice Infrastructure Modernization and Upgrade</b>	Status: Planning
<u>Mission Need</u> : Sea ice is the defining feature of polar marine systems. Existing sea ice equipment and infrastructure is too heavy to safely operate on changing sea ice conditions. Lighter and more flexible sea ice infrastructure will allow US scientists to continue conducting important research in and around McMurdo sound.	
<u>Project Scope</u> : This project will replace the existing sea ice platforms with new lighter and more versatile infrastructure.	
<b>McMurdo Aquarium Infrastructure Improvements</b>	Status: Planning
<u>Mission Need</u> : The McMurdo Aquarium in the Crary Lab facility supports aquatic research. The existing aquarium infrastructure has failed to provide adequate sea water to support the needs of marine scientists.	
<u>Project Scope</u> : This project will improve the seawater delivery system and controls.	

<b>Replace Structures at Dry Valleys and Ross Island</b>	Status: Planning
<u>Mission Need:</u> Dry Valley facilities support annual research to include Long Term Ecological Research network science. Existing facilities are out-of-date and do not provide the necessary support needed for modern scientific research.	
<u>Project Scope:</u> This project will replace existing facilities with newer, more efficient infrastructure.	
<b>Raise Martin A Pomerantz Observatory (MAPO) Building and BICEP Array Replacement Tower (BART)</b>	Status: Planning
<u>Mission Need:</u> South Pole Station's Blue Buildings are being buried in snow and without action, will become unusable.	
<u>Project Scope:</u> This project will utilize the lifting system employed by the ARO project to raise the MAPO building. A new telescope tower will be constructed prior to the raise to ensure continuity of scientific observations.	
<b>New Dark Sector Electrical Substation (Building 61)</b>	Status: Planning
<u>Mission Need:</u> All power and communications to the South Pole Station's Dark Sector labs (the IceCube Lab, the Dark Sector Lab that houses the South Pole telescope, Martin A. Pomerantz Observatory (MAPO) with its attached BICEP array) are fed through building 61. Building 61 is buried and if not replaced could fail and jeopardize the dark sector science.	
<u>Project Scope:</u> This project will replace the infrastructure in Building 61.	
<b>Complete IT&amp;C Primary Addition Facility</b>	Status: Planning
<u>Mission Need:</u> COVID-19 disrupted construction of the McMurdo Information Technology & Communication (IT&C) Addition. Completion of the IT&C Addition is necessary to support the NOAA mission and is an integral part of the McMurdo Master Plan.	
<u>Project Scope:</u> This project will complete the construction of the addition and facilitate the movement of the USAP, NOAA, and NASA McMurdo-based data centers.	
<b>Palmer New Fuel Tank Installation</b>	Status: Planning
<u>Mission Need:</u> Palmer Station fuel is supplied from a single above-ground steel tank built in 1967. The existing tank is a single point of failure and does not meet current standards for fuel spill containment.	
<u>Project Scope:</u> This project will replace the existing tank with multiple new tanks.	

<b>South Pole Arch Replacements Phase 1 - 4</b>	Status: Planning
<u>Mission Need</u> : Critical infrastructure supporting the South Pole Station is housed within buried steel arches. The arches will begin to crush the infrastructure underneath them within the next decade due to snow accumulation. The arches protect the station power and water plants, fuel storage, logistics warehouse, and vehicle maintenance garage.	
<u>Project Scope</u> : This project will replace the arches and infrastructure with new construction in a location identified by the South Pole Master Plan.	

## Reviews

Conceptual Design and Preliminary Design Reviews for AIMS were passed successfully in FY 2015 and FY 2017, respectively, resulting in a National Science Board (NSB) resolution (NSB-2017-20) authorizing NSF to include AIMS in a future budget request. The AIMS Final Design Review (FDR) was conducted in October 2018. The Independent Panel Review found that the project execution plan was well-developed for the FDR and recommended that the project proceed to the Construction Stage; AIMS was awarded in FY 2019.

In addition to daily and weekly communications with the Antarctic Support Contractor's (Leidos) AIMS project management, NSF conducts a formal monthly project management review. This review covers progress described in the monthly project management report produced by Leidos. In addition, annual Construction Reviews are conducted by OPP, the Research Infrastructure Office, and an external panel, with the first one having occurred in November 2020. The most recent construction review was conducted in July 2024. The panel report was delivered in August 2024 and the panel's recommendations were incorporated into the Prime Contractor's FY 2025 construction and quality plans. NSF has monitored progress through the routine Project Management Reviews and by increasing Government oversight at the project site. The next Construction Review is planned for the fourth quarter of FY 2025.

Extensive engagement with the National Science Board took place in FY 2023 and resulted in a formal recommendation from the Board to move forward with the AIR portfolio of work. The CIRB meets on a quarterly basis to prioritize activities within the AIR Program. Readiness reviews for AIR activities are conducted based on the scale and complexity of individual projects.

## Risks

If the infrastructure that enables U.S. access to the Antarctic is not kept robust and efficient, USAP is at risk of losing science capabilities year over year as facilities, utilities, equipment, and the vehicle fleet degrade.

As described above, ongoing and planned near-term activities in the AIR program will mitigate critical risks facing USAP, including some that represent single points of failure to the mission. In executing the projects, NSF has implemented a rigorous risk management approach that includes the identification of risks and mitigation strategies. Robust risk management will also be required of contractors and awardees. In all cases, NSF holds the risk of cost and schedule increases that are



beyond the control of the contractor or awardee, including events such as pandemics, unpredictably severe weather, icebreaker and supply vessel availability, and macroeconomic changes.

**LEADERSHIP-CLASS COMPUTING FACILITY (LCCF)****\$201,000,000****Requested MREFC Funds<sup>1</sup>**

(Dollars in Millions)

	FY 2026 Request
Leadership-Class Computing Facility	\$201.00

<sup>1</sup> The previously presented Total Project Cost of \$457.45 million for LCCF remains intact.

**Brief Description**

Computer simulation, together with artificial intelligence (AI) methods and data analytics, is critical to enabling transformational science and engineering (S&E) research. From understanding the origin and evolution of our universe to exploring atomic-scale biomolecular processes, computational methods are an integral part of almost all curiosity-driven, use-inspired, and translational S&E research. LCCF, led by the Texas Advanced Computing Center (TACC) at the University of Texas at Austin, is envisioned as a distributed facility that will provide unique computational and data analytics capabilities, as well as critical software and services, for the nation's S&E research community to enable discoveries that would not be possible otherwise. Furthermore, the project will deploy a broad portfolio of education and outreach activities that will expand and nurture our nation's future S&E workforce in data and computational sciences.

LCCF's core processing capabilities will be anchored by a computing system called *Horizon*, which will represent a substantial increase over the computational and data analytics capacity of the current NSF leadership-class computing system, *Frontera*. LCCF will also include four Distributed Science Centers (DSCs), which will be located at the Atlanta University Center Consortium (AUCC), the National Center for Supercomputing Applications (NCSA) at the University of Illinois Urbana-Champaign, the Pittsburgh Supercomputing Center (PSC), and the San Diego Supercomputer Center (SDSC). These DSCs are designed to leverage expertise across the broader cyberinfrastructure ecosystem and to provide critical edge-computing services to the LCCF user community. The partnership with AUCC will leverage the consortium's Data Science Initiative to provide workforce pathways into leadership computing. The partnerships with NCSA and PSC will explore and provide new processor technologies for AI, and data intensive computing and data mirrors for published archives, respectively. Finally, the partnership with SDSC will focus on supporting Machine Learning (ML) and instrument data analytics in scientific workflows, and methods to democratize access to LCCF.

In addition to supporting large-scale simulations and AI, LCCF will also facilitate new usage modes such as interactive computing required by scientific tasks that involve human-in-the-loop processing, as well as urgent computing for emergency response scenarios that will need immediate access to computing resources and real-time data. LCCF will support the full scientific data lifecycle, which is critical to modern S&E discovery processes and to unleashing the potential of rapid advancements in ML and AI. The extensive LCCF Education and Public Outreach (EPO) effort will expand the learning and workforce pipeline and aims to attract talented individuals to research computing. A key

component of the LCCF EPO activities will be a Visitor Center at TACC that will include virtual and physical exhibits, along with multiple pilot activities that will be designed to engage students, teachers, and the broader public across the nation.

## Baseline History

In Fiscal Year 2017, NSF released solicitation NSF 17-558 (*Towards a Leadership-Class Computing Facility - Phase 1*)<sup>1</sup> to support the acquisition of a Phase 1 leadership-class computing system and to initiate the planning process for a future Phase 2 LCCF. After rigorous merit review of the submitted proposals, NSF made an award to TACC for the acquisition of the *Frontera* system, the first acquisition in the two-phase process, and to advance the planning for the Phase 2 LCCF. As noted in NSF 17-558, and in response to the recommendations set forth in the report *Future Directions for NSF Advanced Computing Infrastructure to Support U.S. Science and Engineering in 2017-2020*,<sup>2</sup> the goal of the LCCF Phase 2 planning was the design of a major facility that would support all S&E research.

The Major Facilities Design Stage, as defined in the NSF Research Infrastructure Guide,<sup>3</sup> consists of three phases – Conceptual Design, Preliminary Design, and Final Design. In July 2019, LCCF began the Conceptual Design Phase following formal admission to the Design Stage by the NSF Director. The Conceptual Design Review (CDR) was conducted in June 2020 by an external panel of experts to evaluate the proposed, site-independent design of LCCF. A successful CDR resulted in the NSF Director's approval for the project to enter the Preliminary Design Phase in September 2020.

Following extensive Preliminary Design Phase planning activities, the project successfully completed the Preliminary Design Review (PDR) in January 2022. At PDR, the project was judged by an external panel of experts to have made appropriate progress in clearly articulating a cost estimate and a near-final project definition, as well as completing a sufficiently mature risk analysis to allow determination of the risk-adjusted Total Project Cost (TPC) and construction duration for establishing a budget request to Congress. As a result of the successful PDR, the project was approved by the NSF Director to enter the Final Design Phase in August 2022.

A Final Design Review (FDR) of the project was conducted in April 2023. An expert external review panel evaluated the readiness of the project to enter the Construction Stage and recommended that LCCF be advanced. At its November 2023 meeting, the National Science Board discussed LCCF and passed a resolution in favor of advancing the project to the construction stage. In December 2023, the NSF Director authorized the advancement of the project to the construction stage. A construction award was made for the project in July 2024.

## Project Status

In August 2024, the project signed a colocation agreement with Sabey Inc. to provide 32,000 square feet of customized datacenter space for high-density utility hosting of the primary LCCF computing system called *Horizon*. Since entering into the agreement, the project has been holding weekly

<sup>1</sup> [www.nsf.gov/pubs/2017/nsf17558/nsf17558.htm](https://www.nsf.gov/pubs/2017/nsf17558/nsf17558.htm)

<sup>2</sup> [www.nationalacademies.org/our-work/future-directions-for-nsf-advanced-computing-infrastructure-to-support-us-science-in-2017-2020](https://www.nationalacademies.org/our-work/future-directions-for-nsf-advanced-computing-infrastructure-to-support-us-science-in-2017-2020)

<sup>3</sup> [www.nsf.gov/pubs/2021/nsf21107/nsf21107.pdf](https://www.nsf.gov/pubs/2021/nsf21107/nsf21107.pdf)

meetings with the Sabey construction team to ensure on-time delivery of the datacenter colocation space, expected in March 2026.

In early 2025, the project team continued with preparations for making other initial procurements, including the *Horizon* system, visitor center construction, networking equipment, and the prototype system and software that will be available for early-access user testing of the LCCF computing environment. The Project continues to hold collaborative technology discussions with Dell, NVIDIA, and other partners to closely monitor future technological roadmaps. No outstanding technical issues remain.

### **Meeting Intellectual Community Needs**

The scientific requirements for LCCF are defined by the needs of the S&E community. These include the need to expand computation and data analytics capabilities, as well as the size and breadth of the workforce that will use them. LCCF requirements also include agility and the ability to adapt to rapidly changing technology, new application formulations and requirements, as well as new paradigms of computation-based research. Furthermore, LCCF will need to enhance the broader high-performance computing ecosystem by providing unique resources and expertise at our nation's Institutions of Higher Education that complement other investments made by the federal government and in industry.

The LCCF scientific requirements were determined through a broad set of engagements with the S&E community. These included: distillation from a wide variety of scientific community reports; analysis of usage patterns on leadership computing systems across government; feedback from project-organized planning meetings with the research community;<sup>4</sup> discussions under non-disclosure agreements with industry vendors concerning technology roadmaps; technical evaluation of advanced system prototypes; and direct conversations and interviews with scientists and engineers.<sup>5</sup>

During the Design Stage, LCCF augmented its gathering of science requirements by selecting twenty-one Characteristic Science Application (CSA) teams as project partners. The CSA partners represent applications across a broad range of S&E domains and were selected to enable the development of a suite of science drivers that will be used to verify and validate the facility's effectiveness. The CSA partners also provided requirements to inform design decisions and will continue to enable the project to acquire experience and expertise in coding/performance-tuning enhancements in preparation for facility operations.

Finally, LCCF will be a key enabler of large-scale AI research to ensure continued U.S. world leadership in S&E research and development. In particular, the facility will be a key element in advancing a national research infrastructure to broaden access for the entire nation to critically-needed AI resources, as envisioned in the White House *National AI Research Resource Task Force* report.<sup>6</sup> When

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<sup>4</sup> [lccf.tacc.utexas.edu/media/filer\\_public/d4/e4/d4e49b4f-26b2-4065-995e-981f9e21b03f/lccf-tec-science-requirement\\_workshop.pdf](https://lccf.tacc.utexas.edu/media/filer_public/d4/e4/d4e49b4f-26b2-4065-995e-981f9e21b03f/lccf-tec-science-requirement_workshop.pdf)

<sup>5</sup> [lccf.tacc.utexas.edu/media/filer\\_public/24/c8/24c85369-f2ea-4e57-9647-be7ad656e361/lccf-req001\\_sc19\\_bof\\_report.pdf](https://lccf.tacc.utexas.edu/media/filer_public/24/c8/24c85369-f2ea-4e57-9647-be7ad656e361/lccf-req001_sc19_bof_report.pdf)

<sup>6</sup> [www.ai.gov/nairrtf/](https://www.ai.gov/nairrtf/)

operational, LCCF will advance U.S. dominance in AI, as envisioned by the President's Executive Order on *Removing Barriers to American Leadership in Artificial Intelligence*.<sup>7</sup>

## **Governance Structure and Partnerships**

### NSF Governance Structure

NSF oversight of LCCF is provided by a Program Officer in the CISE Office of Advanced Cyberinfrastructure (OAC), working cooperatively with other NSF staff through an Integrated Project Team (IPT). The LCCF IPT includes members from OAC leadership, Research Infrastructure Office (RIO), Office of the General Counsel (OGC), Budget Division, and Division of Acquisition and Cooperative Support. In addition, RIO staff provides advice to OAC and assists with agency oversight and assurance. CISE leadership and NSF's Chief Officer for Research Facilities provide additional high-level guidance and oversight to the project.

### External Governance Structure

The LCCF Senior Management Team consists of the LCCF Project Director (PD), the Project Manager (PM), and the Deputy Project Manager (DPM). This group is responsible for the day-to-day management of the LCCF project. The PD serves as the primary interface between the project and NSF's oversight team. The Project Management office is headed by the PM and DPM, who report to the PD. The PM has line responsibility for operations, reporting, and process management within the project, with support from the DPM. The PD is advised by two groups: the Technology Advisory Board and the Science Advisory Board. Each board consists of members who are leaders in their fields and represent cyberinfrastructure providers and experts (the Technology board) and stakeholders from the community of scientists who will be the ultimate customers of LCCF (the Science board).

### Partnerships and Other Funding Sources

The LCCF project includes partnerships with more than twenty academic institutions that will contribute to design, validation, and eventual operations. The project also has extensive industry partnerships in various high-tech economic sectors, such as computing hardware, software, and data center colocation.

## **Cost and Schedule**

The project began construction in July 2024. The project construction schedule has a duration of 34 months, providing for facility acceptance in FY 2027. The project has also developed schedule contingency of one year to allow for uncertainties in the construction process.

## **Future Operations Costs**

Contingent on the availability of funds, NSF plans to support LCCF operations and maintenance for an initial five years with a possibility of renewal for another five years. The current estimate is that LCCF operations will cost approximately \$40 million annually. NSF support for LCCF beyond 10 years, and possible re-competition of the operations and maintenance award, will be informed by a planned future study by the National Academies of Sciences, Engineering, and Medicine or other similar

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<sup>7</sup> [www.whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/](https://www.whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/)

reports by community-based bodies, and will follow internal NSF procedures for renewal, competition, and disposition.

The current estimated cost for disposition of LCCF at the end of the ten-year operations period is \$0. With the eventual discontinuation of NSF support for LCCF, the main data center will be returned to the colocation provider, and the computing system will be repurposed by the recipient. There is no expectation that site restoration, demolition, or modification would be needed when the facility is decommissioned.

## **Reviews**

### Technical Reviews

The LCCF project was technically reviewed multiple times during the Design Stage by external committees of experts. These include stage gate reviews at CDR, PDR, and FDR in FYs 2020, 2022 and 2023, respectively. The LCCF CSA program was also reviewed by a panel of external experts in FY 2021.

### Management, Cost, and Schedule Reviews

In accordance with NSF's No Cost Overrun Policy, the agency has developed a risk-adjusted TPC estimate post-PDR (based on known risks). Using the TACC proposal as the basis, BFA employed a series of independent cost estimate reviews to inform NSF's post-PDR cost analysis. These included an independent cost estimate in accordance with U.S. Government Accountability Office good practices, conducted by an external contractor for appropriate project components, by BFA's internal Cost Analysis and Pre-award Branch for other elements of cost, and by RIO for assessments of budget contingency and schedule. This information was reconciled against the original proposed budget from TACC in determining the recommended value for inclusion in the FY 2024 Budget Request.

At the completion of FDR, a refined final risk-adjusted TPC and schedule were proposed by the project. BFA conducted a second series of independent cost estimate reviews in accordance with NSF policies prior to the issuance of the Construction award.

## **Risks**

### Technical

The LCCF project deploys state-of-the-art technologies and services for the Nation's S&E research community. Several risks related to the readiness and reliability of the future deployed systems and services are included in the LCCF risk register. The LCCF CSA partnerships will be key in monitoring and managing these risks as the CSA teams will be the early users of the facility and will help to identify and remedy issues as they arise. Cost and schedule contingencies have also been factored into the plan to mitigate these risks. In addition, a scope management plan provides options to mitigate cost and/or schedule overruns by eliminating project scope if necessary. LCCF's scope management plan is arranged so that any decision to descope can be made as late as possible in the project and with minimal impact on the science goals.

### Environmental Health and Safety

The project includes several health and safety-related risks in its risk register, including events that may have a system-wide impact on the LCCF construction schedule. Contingencies have been factored into the construction schedule to mitigate these risks if necessary. Furthermore, an assessment for

compliance with National Environmental Policy Act regulations has been completed by NSF OGC.

Partnership Risk

The project has established partnerships with several technology vendors. Risks of withdrawal by partners due to unforeseen business reasons are included in the risk register and are carefully monitored and managed by the project. Project assessment of these partnership risks is that the probability of their occurrence is very low. However, mitigation plans have been developed, including vendor penalties for late delivery.

System Integration Risk

An experienced technology integrator for the core *Horizon* system has been identified, and overall system integration risk is low. However, several other risks have been identified by the project related to delays in data center access and technology roadmap changes that could impact the system integration timeline and schedule. Cost and schedule contingencies have been factored into the plan to mitigate these risks.

**MID-SCALE RESEARCH INFRASTRUCTURE TRACK 2  
(MID-SCALE RI-2)**

**\$25,000,000**

**Requested MREFC Funds**

(Dollars in Millions)

	FY 2026 Request
Mid-scale Research Infrastructure Track 2	\$25.00

**Scientific Purpose**

The Mid-scale Research Infrastructure program is an NSF-wide effort to meet the research community's needs for modern research infrastructure to support priority science and engineering research. Here, we describe Track 2 (Mid-scale RI-2), covering projects with individual implementation costs between \$20.0 million and \$100.0 million, with funding provided from the MREFC account.

**Baseline History**

The scientific importance of mid-scale research infrastructure is reflected in the 2017 American Innovation and Competitiveness Act (AICA), which directed NSF to “evaluate the existing and future needs, across all disciplines supported by the Foundation, for mid-scale projects.” NSF issued a Request for Information in late 2017 that resulted in nearly 200 ideas for research infrastructure with project costs in the \$20.0 million to \$100.0 million range, amounting to a prospective demand for approximately \$10 billion in funding.

In the 2018 appropriation for NSF, report language from the House of Representatives encouraged the NSB “to consider further changes that would bridge the gap between the Major Research Instrumentation program and the MREFC account while also developing processes appropriate for mid-scale infrastructure, cyberinfrastructure, and instrument upgrades to be funded through the MREFC account.” The NSB issued a report (NSB-2018-40)<sup>1</sup> that made several recommendations, including “a long-term *agency-level* commitment to mid-scale research infrastructure.”

NSF's response to the NSB recommendations and the AICA mandate to develop a strategy was the creation of a targeted Mid-scale RI program. As part of that program, funding for projects with implementation costs greater than \$20.0 million was requested in the MREFC account as Track 2 of an NSF-wide Mid-scale RI program, and funding was appropriated in that account beginning in FY 2020. NSF issued its first solicitation for Mid-scale RI-2 in December 2018,<sup>2</sup> requesting proposals with total implementation costs between \$20.0 million and \$70.0 million. A second solicitation<sup>3</sup> with a new upper limit of \$100.0 million was issued in December 2020 and the award portfolio was approved

<sup>1</sup> [www.nsf.gov/nsb/publications/2018/NSB-2018-40-Midscale-Research-Infrastructure-Report-to-Congress-Oct2018.pdf](https://www.nsf.gov/nsb/publications/2018/NSB-2018-40-Midscale-Research-Infrastructure-Report-to-Congress-Oct2018.pdf)

<sup>2</sup> [www.nsf.gov/pubs/2019/nsf19542/nsf19542.htm](https://www.nsf.gov/pubs/2019/nsf19542/nsf19542.htm)

<sup>3</sup> [www.nsf.gov/pubs/2021/nsf21537/nsf21537.pdf](https://www.nsf.gov/pubs/2021/nsf21537/nsf21537.pdf)



in February 2023, resulting in three awards in FY 2023, and a fourth in FY 2024. The third solicitation<sup>4</sup> for Mid-scale RI-2 was released in March 2023. The review process for that solicitation has been completed. NSF does not anticipate making new awards in FY 2026.

Since Mid-scale RI-2 is a portfolio of implementation awards that span all NSF research communities, it does not have a single set of *a priori* scientific goals. Rather, the solicitations define research infrastructure as “any combination of facilities, equipment, instrumentation, or computational hardware or software, and the necessary human capital in support of the same” and, consequently, generate proposal submissions over a wide range of disciplines. As stated in the 2020 solicitation, NSF’s intent is that “[t]he Mid-scale Research Infrastructure programs are aimed at transforming scientific and engineering research fields as well as science, technology, engineering, and mathematics education research by making available new capabilities, while simultaneously training early-career researchers in the development, design, and construction of cutting-edge infrastructure.”

### **Management and Oversight**

Mid-scale RI-2 proposals have been received from all scientific disciplines covered by NSF. Management and oversight processes for Mid-scale RI awards have been codified in the NSF Research Infrastructure Guide (NSF 21-107<sup>5</sup> and subsequent revisions). Because of the varied nature of potential Mid-scale RI-2 awards, the Research Infrastructure Guide states the following:

“Mid-scale project oversight requirements are to be tailored based on each project’s unique characteristics such as the technical scope, the type and mix of work performed (e.g., standard procurement by the Recipient, software development, or civil construction), and an assessment of the associated technical and programmatic risks. However, NSF is committed to the principle that this flexibility does not preclude the requirement for appropriate rigor on the part of NSF or the Recipient. Appropriate use of NSF major facility oversight practices will be determined on a case-by-case basis...”

Each Mid-scale project is overseen by a program officer from a relevant research directorate as well as an awarding official from BFA. Additionally, within BFA, the Research Infrastructure Office has designated a liaison for the mid-scale award portfolio to assure a consistent and effective approach to project management oversight for these awards. To enable appropriate oversight, all Mid-scale RI-2 proposals are required to include a detailed Project Execution Plan. This plan is the basis for management requirements for the Awardee as referenced by each individual award’s Terms and Conditions and helps NSF assess project risk and complexity to tailor the oversight needs prior to award issuance. Portfolio-wide oversight, ensuring that the Mid-scale RI-2 program meets its overall objectives, is led by the Deputy Chief Officer for Research Facilities in the Office of the Director.

### **Mid-scale RI Track 2 Status**

Authorization for the current complement of Mid-scale RI-2 awards was given in May 2020 and February 2023, respectively. The authorized awards underwent full cost analyses and final award

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<sup>4</sup> [www.nsf.gov/pubs/2023/nsf23570/nsf23570.pdf](https://www.nsf.gov/pubs/2023/nsf23570/nsf23570.pdf)

<sup>5</sup> [www.nsf.gov/pubs/2021/nsf21107/nsf21107.pdf](https://www.nsf.gov/pubs/2021/nsf21107/nsf21107.pdf)

negotiations, including Independent Cost Estimates as required under AICA. The first three Mid-scale RI-2 awards were made from the MREFC account in October 2020,<sup>6</sup> and followed by two additional awards, made in June 2021 and February 2022, respectively. These awards are listed below:

- “High Magnetic Field Beamline,” Cornell University, \$32.69 million.
- “Global Ocean Biogeochemistry Array,” Monterey Bay Aquarium Research Institute, \$52.94 million.
- “Grid-Connected Testing Infrastructure for Networked Control of Distributed Energy Resources,” University of California at San Diego, \$39.47 million.
- “Network for Advanced NMR [Nuclear Magnetic Resonance],” University of Connecticut, \$39.70 million.<sup>7</sup>
- “Research Data Ecosystem: A National Resource for Reproducible, Robust, and Transparent Social Science Research in the 21<sup>st</sup> Century,” University of Michigan, \$38.36 million.<sup>8</sup>

Four projects resulting from the second solicitation were added to the Mid-scale RI-2 portfolio, with three awards made in FY 2023:

- “Airborne Phased Array Radar,” University Corporation for Atmospheric Research, \$91.80 million.<sup>9</sup>
- “Advanced Simons Observatory,” University of Pennsylvania, \$52.70 million.<sup>10</sup>
- “Compact X-ray Free-Electron Laser,” Arizona State University, \$90.80 million.<sup>11</sup>

An additional award from this second solicitation was made in May 2024.

- “A National Research Infrastructure for Large-Scale Learning Science and Engineering” Rice University, \$89.93 million.<sup>12</sup>

A solicitation for a third round of proposals for Mid-scale RI-2 was released in March 2023. NSF has completed the review of those proposals. NSF does not anticipate making new awards in FY 2026.

## **Future Operations Costs**

The Mid-scale RI-2 solicitations specifically prohibited inclusion of operations costs in the individual project budgets, but proposers are required to present operations and utilization plans as well as estimates of full lifecycle costs. For each proposal considered for inclusion in the award portfolio, the lead directorate is required to confirm the submission of adequate operational funding models for the projects, and to estimate and commit to any additional operations costs necessary to reap the scientific benefits of an award. At the total planned award amount of \$528.40 million from the first two solicitations and an estimated upper limit to the operations cost of 10 percent of the capital costs per project per year,<sup>13,14</sup> the total operations cost impact from the current portfolio of Mid-scale RI-2

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<sup>6</sup> [www.nsf.gov/news/special\\_reports/announcements/102920.jsp](https://www.nsf.gov/news/special_reports/announcements/102920.jsp)

<sup>7</sup> [www.nsf.gov/news/special\\_reports/announcements/061621.jsp](https://www.nsf.gov/news/special_reports/announcements/061621.jsp)

<sup>8</sup> [www.nsf.gov/news/special\\_reports/announcements/020422.jsp](https://www.nsf.gov/news/special_reports/announcements/020422.jsp)

<sup>9</sup> [www.new.nsf.gov/news/nsf-announces-investment-research-infrastructure](https://www.new.nsf.gov/news/nsf-announces-investment-research-infrastructure)

<sup>10</sup> [www.new.nsf.gov/news/detecting-faint-traces-universes-explosive-birth](https://www.new.nsf.gov/news/detecting-faint-traces-universes-explosive-birth)

<sup>11</sup> [new.nsf.gov/news/nsf-announces-infrastructure-investment](https://new.nsf.gov/news/nsf-announces-infrastructure-investment)

<sup>12</sup> [new.nsf.gov/news/nsf-invests-90m-innovative-national-scientific](https://new.nsf.gov/news/nsf-invests-90m-innovative-national-scientific)

<sup>13</sup> [www.nsf.gov/nsb/publications/2018/NSB-2018-17-Operations-and-Maintenance-Report-to-Congress.pdf](https://www.nsf.gov/nsb/publications/2018/NSB-2018-17-Operations-and-Maintenance-Report-to-Congress.pdf)

<sup>14</sup> An annual operations cost of 10 percent of the total capital costs is a typical “high-end” estimate for a major infrastructure project. Since some of the Mid-scale RI-2 awards being made by NSF are additions to existing

awards could potentially ramp up to a steady state of about \$52.0 million per year, spread across the sponsoring Directorates, when implementation is complete. Given the variety of operational models for the funded infrastructure, this cost would only be partially borne by NSF and such costs within NSF are spread across multiple directorates and divisions. Some of the first projects funded by the Mid-scale RI-2 program have transitioned to full operations in FY 2025, so those costs will be captured within the budgets of the sponsoring Directorate. Operations costs of projects funded from the second solicitation, released in FY 2021, and from subsequent solicitations, would not begin until well after FY 2026.

## **Reviews**

The Mid-scale RI-2 program only considers projects that have reached a high state of readiness for implementation through previous investments in development. As a result, the multi-phase Design Stage and accompanying reviews that are typical of major facility projects are not used. Instead, the program has been designed to include a two-step, pre-proposal and full-proposal process to limit the burden on the research community of both preparing and reviewing full proposals and Project Execution Plans. Lead NSF directorates are identified to coordinate the review of each pre-proposal and full proposal. Pre-proposals are reviewed externally according to the standard NSF merit review criteria and solicitation-specific review criteria, with a subset of teams invited to submit full proposals based on the outcomes of the pre-proposal reviews. Full proposals are also reviewed externally, with a subset selected for a Site Visit. Based on the results of the site visit, a further subset of proposals is invited to a Reverse Site Visit at NSF (or held virtually) for detailed assessment of the Project Execution Plans.

Based on the extensive input from external merit review, the most meritorious proposals are identified by the lead directorates and submitted to the Mid-scale RI-2 Working Group. That working group identifies potential funding scenarios of those proposals at different levels of total funding and forwards them to the Office of the Director for further consideration. The Deputy Chief Officer for Research Facilities convenes an independent Portfolio Recommendation Group to evaluate the scenarios from the working group and develop one or more final recommended portfolios that consider agency strategy, technical and programmatic risk, projected funding availability, and overall portfolio balance. During the portfolio construction process, NSF also conducts a rigorous cost analysis of each candidate project to ensure compliance with Government Accountability Office good practices, as required by the solicitation and the Research Infrastructure Guide. That analysis may inform modifications to the requested budget if it reveals substantial deficiencies in the development of the proposed cost of a project.

## **Risks**

Technical risks and risk management approaches are described in each project's Project Execution Plan and are evaluated rigorously by an external panel of project management experts during a Reverse Site Visit, as described above. The assembly of the final portfolio also relies significantly on an evaluation of agency risks. These include, for example, a constraint that not all the projects should

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facilities or infrastructure, the predicted increments to the operations costs are less than that high-end estimate for several projects.

have very high or very low technical risk,<sup>15</sup> potential cost risks identified during the review process, assessment of any partnership risks, the risk that events outside the control of an award recipient might significantly impact an individual project, and/or the risk of overcommitting future budgets such that the next solicitation might be significantly delayed.

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<sup>15</sup> NSF does not want all projects to have very high technical risk because of the desire for a high probability of very successful projects coming out of the Mid-scale program. On the other hand, NSF does not want all projects to be “safe” projects with very low technical risk because a portfolio consisting only of such projects might have less potential for dramatic increases in scientific knowledge.

## MAJOR FACILITIES OVERVIEW

Major Facilities Funding (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total Research and Related Activities</b>	<b>\$1,099.11</b>		<b>\$763.00</b>	<b>-\$336.11</b>	<b>-30.6%</b>
Operations and Maintenance of Existing Facilities	736.38		527.00	-209.38	-28.4%
Federally Funded Research and Development Centers	311.64		186.00	-125.64	-40.3%
Operations and Maintenance of Facilities under Construction	17.71		32.00	14.29	80.7%
R&RA Design Stage Activities	33.38		18.00	-15.38	-46.1%
<b>Major Research Equipment and Facilities Construction</b>	<b>\$233.00</b>		<b>\$250.00</b>	<b>\$17.00</b>	<b>7.3%</b>
<b>Total, Major Research Facilities</b>	<b>\$1,332.11</b>		<b>\$1,013.00</b>	<b>-\$319.11</b>	<b>-24.0%</b>

NSF's investments in major multi-user research facilities (major facilities) enable access to and the operation of large, state-of-the-art tools for research and education. These tools can include instrumentation networks, observatories, accelerators, telescopes, research vessels, aircraft, and simulators. These investments support U.S. leadership in a broad swath of science, engineering and technology, and, in many cases, are the world-leading infrastructure in their discipline. NSF's investments are coordinated with those of other organizations, federal agencies, and international partners to ensure they are complementary and well-integrated. Planning for, and operations and maintenance (O&M) of major facilities are funded through the R&RA account. Most construction is funded through the MREFC account; projects currently supported by the MREFC account are discussed in a separate section.

In FY 2026, NSF will continue to provide O&M funding to all existing major facilities, with a focus on maintaining unique and state-of-the-art capabilities that advance U.S. competitiveness and support national and economic security. NSF will also continue to develop concepts for new potential research infrastructure investments that will keep the U.S. at the forefront of global science and engineering. Funding for logistics and infrastructure in support of the U.S. Antarctic Program and similar activities in the Arctic will enable the U.S. to retain its influential presence through the conduct of scientific research on the Antarctic continent and in Greenland.

At the requested FY 2026 Budget level, NSF will emphasize O&M support for its highest priority infrastructure, including the U.S. Antarctic Program, world-leading optical (Vera C. Rubin Observatory) and radio (Atacama Large Millimeter/submillimeter Array) astronomy facilities, the National Geophysical Facility, the National Ecological Observatory Network, and some ships of the Academic Research Fleet. Each of these facilities is a unique infrastructure that both enables cutting-edge scientific discovery and maintains U.S. scientific and technical leadership in the global research enterprise. A second tier of infrastructure will be supported at a substantially reduced level, which will enable continued delivery of significant scientific outcomes, albeit at a diminished rate. A final group of facilities will be funded at a level that enables only limited FY 2026 activity with the intent to proceed with eventual disposition (closure or divestment) of the infrastructure.

The **Vera C. Rubin Observatory**, operated by NSF's National Optical-Infrared Astronomy Research Laboratory (NOIRLab), comprises an 8.4-meter wide-field optical telescope, equipped with a 3.2-gigapixel camera supplied by the Department of Energy (DOE) and is the only facility of its kind in the world. Located on Cerro Pachón in northern Chile, Rubin Observatory will commence its ten-year in-

## Major Facilities

depth survey of the night sky in early FY 2026. The culmination of years of investment by NSF and DOE, Rubin Observatory's novel technology, coupled to the world's largest digital camera, will not only advance discovery in astronomical sciences but also contribute to planetary defense by cataloging millions of near-Earth objects such as asteroids.

The **Atacama Large Millimeter/submillimeter Array (ALMA)**, part of NSF's National Radio Astronomy Observatory (NRAO), is the world's most powerful radio telescope. Ongoing support for this 66-antenna array, located on the Chajnantor Plateau in the Atacama Desert of Chile, will ensure that continuous observations of the universe are obtained to enable ground-breaking studies of stars, galaxies and planetary formation, leading to a deeper understanding of the origins of the cosmos. ALMA is an international observatory, collaboratively funded and operated by NSF, the National Institutes of Natural Sciences of Japan, and the European Southern Observatory.

Also operated by NRAO is the **Very Long Baseline Array (VLBA)**, the world's preeminent facility for high-precision astrometric studies and high-resolution imaging. VLBA comprises ten 25-meter diameter telescopes distributed across the U.S., from the U.S. Virgin Islands to Hawaii. The operations of the VLBA are jointly funded by NSF and the U.S. Naval Observatory, which continues to rely on VLBA data for mission-critical measurements of Earth orientation, data necessary for the accurate functioning of GPS. Remaining components of NRAO, including the Very Large Array and Central Development Laboratory, will operate at reduced levels of service at the FY 2026 Budget level.

NSF manages the **U.S. Antarctic Program (USAP)** on behalf of the U.S. government, operating three year-round stations (McMurdo, Amundsen-Scott South Pole, and Palmer) in partnership with the U.S. military, other federal agencies, and private contractors. The USAP maintains an active and influential U.S. presence on the Antarctic continent while enabling cutting-edge scientific research in astronomy, biology and glaciology, among other fields. At the FY 2026 Budget level, NSF will continue to operate all three stations, to support the conduct of long-term research projects, and to carry out recapitalization work that will make the USAP more efficient and effective. To focus support on the stations and associated logistics, NSF intends to terminate the lease of the research vessel *Nathaniel B. Palmer* in FY 2026.

The **National Geophysical Facility (NGF)**, formed in FY 2025 from the consolidation of the former Geodetic and Seismological Facilities for Advancement of Geosciences (GAGE and SAGE), enables the study of Earth processes, such as earthquakes, volcanic eruptions, landslides, and water cycle dynamics. Through continued operation of networks of Global Positioning System (GPS) and Global Navigational Satellite Systems (GNSS) instruments and the Global Seismological Network, in FY 2026, NGF will address national security needs such as improved natural hazards models and earthquake and tsunami early warning systems, in conjunction with USGS and NOAA, respectively, and nuclear test monitoring, in partnership with the National Nuclear Security Administration. Moreover, a robust and growing suite of private sector partnerships supports the use of GPS/GNSS data for automotive navigation, industrial automation, precision agriculture, and wireless network infrastructure.

The **National Ecological Observatory Network (NEON)** is the only continental-scale biological observing system, with infrastructure distributed across the U.S., including Alaska, Hawai'i, and Puerto Rico. Data from NEON enable studies of the complex interactions between living organisms and natural systems, advancing our understanding of wildfires, drought, invasive species, and infectious diseases. In FY 2026, NEON will focus on maintaining the long-term data record generated by the

automated instrumentation deployed at its terrestrial and aquatic sites and gathering samples of key plant and animal species, such as disease-transmitting species of mosquitoes.

The U.S. **Academic Research Fleet (ARF)** currently consists of 17 oceanographic vessels and various submersibles/autonomous vehicles owned by NSF, the Office of Naval Research, and U.S. universities and laboratories. All ARF ships and vehicles are operated by research universities and laboratories. This fleet of technologically advanced ships and submersibles/autonomous underwater vehicles supports research in complex ocean, seafloor and sub-seafloor environments, the Great Lakes, and the polar regions. The FY 2026 Budget Request will enable partial support of some ships in the ARF, with a focus on achieving adequate coverage of both the global oceans and coastal environments and minimizing the loss of qualified crew.

The **National Center for Atmospheric Research (NCAR)** is an NSF-sponsored Federally Funded Research and Development Center (FFRDC) guided by the vision: “a world-class research center leading, promoting and facilitating innovation in the atmospheric and related Earth Systems sciences.” NCAR addresses this vision with integrated research and facilities organized around three overlapping areas of activity: cutting-edge airborne and ground-based observational facilities; community weather and climate models with thousands of users worldwide; and petascale high-performance computing. At the FY 2026 Budget level, NCAR will curtail but continue to support research to refine weather and earth system models and to better understand the evolution of wildland fires. Also, continued operation of the NCAR-Wyoming Supercomputer Center will support the integration, analysis, and modeling of large data sets.

NSF supports two large physics experiments – the **Laser Interferometer Gravitational Wave Observatory (LIGO)** and the ATLAS and CMS detectors at the **Large Hadron Collider (LHC)**. **LIGO** is the most sensitive detector of gravitational waves ever built and leads the worldwide effort to study the structure and evolution of the universe through gravitational radiation. LIGO makes use of exquisitely sensitive optical interferometers at two sites – Hanford, Washington and Livingston, Louisiana – to detect gravitational waves and, in collaboration with other, similar experiments in Italy and Japan, to determine the part of the sky from which the radiation originates. Past efforts by LIGO have led to the detection of hundreds of gravitational waves originating from the collisions of black holes, neutron stars, and other celestial objects. In FY 2026 NSF will operate only one of the two sites and will support a reduced level for technology development.

**The Large Hadron Collider (LHC)**, operated by the European Organization for Nuclear Research (CERN) in Geneva, Switzerland, is the world’s most powerful particle accelerator. It produces the highest energy particle beams ever created in a laboratory, making it the premier facility in the world for research in elementary particle physics. NSF supports the participation of U.S. researchers in experiments at CERN through the operation of two of LHC’s detectors: A Toroidal LHC Apparatus (ATLAS) and the Compact Muon Solenoid (CMS). At the FY 2026 Budget level, NSF will provide about 60% of the prior share of support for these detectors. Participation of U.S. researchers in LHC research will be commensurately reduced, and NSF expects similar reductions for software and computing capability for analysis.

The **National High Magnetic Field Laboratory (NHMFL)**, operated by a consortium of Florida State University, University of Florida, and Los Alamos National Laboratory, is the world’s premier facility for studies requiring high magnetic field environments. NHMFL has an extensive collection of unique

## *Major Facilities*

magnet systems that enable research across a broad range of topics, including quantum phenomena in many types of materials, structure of macromolecular components of life, and properties of materials essential to energy production, storage, and use. At the FY 2026 Budget Request level, NHMFL will support a subset of its cutting-edge facilities that includes research on the spin dynamics of quantum particles, which informs the development of room-temperature quantum computing devices, and access to Nuclear Magnetic Resonance technology that enables study of drug development with microorganisms.

The **National Solar Observatory (NSO)**, an NSF-sponsored FFRDC, provides leadership to the solar astronomy community through operations of the Daniel K. Inouye Solar Telescope (Inouye) and the NSO Integrated Synoptic Program, which includes the Global Oscillations Network Group (GONG). Located at the summit of Haleakala on the island of Maui, Hawai'i, Inouye is the world's largest and most advanced solar telescope. Once its commissioning phase is complete, Inouye will enable detailed study of the Sun, including phenomena, such as solar flares and coronal mass ejections, that impact space weather, satellite operations, and terrestrial electrical systems. Observations from GONG, a global network of six telescopes, are essential to predictions of space weather. At the FY 2026 Budget request level, NSF will continue the commissioning of Inouye and its data center.

In addition to Rubin Observatory, **NSF's National Optical-Infrared Astronomy Research Laboratory (NOIRLab)** operates the International Gemini Observatory (Gemini), optical and infrared telescopes at Kitt Peak National Observatory (Arizona) and Cerro Tololo Inter-American Observatory (northern Chile), and the Community Science and Data Center. Gemini comprises two 8-meter telescopes: Gemini-North on Maunakea in Hawaii and Gemini-South on Cerro Pachón in northern Chile. NOIRLab's facilities are open to all astronomers regardless of institutional affiliation, with services provided to over 1000 graduate and undergraduate students annually. At the FY 2026 Budget Request level, the Gemini telescopes will operate at approximately 50% capacity and access to the telescopes at Kitt Peak and Cerro Tololo will be phased out. NSF will begin transferring ownership and operations of these telescopes to other agencies or academic institutions.

Located beneath the ice at the U.S. Amundsen-Scott South Pole station, the **IceCube Neutrino Observatory (ICNO)** is the world's largest high-energy neutrino detector. Over 5000 detectors are distributed throughout a cubic kilometer of ice to observe neutrinos originating from a range of astrophysical processes occurring in the universe. ICNO operates continuously, with data transmitted daily to a data center at the University of Wisconsin-Madison. In FY 2026, operations will continue with a reduction in staff deploying to Antarctica and minimal maintenance activities.

The FY 2026 Budget Request also provides funding for the **Ocean Observatories Initiative (OOI)**, **Sub-seafloor Sampling program (S3P)**, and **Green Bank Observatory** major facilities. The FY 2026 request will support only basic services, such as minimal routine maintenance and continued provision of data to the research community. NSF intends to pursue decommissioning and disposition of these facilities to focus on higher priority investments as described above

### Oversight

The Chief Officer for Research Facilities in the Office of the Director is the senior agency official responsible for oversight of major facilities throughout their complete lifecycle. This individual works cooperatively with the Research Infrastructure Office (RIO, formerly the Large Facilities Office), Program Offices, and others across NSF to ensure appropriate oversight of the development,



construction, operations, and disposition of major facilities, as required by Section 110 of the American Innovation and Competitiveness Act (P.L. 114-329). A Deputy Chief Officer for Research Facilities assists in these efforts and provides oversight for NSF's Mid-scale Research Infrastructure portfolio.

All NSF major facilities are managed by Integrated Project Teams (IPT) comprising one or more program officers and staff from the Research Infrastructure Office and the Division of Acquisition and Cooperative Support. Within each Directorate, a Senior Advisor for Facilities or Directorate Representative also provides high-level guidance, support, and oversight. Each IPT meets at least once annually with the Chief Officer for Research Facilities and more regular updates are provided through the Directorate representatives and bimonthly written reports.

#### MAJOR FACILITIES FUNDING, BY PROJECT

(Dollars in Millions)

	FY 2024	FY 2025	FY 2026	Change over	
	Current Plan			FY 2024 Current Plan	Percent
<b>Operations and Maintenance of Major Facilities</b>	<b>\$1,065.73</b>		<b>\$745.00</b>	<b>-\$320.73</b>	<b>-30.1%</b>
National Ecological Observatory Network (NEON)	78.05		47.00	-31.05	-39.8%
<b>Biological Sciences</b>	<b>\$78.05</b>		<b>\$47.00</b>	<b>-\$31.05</b>	<b>-39.8%</b>
Academic Research Fleet	153.06		92.00	-61.06	-39.9%
National Center for Atmospheric Research (NCAR) FFRDC	127.66		77.00	-50.66	-39.7%
National Geophysical Facility <sup>1</sup>	39.48		39.00	-0.48	-1.2%
Ocean Observatories Initiative (OOI)	39.34		8.00	-31.34	-79.7%
U.S. Sub-seafloor Sampling (S3P) <sup>2</sup>	48.51		10.00	-38.51	-79.4%
<b>Geosciences</b>	<b>\$408.05</b>		<b>\$226.00</b>	<b>-\$182.05</b>	<b>-44.6%</b>
Large Hadron Collider (LHC) - ATLAS and CMS	20.50		12.00	-8.50	-41.5%
Laser Interferometer Gravitational Wave Observatory (LIGO)	48.00		29.00	-19.00	-39.6%
National High Magnetic Field Laboratory (NHMFL)	38.57		23.00	-15.57	-40.4%
National Radio Astronomy Observatory (NRAO) FFRDC	107.90		71.00	-36.90	-34.2%
NRAO O&M	43.59		24.00	-19.59	-44.9%
Atacama Large Millimeter Array (ALMA) O&M	54.76		44.00	-10.76	-19.6%
Green Bank Observatory	9.55		3.00	-6.55	-68.6%
National Solar Observatory (NSO) FFRDC	27.67		17.00	-10.67	-38.6%
NSO O&M	6.24		4.00	-2.24	-35.9%
Daniel K. Inouye Solar Telescope (DKIST)	21.43		13.00	-8.43	-39.3%
NSF's National Optical-Infrared Astronomy Research Laboratory FFRDC	66.12		53.00	-13.12	-19.8%
NOIRLab O&M (Mid-Scale Observatories & Community Science and Data Center)	23.68		6.00	-17.68	-74.7%
GEMINI Observatory O&M	24.73		15.00	-9.73	-39.3%
Vera C. Rubin Observatory O&M	17.71		32.00	14.29	80.7%
<b>Mathematical and Physical Sciences</b>	<b>\$308.76</b>		<b>\$205.00</b>	<b>-\$103.76</b>	<b>-33.6%</b>
Antarctic Facilities and Operations (AFO)	262.93		263.00	0.07	0.0%
IceCube Neutrino Observatory (ICNO)	7.94		4.00	-3.94	-49.6%
<b>Office of Polar Programs</b>	<b>\$270.87</b>		<b>\$267.00</b>	<b>-\$3.87</b>	<b>-1.4%</b>
<b>Major Research Facilities Construction Investments</b>	<b>\$266.38</b>		<b>\$268.00</b>	<b>\$1.62</b>	<b>0.6%</b>
<b>R&amp;RA Design Stage Activities<sup>3</sup></b>	<b>\$33.38</b>		<b>\$18.00</b>	<b>-\$15.38</b>	<b>-46.1%</b>
<b>Major Research Equipment and Facilities Construction (MREFC)</b>	<b>\$233.00</b>		<b>\$250.00</b>	<b>\$17.00</b>	<b>7.3%</b>
<b>Total, Major Research Facilities</b>	<b>\$1,332.11</b>		<b>\$1,013.00</b>	<b>-\$319.11</b>	<b>-24.0%</b>

FFRDC is an acronym for Federally-Funded Research and Development Center.

<sup>1</sup> FY 2024 column restated to include GAGE and SAGE, which were subsequently consolidated into a single facility, the National Geophysical Facility (NGF).

<sup>2</sup> Formerly the Integrated Ocean Drilling Program (IODP).

<sup>3</sup> Design Stage Activities include support for potential next generation major facilities. This line reflects FY 2024 funding amounts of \$3.88 million for the Antarctic Research Vessel (ARV), \$9.5 million for Summit Station, \$7.0 million for the Next Generation Very Large Array (ngVLA), and \$13.0 million for Extremely Large Telescopes (ELT), and FY 2026 funding amounts of \$12.0 million for Summit Station, and \$6.0 million for ngVLA.



## RESEARCH AND RELATED ACTIVITIES

**For definitions of common acronyms used throughout NSF’s FY 2026 Budget Request, see the NOTES found at the beginning of the entire document on pages iii-iv.**

R&RA Overview .....	R&RA - 3
Biological Sciences .....	R&RA - 5
Computer and Information Science and Engineering.....	R&RA - 6
STEM Education .....	R&RA - 7
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Mathematical And Physical Sciences .....	R&RA - 12
Social, Behavioral, and Economic Sciences, including NCSES .....	R&RA - 13
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Office of the Chief of Research Security and Policy.....	R&RA - 16
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**RESEARCH AND RELATED ACTIVITIES (R&RA)****\$3,276,150,000**

The FY 2026 Budget Request for the Research and Related Activities account is \$3,276.15 million. Funding within the R&RA Appropriation advances U.S. economic competitiveness and national security, invests in transformative early-stage discoveries, and complements private sector R&D where public investment can deliver the greatest value to the American people. Investments through R&RA also emphasize the development of a strategically prepared science and engineering workforce capable of sustaining long-term innovation in basic science and engineering research. These efforts focus on advancing capabilities across fields critical to U.S. leadership in science and technology, ensuring that the workforce can meaningfully enhance the Nation's scientific and economic vitality.

**R&RA Funding<sup>1</sup>**  
(Dollars in Millions)

	FY 2024		FY 2026 Request	Change over	
	Current Plan	FY 2025 (TBD)		FY 2024 Current Amount	Plan Percent
R&RA Organization					
Biological Sciences	\$789.59		\$224.89	-\$564.70	-71.5%
Computer & Information Science & Engineering	989.35		346.27	-643.08	-65.0%
STEM Education	1,154.31		288.43	-865.88	-75.0%
Engineering	740.80		185.20	-555.60	-75.0%
Geosciences	1,577.08		873.57	-703.51	-44.6%
Geosciences: Office of Polar Programs	559.76		497.22	-62.54	-11.2%
<i>U.S. Antarctic Logistics Activities</i>	109.31		109.31	-	-
Mathematical & Physical Sciences	1,554.21		515.28	-1,038.93	-66.8%
Social, Behavioral & Economic Sciences	290.29		94.00	-196.29	-67.6%
<i>NCSES</i>	74.07		44.00	-30.07	-40.6%
Technology, Innovation, & Partnerships	617.90		350.00	-267.90	-43.4%
<i>SBIR/STTR, including Operations</i>	251.78		108.47	-143.31	-56.9%
Office of the Chief of Research Security Strategy & Policy	13.50		10.00	-3.50	-25.9%
Office of International Science & Engineering	63.70		12.74	-\$50.96	-80.0%
Integrative Activities	430.02		177.73	-252.29	-58.7%
U.S. Arctic Research Commission	1.75		1.15	-0.60	-34.3%
Mission Support Services	126.00		196.89	70.89	56.3%
<b>Total</b>	<b>\$8,348.50</b>		<b>\$3,276.15</b>	<b>-\$5,308.27</b>	<b>-63.6%</b>

<sup>1</sup> Restatements for comparability includes the consolidation of the Directorate for STEM Education (EDU) and Mission Support Services within R&RA, and the establishment of the Office of the Chief of Research Security, Strategy, and Policy (CRSP) as a standalone Program Activity.

**Alignment and Operational Efficiency**

Mission Support Services (MSS), formerly termed Program Related Administration (PRA), reflects the consolidation of two major budgetary components: 1) Program Related Technology (PRT) investments, and 2) Other Program Related Administration (Other PRA) investments. This funding, which was once managed under NSF's programmatic directorates and offices, was organized into a centralized Budget Activity with direct funding allocated from the R&RA account in FY 2025. As part of the FY 2026 President's Budget, NSF proposes consolidating remaining IT services and budget activities with an agency-wide benefit and previously funded under the AOAM account into the Mission Support

Services portfolio under the R&RA account; this will align like functions, achieve scale efficiencies, centralize oversight, and support Administration priorities.

In FY 2026, funding for Mission Support Services is \$196.89 million. Consistent with NSF's approach, PRT and Other PRA will continue to be the major components of MSS and will be managed as separate investments. For additional details on these investments, please see the Organizational Excellence Chapter of this budget submission.

In FY 2026, NSF also proposes integrating the Directorate for STEM Education (EDU) into the R&RA Account, retiring the standalone STEM Education Account. The R&RA appropriation already supports STEM education. This consolidation brings these efforts into a single, cohesive structure. This change enhances administrative efficiency, reduces complexity, and improves NSF's ability to execute its mission while aligning with administration priorities, particularly during the year of execution.

### **Targeted Investments in Administration Priorities**

- **Artificial Intelligence (AI):** The FY 2026 Budget increases FY 2024 funding levels in AI, reaffirming the administration's commitment to securing America's dominance in this critical field of science. Investments will advance foundational research in machine learning, computer vision, and natural language processing. These efforts are designed to bolster national security, drive economic growth, and ensure that the U.S. remains at the forefront of AI innovation. By bolstering collaborations between industry and government, NSF aims to translate AI research into practical applications that benefit the American people and reinforce the nation's global leadership.
- **Quantum Information Science (QIS):** The FY 2026 Budget increases FY 2024 funding levels in QIS, maintaining the administration's strong support for QIS. Investments will focus on foundational research in quantum computing to advance the Nation as a leader in Quantum technology. These initiatives are critical for developing next-generation technologies that can revolutionize industries and enhance national security. By prioritizing QIS investments, NSF will drive partnerships with federal agencies, industry, private foundations, and national laboratories to improve American innovation in quantum computing.
- **Technology, Innovation, and Partnerships (TIP):** The FY 2026 Budget allocates \$350.0 million for the TIP Directorate, including funds for SBIR/STTR, reinforcing this administration's commitment to supporting NSF in accelerating technological advancements and promoting industry partnerships. Funding will target critical and emerging technologies with the potential to yield tangible benefits for the American people. In line with administration priorities, emphasis will be placed on fostering partnerships that drive innovation, support domestic manufacturing, and enhance the Nation's competitive edge.
- **Strategic Industry Focus:** The FY 2026 Budget directs research investments toward sectors vital to U.S. economic and national security, including microelectronics and semiconductors, biotechnology, and advanced manufacturing. This aims to build the foundational science necessary to secure supply chains, bolster domestic production capacities, and enhance industrial competitiveness. In FY 2026, NSF will advance administration initiatives to guarantee that federal investments foster innovation, generate high-quality jobs, and strengthen America's industrial leadership in key technological domains.

**DIRECTORATE FOR BIOLOGICAL SCIENCES (BIO)****BIO Funding**

(Dollars in Millions)

	FY 2024		FY 2026 Request	Change over	
	Current Plan	FY 2025 (TBD)		FY 2024 Current Plan Amount	Percent
<b>Total</b>	<b>\$789.59</b>		<b>\$224.89</b>	<b>-\$564.70</b>	<b>-71.5%</b>
Research	613.59		167.61	-445.98	-72.7%
Education	34.60		2.43	-32.17	-93.0%
Infrastructure	141.40		54.85	-86.55	-61.2%

BIO supports fundamental research, human capital, and physical and cyber infrastructure that enhance our understanding of living systems at all scales. The knowledge gained helps to advance the U.S. bioeconomy and drives technology and innovation in agriculture, health and medicine, materials, and energy. In FY 2026, as part of this mission-driven strategy to fully support the Administration's priorities, BIO will focus on expanding existing investments in prioritized industry investments, including biotechnology, artificial intelligence, and quantum information science.

In FY 2026, BIO will prioritize:

- Advancing innovative biotechnology research to increase our ability to use, harness, modify, and/or strengthen living systems and how they have adapted to a myriad of needs, environments, and changes. Novel biotechnologies that use life to improve life will stimulate the U.S. economy and help develop innovative solutions in health care, agriculture, manufacturing, and energy. Investments will include those in the research, data, and infrastructure necessary to facilitate these advances.
- Enhancing support for research at the intersection of biology and artificial intelligence (AI). This support will include investments in tools and experiments necessary to generate and maintain the data required for use in AI approaches, applications of existing and innovative AI methods and tools to address biological questions, and the validation of outputs.
- Investing in educating and tooling the biotechnology workforce of tomorrow, which is estimated to include 1 million new jobs by 2030. BIO will invest in training for these interdisciplinary jobs in fundamental biology, data science and artificial intelligence, bioengineering and biomanufacturing, and other related fields.

**DIRECTORATE FOR COMPUTER AND INFORMATION SCIENCE AND ENGINEERING (CISE)**

<b>CISE Funding</b> (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$989.35</b>		<b>\$346.27</b>	<b>-\$643.08</b>	<b>-65.0%</b>
Research	697.70		236.77	-460.93	-66.1%
Education	57.50		13.31	-44.19	-76.9%
Infrastructure	234.15		96.19	-137.96	-58.9%

Essentially all practical applications of today's Information Technology are based on ideas and concepts that emerged from investments in fundamental computing and information research, many of them funded by CISE<sup>1</sup> over the last four decades. CISE investments have three intertwined components: foundational and use-inspired research, cyberinfrastructure that supports and enables this research, and education and training for the cyber workforce of the future. CISE supports research across subfields in the AI and computing ecosystem, including novel algorithms, hardware and systems, programming and software engineering paradigms, cybersecurity, advanced wired and wireless networking, robotics, and quantum and bioinspired computing approaches. CISE investments also include advanced cyberinfrastructure within computing and across science and engineering, and novel educational approaches that stay ahead of fast-moving and disruptive technologies, like AI and quantum, to effectively train students and workers for the jobs of the future.

In FY 2026 CISE will support research on critical technologies to fuel economic growth, unleash American prosperity, and bolster national security. CISE will:

- Advance AI through support for foundational and use-inspired research, education, and infrastructure in strong alignment with the priority areas identified in the *Request for Information on the Development of a 2025 National Artificial Intelligence (AI) Research and Development (R&D) Strategic Plan*<sup>2</sup> and the White House Executive Order on *Advancing Artificial Intelligence Education for American Youth*.<sup>3</sup> Key investments will include the National AI Research Institutes and the National AI Research Resource.
- Support research and education that advance the foundations of quantum information science and technology, including through novel approaches for building the quantum computing stack as well as hybrid approaches that combine quantum and classical computing, and high-performance post-quantum cryptographic algorithms and implementations that are secure against attacks from both classical and quantum computers.
- Support other areas critical to U.S. technological leadership, such as advanced wireless communications technologies, advanced manufacturing, semiconductors and microelectronics, biotechnology, and cybersecurity.

<sup>1</sup> [www.nap.edu/catalog/25961/information-technology-innovation-resurgence-confluence-and-continuing-impact](http://www.nap.edu/catalog/25961/information-technology-innovation-resurgence-confluence-and-continuing-impact)

<sup>2</sup> [www.federalregister.gov/documents/2025/04/29/2025-07332/request-for-information-on-the-development-of-a-2025-national-artificial-intelligence-ai-research](https://www.federalregister.gov/documents/2025/04/29/2025-07332/request-for-information-on-the-development-of-a-2025-national-artificial-intelligence-ai-research)

<sup>3</sup> [www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth](https://www.whitehouse.gov/presidential-actions/2025/04/advancing-artificial-intelligence-education-for-american-youth)



**DIRECTORATE FOR STEM EDUCATION (EDU)**

<b>EDU Funding</b> (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$1,172.00</b>		<b>\$288.43</b>	<b>-\$883.57</b>	<b>-75.4%</b>
Research	512.10		110.32	-401.78	-78.5%
Education	659.90		178.11	-481.79	-73.0%

EDU's work closely aligns with the Administration's priorities of building a workforce for the needs of industries today and in the future, in order to strengthen the economy and maintain global competitiveness in emerging technologies. Both STEM education and STEM education research play a central role in advancing excellence in U.S. STEM education at all levels and in all settings, supporting preK-12 students and teachers, reskilling/upskilling of adult learners, learning at institutions of higher education, and STEM learning for the American public. This support encourages the development of a well-prepared workforce and a well-informed citizenry.

In FY 2026, EDU will continue to support the translation of research findings into practical STEM education applications through investments in STEM education R&D, which supports critical technologies that fuel economic growth and bolster national security, including:

Artificial Intelligence (AI)

EDU supports fellowships, scholarships, research, and workforce development opportunities across all learning settings in two AI fields: 1) AI in Education, which uses AI to enhance teaching and learning, and 2) AI Education, which prepares the workforce for the AI-driven economy. EDU funds research and development of AI-enabled pedagogy and tools that support personalized learning, teacher effectiveness, and student engagement, as well as curriculum innovations and research experiences that integrate AI with domain knowledge in cybersecurity, energy, and manufacturing. EDU supports the April 2025 E.O. on Advancing Artificial Intelligence Education for American Youth.

Quantum Information Science and Engineering (QISE)

EDU supports efforts to promote awareness, understanding, and development of skilled professionals in QISE. By its very nature, QISE requires innovations and collaborations across multiple STEM fields. These investments contribute to the Nation's understanding of the potential benefits of QISE research and shape the development of a cadre of preK-12 educators who will provide instruction in QISE and related topics in ways that will have a positive impact on students' STEM interests and career choices.

Biotechnology and Nuclear Sciences

EDU's investments in STEM education at all levels better prepare students to enter careers in biotechnology or nuclear fields, working to expand and grow the workforce to support the nation's leadership in the biotechnology and nuclear industries and strengthen U.S. national security and global competitiveness. For example, EDU funding helps to prepare graduate students to conduct research in convergent areas and acquire skills that allow them to succeed in school and in the workforce.

**H-1B NONIMMIGRANT PETITIONER FEES**

In FY 2026, H-1B Nonimmigrant Petitioner Fees are projected to be \$150.46 million.

**H-1B Nonimmigrant Petitioner Fees Funding**

(Dollars in Millions)

	FY 2024		Change over	
	Current Plan	FY 2025 (TBD)	FY 2024 Request	FY 2024 Current Plan Amount Percent
H-1B Nonimmigrant Petitioner Fees Funding	\$138.93		\$150.46	\$11.53 8.3%

Beginning in FY 1999, Title IV of the American Competitiveness and Workforce Improvement Act (ACWIA) of 1998 (P.L. 105-277) established an H-1B Nonimmigrant Petitioner Account in the general fund of the U.S. Treasury for fees collected for each petition for alien nonimmigrant status. The Congressional statute requires that a prescribed percentage of funds in the account be made available to NSF for scholarships to low-income STEM students; grants for mathematics, engineering, or science enrichment courses; and systemic reform activities. In FY 2005, Public Law 108-447 reauthorized H-1B funding. NSF was provided with 40 percent of the total H-1B receipts collected. Thirty percent of H-1B receipts (75 percent of the receipts that NSF receives) are to be used for a low-income scholarship program, NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM). Ten percent of receipts (25 percent of the receipts that NSF receives) are designated for support of private-public partnerships in K-12 education through Innovative Technology Experiences for Students and Teachers (ITEST). NSF will work to ensure that these programs are in alignment with Administration policies and executive actions.

**H-1B Financial Activities from FY 2015 - FY 2024**

(Dollars in Millions)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Receipts</b>	<b>\$143.00</b>	<b>\$138.80</b>	<b>\$141.07</b>	<b>\$155.99</b>	<b>\$156.72</b>	<b>\$153.03</b>	<b>\$213.50</b>	<b>\$189.94</b>	<b>\$134.94</b>	<b>\$158.87</b>
Annual receipts due to NSF							\$153.50			
DOL 2020 temporary rescission to NSF							\$60.00			
<b>Unobligated Balance start of year</b>	<b>\$111.39</b>	<b>\$116.02</b>	<b>\$74.63</b>	<b>\$96.86</b>	<b>\$64.68</b>	<b>\$77.47</b>	<b>\$124.67</b>	<b>\$141.77</b>	<b>\$51.14</b>	<b>\$80.04</b>
<b>Appropriation Previously unavailable (Sequestered)</b>	<b>\$9.54</b>	<b>\$7.30</b>	<b>\$6.80</b>	<b>\$9.73</b>	<b>\$10.30</b>	<b>\$9.72</b>	<b>\$9.03</b>	<b>\$8.75</b>	<b>\$10.83</b>	<b>\$7.69</b>
<b>Appropriation Currently unavailable (Sequestered)</b>	<b>-\$7.30</b>	<b>-\$6.80</b>	<b>-\$9.73</b>	<b>-\$10.30</b>	<b>-\$9.72</b>	<b>-\$9.03</b>	<b>-\$8.75</b>	<b>-\$10.83</b>	<b>-\$7.69</b>	<b>-\$9.06</b>
<b>Rescission</b>							<b>-\$60.00</b>			
Obligations incurred:										
Scholarships in Science, Technology, Engineering, and Mathematics	109.34	140.54	84.38	156.40	114.76	79.91	94.70	243.69	83.99	75.67
Private-Public Partnership in K-12 <sup>1</sup>	29.83	44.35	35.11	35.86	34.24	34.87	51.81	34.79	31.98	29.65
<b>Total Obligations</b>	<b>\$139.17</b>	<b>\$184.89</b>	<b>\$119.49</b>	<b>\$192.26</b>	<b>\$149.00</b>	<b>\$114.78</b>	<b>\$146.51</b>	<b>\$278.47</b>	<b>\$115.97</b>	<b>\$105.32</b>
Unallocated Recoveries	4.95	1.60	3.58	4.66	4.49	8.26	5.30	-0.01	6.79	9.32
<b>Unobligated Balance end of year</b>	<b>\$122.41</b>	<b>\$72.03</b>	<b>\$96.86</b>	<b>\$64.68</b>	<b>\$77.47</b>	<b>\$124.67</b>	<b>\$137.24</b>	<b>\$51.15</b>	<b>\$80.04</b>	<b>\$141.56</b>

<sup>1</sup> P.L. 108-447 directs that 10 percent of the H-1B Petitioner funds go toward K-12 activities involving private-public partnerships in a range of areas such as materials development, student externships, math and science teacher professional development, etc.

**DIRECTORATE FOR ENGINEERING (ENG)**

<b>ENG Funding</b>					
(Dollars in Millions)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current Plan	
	Plan	(TBD)	Request	Amount	Percent
<b>Total</b>	<b>\$740.80</b>		<b>\$185.20</b>	<b>-\$555.60</b>	<b>-75.0%</b>
Research	699.17		179.05	-520.12	-74.4%
Education	17.30		4.10	-13.20	-76.3%
Infrastructure	24.33		2.05	-22.28	-91.6%

The Directorate for Engineering (ENG) supports investments that spur breakthroughs to help ensure future U.S. prosperity, resilience, security, health, and technological leadership. ENG will invest in groundbreaking fundamental engineering research that advances key Administration and NSF research priorities. Strategic ENG support will strengthen the engineering workforce and accelerate the development of technological innovations to increase U.S. global competitiveness.

In FY 2026, ENG will invest in research and education that advance national priority areas:

- **Artificial intelligence (AI):** Fundamental engineering AI research; chip, computing, and sensor technologies that enable AI; and safe and secure AI-enabled systems for healthcare, independent aging, manufacturing, robotics, transportation, civil infrastructure, and more.
- **Quantum information science and engineering:** Design and manufacturing of devices, networks, and systems for quantum computing, encryption, sensing, and communication that empower U.S. security and global leadership.
- **Energy and other key technology areas:** Advanced manufacturing, advanced wireless, biotechnology, energy grid resilience, and microelectronics and semiconductors research to increase U.S. prosperity, security, and economic growth.
- **Student and early-career faculty development:** Hands-on research experiences for students and support for new faculty to grow a competitive future engineering workforce across the U.S.

**DIRECTORATE FOR GEOSCIENCES (GEO)**

<b>GEO Funding<sup>1</sup></b> (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$1,017.32</b>		<b>\$376.35</b>	<b>-\$640.97</b>	<b>-63.0%</b>
Research	503.32		125.10	-378.22	-75.1%
Education	40.42		3.68	-36.74	-90.9%
Infrastructure	473.58		247.57	-226.01	-47.7%

<sup>1</sup> Not included in this display is funding for the Office of Polar Programs (OPP), a division within the Geosciences Directorate. Due to the nature of the activities funded by OPP, this division is provided a separate writeup in NSF's Congressional Budget Submission.

GEO invests in critical scientific research and infrastructure that drives discovery, enables technological innovation, and advances our understanding of the global environment. GEO studies the complex geologic, marine, atmospheric, and hydrologic processes that sustain life and support a thriving society. GEO supports vital research on understanding and predicting natural hazards such as earthquakes, hurricanes, volcanic eruptions, and solar storms. Such knowledge improves preparedness, decision-making, and mitigation strategies. These investments are essential to our national security as they help save lives, protect property, and support economic growth.

In FY 2026, GEO will support the following priority investments:

- **Artificial Intelligence:** GEO will prioritize AI investments to advance the development and adoption of innovative methods to increase scientific understanding of the Earth Systems.
- **Innovating the Future:** GEO will support innovative research that advances the Nation's energy strategy and propels the bioeconomy and technology sectors into the future. GEO investments will help restore American dominance in critical minerals through research, new technology, and AI methods to improve mineral exploration as well as mining and processing efficiency and productivity. GEO will also support biotechnology research to spur innovation and advances in the marine and earth sciences.
- **National Security Strategies:** GEO will help to strengthen national security through critical mineral research and continued investment in the prediction of natural hazards, which safeguards stability, supports defense operations, and enables resilient strategies for a secure future. Research in natural hazards such as wildfires, earthquakes, and windstorms will improve the Nation's ability to respond to such occurrences, build our knowledge and understanding of disasters, including their interplay with the natural environment and built infrastructure. This work will inform the development of new technologies and systems to mitigate risks and manage the impacts of such disasters.

**GEOSCIENCES: OFFICE OF POLAR PROGRAMS (OPP)****OPP Funding<sup>1</sup>**  
(Dollars in Millions)

	FY 2024	FY 2025 (TBD)	FY 2026 Request	Change over	
	Current Plan			FY 2024 Current Amount	Current Plan Percent
<b>Total</b>	<b>\$559.76</b>		<b>\$497.22</b>	<b>-\$62.54</b>	<b>-11.2%</b>
Research	86.00		25.00	-61.00	-70.9%
Education	3.92		-	-3.92	-100.0%
Infrastructure	469.84		472.22	2.38	0.5%
U.S. Antarctic Logistical Support (USALS) (054 Functional Classification)	109.31		109.31	-	-

<sup>1</sup> The Office of Polar Programs (OPP) is a division within the Geosciences Directorate. Due to the nature of the activities funded by OPP, this division is provided a separate writeup in NSF's Congressional Budget Submission.

OPP is the primary U.S. supporter of fundamental research in the polar regions. In the Arctic, NSF facilitates coordination of research planning as directed by the Arctic Research Policy Act of 1984, and the NSF Director chairs the Interagency Arctic Research Policy Committee (IARPC) created for this purpose. In the Antarctic, per Presidential Memorandum 6646, NSF manages all U.S. activities as a single, integrated program, making Antarctic research possible for scientists supported by NSF and other U.S. agencies. NSF's U.S. Antarctic Program (USAP) research activity also supports leadership by the U.S. Department of State in the governance of the continent and Southern Ocean under the aegis of the Antarctic Treaty System.

OPP's FY 2026 Request provides research support and logistics, including infrastructure, such as permanent stations and temporary field camps in the Antarctic and the Arctic. FY 2026 priorities include:

- **Antarctic Infrastructure:** Maintaining an active operational presence at three permanent year-round stations and field stations in Antarctica. These activities include critical infrastructure investments to ensure a continued world-leading presence on the continent through the Antarctic Infrastructure Recapitalization (AIR) program (discussed in more detail within the MREFC account narrative).
- **Arctic Infrastructure:** Operating research stations, vessels, and other infrastructure in Greenland, Alaska, and the Arctic Ocean. This includes continued development of modernization and recapitalization at Summit Station in Greenland as well as coordination with other government agencies and international partners to enhance U.S. presence in the Arctic.
- **Polar Research:** Targeting scientific research investments to activities that address National priorities in the polar regions.

**DIRECTORATE FOR MATHEMATICAL AND PHYSICAL SCIENCES (MPS)**

<b>MPS Funding</b>					
(Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$1,554.21</b>		<b>\$515.28</b>	<b>-\$1,038.93</b>	<b>-66.8%</b>
Research	1,102.77		273.38	-829.39	-75.2%
Education	35.77		-	-35.77	-100.0%
Infrastructure	415.67		241.90	-173.77	-41.8%

Through investments in individual investigator awards, centers/institutes, and mid-scale and major facilities, MPS supports fundamental research in astronomy, chemistry, materials, mathematics, and physics that advances scientific knowledge and enhances our Nation's economic growth, security, and quality of life. MPS also empowers the scientific workforce of the future through training, mentorship, and research support across U.S. institutions and communities.

In FY 2026, MPS will continue to align its funding with NSF and Administration priorities, highlighted but not limited to the following three areas:

- Strengthening investments under the theme of AI for Sciences and the Science of AI. MPS will support the National AI Institutes, the development of science-driven AI technologies, and investigate their theoretical underpinning in collaboration with other federal agencies and private foundations.
- Sustaining investments in Quantum Information Science and Technology through supporting the Quantum Leap Challenge Institutes, National Quantum Virtual Laboratory, research centers, and transdisciplinary research in quantum computing, quantum materials, quantum networking, quantum sensing, and quantum simulations. MPS will strategically invest in this research through collaborations with other federal agencies, industry, and private foundations.
- Continuing investments towards research on the chemical, mathematical, and physical foundations of biotechnology and their applications, in collaboration with other federal agencies, industry, and private foundations.

**DIRECTORATE FOR SOCIAL, BEHAVIORAL, AND ECONOMIC SCIENCES (SBE), including the  
NATIONAL CENTER FOR SCIENCE AND ENGINEERING STATISTICS (NCSES)**

<b>SBE Funding</b> (Dollars in Millions)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current Plan	
	Plan	(TBD)	Request	Amount	Percent
<b>Total</b>	<b>\$290.29</b>		<b>\$94.00</b>	<b>-\$196.29</b>	<b>-67.6%</b>
<i>SBE Programs</i>	216.22		50.00	-166.22	-76.9%
<i>NCSES</i>	74.07		44.00	-30.07	-40.6%
Research	193.77		41.11	-152.66	-78.8%
Education	7.00		2.89	-4.11	-58.7%
Infrastructure	89.52		50.00	-39.52	-44.1%

SBE supports fundamental research on people and society, including the study of human behavior, systems, and dynamics. SBE research advances Administration priorities by funding discoveries that fuel American productivity, empower America's industries, advance American entrepreneurialism, strengthen American safety, and reinforce America's global advantage. SBE researchers examine fundamental questions about the dynamic abilities of humans and human systems; human interactions with physical and built environments; the creation of jobs and industries; impacts of critical and emerging technologies such as artificial intelligence (AI) and biotechnologies; national security; and finding new ways to improve quality of life for Americans. SBE research empowers America's private, philanthropic, and public sectors to grow the economy; secure the homeland; enhance the health and safety of American families; strengthen decision making; and increase the competitiveness of farms, factories, and offices across the Nation.

In FY 2026 SBE will:

- Support the sciences of AI, biotechnology, advanced manufacturing, and other critical and emerging industries. SBE-funded foundational research enables discoveries that inform and improve critical and emerging industries and technologies. SBE-funded researchers also measure the impacts of these on individuals, communities, and the workforce.
- Contribute to the science of national security, secure borders, and public safety. SBE-supported awards enable decision-makers to better understand and anticipate matters of security and safety, excellence and readiness of our military, and disaster response.
- Fund the sciences of economic prosperity and innovation. SBE-supported researchers contribute to our fundamental knowledge of economics and prosperity; of the human aspects of energy, technology, health, and other infrastructures; spectrum sciences; and the future of digital assets; among other topics.
- Enable and support the science of a 21st-Century American education. SBE sciences inform how students of all levels can enjoy better educational outcomes and emerge from their education prepared for modern demands of the 21<sup>st</sup> century workforce and jobs in critical and emerging industries.
- Contribute to the Nation's understanding of efficiency and oversight, freedoms and liberty, and other priorities of the Administration as indicated through the Administration's Presidential Actions.

## **National Center for Science and Engineering Statistics (NCSES)**

SBE is home to the National Center for Science and Engineering Statistics (NCSES) at NSF. NCSES is one of the Office of Management and Budget's 16 recognized statistical agencies and units in the Federal statistical system and has the statutory mandate to collect, acquire, analyze, report, and disseminate objective, policy-relevant information regarding the science and engineering enterprise in a global context. NCSES provides policymakers, researchers, and the public with high-quality data and analysis on research and development (R&D), innovation, the education of scientists and engineers, and the science and engineering workforce. NCSES supports research on statistical methodology and data quality improvement efforts, the education and training of researchers, and information compilation and dissemination to meet statistical and analytical needs. NCSES also plays a critical role in government-wide shared services for evidence building.

The FY 2026 request for SBE funds NCSES at \$44.0 million and supports the following activities:

- Data collection and analytic activities, which provide key evidence used widely in policy discussions and evidence-based decision making. The request will support nationally representative surveys: on U.S. investment in R&D and innovation from the private and public sectors; and surveys on the education and career pathways of scientists and engineers. The request will also fund rescoped information available for the science and engineering workforce that will ensure continued measurement of the nation's scientific talent and the businesses that support it.
- Investments to modernize surveys by assessing the feasibility of leveraging administrative data sources, data linkage opportunities, survey integration efforts, and new approaches to reduce costs and respondent burden while maintaining high-quality and objective data.
- Continued efforts to measure Administration priority topics, including the use and impact of critical and emerging technologies.
- Analysis and dissemination of data on scientific progress and technological innovation, including the statutorily mandated reports: Indicators of the State of Science and Engineering in the U.S. and Statistical Information on Individuals in Science and Engineering.
- Implementation of a data tool to improve access to and timeliness of statistical information for the National Science Board.
- Internationally comparable data to assess U.S. science and technology global competitiveness.
- Maintenance of IT infrastructure needs and security requirements including the NCSES data tools, website publication infrastructure, and other dissemination tools for continued data accessibility and stakeholder engagement.
- Continued leadership of government-wide evidence-building activities such as management of the Standard Application Process portal for applying to access restricted-use data from all OMB-recognized statistical agencies and units, including expansion of this portal in features, usability, agency participation, and datasets.
- The National Secure Data Service demonstration project and related statistical system-wide efforts with an emphasis on using AI techniques to create efficiencies and reduce administrative barriers in data discovery, acquisition, and use; testing of a secure computing space to promote innovative research and development; and establishing a comprehensive data concierge service to streamline data discovery and access for evidence building.



**DIRECTORATE FOR TECHNOLOGY, INNOVATION AND PARTNERSHIPS (TIP)**

<b>TIP Funding</b> (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$617.90</b>		<b>\$350.00</b>	<b>-\$267.90</b>	<b>-43.4%</b>
Research	593.78		345.88	-247.90	-41.7%
Education	24.12		4.12	-20.00	-82.9%
Infrastructure	-		-	-	N/A

TIP is ushering in the golden age of American innovation by accelerating research and development through strategic investments in key technologies like artificial intelligence (AI), quantum information science and technology (QIST), and biotechnology. TIP is well-positioned to advance American technological supremacy, national security, and community flourishing with investments that support the nation's top innovators and entrepreneurs, fuel the advancement of critical and emerging technologies, and prepare all Americans for tomorrow's jobs. TIP is pursuing new, data-driven funding mechanisms that stage technology investments to out-compete foreign adversaries, incentivize new performers across the nation to engage in science and technology development, reduce the time from idea generation to funding, and leverage partnerships with other federal agencies, industry, and philanthropy to tap into new capital and talent pools – thereby transforming the composition, capacity, and pace of the American innovation enterprise. TIP is unlocking technological innovation from frontier research with focused investments that integrate public funding with significant private investment or revenue streams to translate technologies to market faster, closing the so-called “valley of death.”

In FY 2026, TIP will:

- Continue to speed the advancement of key technologies in partnership with the private sector, particularly in AI, QIST, and biotechnology. For example, TIP will accelerate the development of AI test beds enabling researchers to prototype new AI capabilities in secure, real-world environments; establish programmable cloud labs that will transform entire fields of science through automation; advance protein design and cell-free systems for radically new bioengineering applications; support the National Quantum Virtual Laboratory to enable experimentation in next-generation QIST; and form Translation Accelerators to accelerate the movement of ideas from lab to market. TIP will also continue proven initiatives, such as the Small Business Innovation Research program, which has seen a \$1.60 billion investment in startups over the last decade yield more than \$32.0 billion in follow-on capital.
- Further economic growth nationwide through the NSF Regional Innovation Engines (NSF Engines) program. In just the last year, an initial investment of \$150.0 million in 10 NSF Engines has yielded more than \$1.0 billion in matching commitments from private industry, nonprofits, and state and local governments.
- Grow the workforce through continued investment in upskilling and reskilling for all Americans, including with private sector and philanthropic co-investment and input.

**OFFICE OF THE CHIEF OF RESEARCH SECURITY STRATEGY AND POLICY (CRSP)**

<b>CRSP<sup>1</sup> Funding</b> (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$13.50</b>		<b>\$10.00</b>	<b>-\$3.50</b>	<b>-25.9%</b>
Research	13.50		10.00	-3.50	-25.9%
Education	-		-	-	N/A
Infrastructure	-		-	-	N/A

<sup>1</sup> Office of the Chief of Research Security Strategy and Policy acronym changed from “OCRSSP” to “CRSP” in FY 2025.

CRSP leads NSF's efforts to safeguard the research enterprise by developing policies and practices that balance the security of federally funded research with initiatives that maintain an open and collaborative international research environment. In addition to leading internal strategy for the agency, CRSP collaborates with federal partners and the White House to coordinate efforts aimed at improving research security and integrity at the federal level. CRSP also engages with international partners to ensure current and future international collaborations continue to uphold core values such as transparency and accountability.

In FY 2026, CRSP will:

- Continue to support the SECURE (Safeguarding the Entire Community of the U.S. Research Ecosystem) Program to address foreign threats to the security and integrity of the U.S. research enterprise, as required by Section 10338 of the CHIPS and Science Act. The SECURE Center, run by a non-government entity through a cooperative agreement, will empower the research community to meet research security requirements by providing information, tools, and other services. The SECURE-Analytics award supports the analytics needs of the broader research community and works in close coordination with the SECURE-Center.
- Support the Research on Research Security (RoRS) Program, which will advance the understanding of the full scope, potential, challenges, and nature of the research on research security field through scholarly evidence.

**OFFICE OF INTERNATIONAL SCIENCE AND ENGINEERING (OISE)**

<b>OISE Funding</b>					
(Dollars in Millions)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current Plan	
	Plan	(TBD)	Request	Amount	Percent
<b>Total</b>	<b>\$63.70</b>		<b>\$12.74</b>	<b>-\$50.96</b>	<b>-80.0%</b>
Research	51.60		12.71	-38.89	-75.4%
Education	12.00		-	-12.00	-100.0%
Infrastructure	0.10		0.03	-0.07	-70.0%

OISE is the focal point for NSF's international science and engineering activities and promotes an integrated Foundation-wide international engagement strategy. The Office manages and coordinates catalytic internationally focused programs and advances international activities that offer opportunities for U.S. researchers through active engagement and outreach with international counterparts.

In FY 2026, OISE will invest in research related to critical and emerging technologies that align with Administration priorities through the Global Centers (GC) program and bilateral partnerships, notably in the areas of Artificial Intelligence (AI), Quantum Information Science (QIS), biotechnology, and translational research.

Within the framework of OISE's FY 2026 Request, the Office will continue contributing to strengthening the U.S. science and engineering enterprise, advancing innovation in emerging technologies, and furthering U.S. leadership in the global research, innovation, and technology ecosystem. OISE will also continue the development of a technology-savvy U.S. workforce for U.S. economic prosperity and promotion of U.S. technological leadership.

**INTEGRATIVE ACTIVITIES (IA)**

<b>IA Funding</b> (Dollars in Millions)					
	FY 2024 Current Plan	FY 2025 (TBD)	FY 2026 Request	Change over FY 2024 Current Plan	
				Amount	Percent
<b>Total</b>	<b>\$430.02</b>		<b>\$177.73</b>	<b>-\$252.29</b>	<b>-58.7%</b>
EPSCoR	250.00		107.70	-142.30	-56.9%
Compliance in Research	3.00		2.34	-0.66	-22.0%
Evaluation & Assessment Capability	6.40		-	-6.40	-100.0%
Facility Operations Transition	[12.00]		-	N/A	N/A
Growing Convergence Research	15.77		-	-15.77	-100.0%
GRANTED	34.50		-	-34.50	-100.0%
HBCU Excellence in Research	25.00		20.00	-5.00	-20.0%
Major Research Instrumentation	31.17		20.00	-11.17	-35.8%
Mid-scale Research Infrastructure	40.05		-	-40.05	-100.0%
Modeling and Forecasting	3.46		-	-3.46	-100.0%
Planning & Policy Support	5.96		-	-5.96	-100.0%
Research Investment Communications	8.77		-	-8.77	-100.0%
STC Admin	0.59		-	-0.59	-100.0%
Science & Technology Policy Institute	5.35		2.30	-3.05	-57.0%
Strategic Initiatives Resources	[30.00]		25.39	-4.61	-15.4%

IA invests in activities that support transformative advances in science and technology by incubating new ideas and communities, supporting innovation in research and in NSF's own processes, and promoting the integration of research, training, and partnerships. They enhance the competitiveness of the Nation's research through activities that build capacity and competitiveness for science and engineering (S&E), especially along organizational and geographic axes.

IA provides funding for innovative programs designed to enhance the ability of jurisdictions and institutions to conduct globally competitive research. In FY 2026, IA's programs will include Established Program to Stimulate Competitive Research (EPSCoR), Historically Black Colleges and Universities - Excellence in Research (HBCU-EiR), and Major Research Instrumentation (MRI).

In FY 2026, IA investments may support Administration priorities across the following activities, including:

- Established Program to Stimulate Competitive Research (EPSCoR):
  - EPSCoR investments uses three strategic investment tools to contribute to NSF in its statutory function "to strengthen research and education in the sciences and engineering, including independent research by individuals, throughout the United States, and to avoid undue concentration of such research and education." EPSCoR investment tools are Research Infrastructure Improvement (RII) awards, Co-Funding, and Outreach/Workshops.
  - At the FY 2026 Request level, EPSCoR funding will support EPSCoR's active RII awards made in prior years, which will build and strengthen research capacity in Administration and jurisdictional science and technology priorities.
- Compliance in Research: In FY 2026, NSF will continue to support its ability to maximize program delivery, to include strategic planning and implementation, training, stakeholder engagement,

complaint processing, partnership engagement, proactive compliance and recruitment and outreach activities. These activities respond to the need to ensure compliance and address Sexual Assault/Harassment Prevention & Response (SAHPR) related concerns and requirements. These efforts support the requirements to address sexual harassment as outlined in Section 10536 of the CHIPS and Science Act.

- **Historically Black Colleges and Universities – Excellence in Research (HBCU-EiR):** The HBCU-EiR program focuses on improving the research capacity and competitiveness of HBCUs by supporting new research opportunities at these institutions. In FY 2026, investments in HBCU-EiR will fund up to 40 HBCU-EiR research grants managed by NSF research and education directorates. NSF will provide supplemental support to HBCU-EiR research activities involving postdoctoral researchers, graduate and undergraduate students.
- **Major Research Instrumentation (MRI):** MRI invests in shared-use S&E research instrumentation. Such instrumentation is vital for progress in many fields; for example, cyberinfrastructure is important for AI research and research training, analysis and fabrication tools are necessary for quantum, microelectronics, and other nanotechnology-based research, and a range of types of sophisticated instruments are needed for research in to advance the bioeconomy. Approximately 30-40 new awards will support instrument and equipment acquisition and development across NSF's S&E domains.
- **Science and Technology Policy Institute (STPI):** STPI is a Federally Funded Research and Development Center sponsored by NSF on behalf of the White House Office of Science and Technology Policy (OSTP). STPI provides analysis of significant domestic and international science and technology policies and developments for OSTP and other federal agencies.
- **Strategic Initiatives Resources:** Through the Strategic Initiatives Resources, NSF will support activities responding to national priorities that may not align with a specific disciplinary focus or project scope.

**EPSCoR Funding**  
(Dollars in Millions)

	FY 2024		FY 2026 Request	Change over	
	Current Plan	FY 2025 (TBD)		FY 2024 Current Amount	Plan Percent
<b>Total, EPSCoR</b>	<b>\$268.24</b>		<b>\$107.70</b>	<b>-\$160.54</b>	<b>-59.8%</b>
Research Infrastructure Improvement	201.22		107.70	-93.52	-46.5%
Co-funding	66.64		-	-66.64	-100.0%
Outreach and Workshops	0.38		-	-0.38	-100.0%

**UNITED STATES ARCTIC RESEARCH COMMISSION (USARC)****USARC Funding**

(Dollars in Millions)

FY 2024		Change over		
Current	FY 2025	FY 2026	FY 2024	Current Plan
Plan	(TBD)	Request	Amount	Percent
<b>\$1.75</b>		<b>\$1.15</b>	<b>-\$0.60</b>	<b>-34.3%</b>

USARC was created by the Arctic Research and Policy Act of 1984, (as amended, P. L. 101-609), to establish the national policy, priorities, and goals necessary to construct a federal program plan for basic and applied Arctic scientific research. USARC advises the Interagency Arctic Research Policy Committee in developing national Arctic research projects and a five-year plan to implement those projects. USARC also supports interaction with Arctic residents, international Arctic research programs and organizations, and local institutions, including regional and local governments, to obtain the broadest possible view of Arctic research needs. USARC is an independent federal agency, funded through NSF's appropriation, specifically as an activity in the R&RA account.

The FY 2026 Request for USARC is \$1.15 million and will help to advance Arctic research and to recommend Arctic research policy that is consistent with the Administration's priorities.

The FY 2026 Request will fund offices in Virginia and Alaska that support eight presidentially appointed commissioners, and two full-time equivalent (FTE) staff tasked with duties defined in the Arctic Research and Policy Act (ARPA) of 1984, as amended.

**US Arctic Research Commission****Personnel Compensation and Benefits and General Operating Expenses**

(Dollars in Thousands)

	FY 2024		Change over		
	Current	FY 2025	FY 2026	FY 2024	Current Plan
	Plan	(TBD)	Request	Amount	Percent
Personnel Compensation & Benefits	\$1,008.34		\$894.00	-\$114.34	-11.3%
Travel & Transportation of Persons	77.50		20.00	-57.50	-74.2%
Advisory & Assistance Services	386.50		66.00	-320.50	-82.9%
Rent	147.66		150.00	2.34	1.6%
Information Technology	22.00		5.00	-17.00	-77.3%
Communications, Supplies, Equipment, and Other	108.00		15.00	-93.00	-86.1%
<b>Total</b>	<b>\$1,750.00</b>		<b>\$1,150.00</b>	<b>-\$600.00</b>	<b>-34.3%</b>
Full-Time Equivalents (FTE)	3		2	-1	-33.3%

**ORGANIZATIONAL EXCELLENCE**

**For definitions of common acronyms used throughout NSF’s FY 2026 Budget Request, see the NOTES found at the beginning of the entire document on pages iii-iv.**

Organizational Excellence Portfolio ..... OrgEx - 3

**Office of Inspector General.....OIG - 1**

**Office of the National Science Board..... NSB - 1**





**ORGANIZATIONAL EXCELLENCE****\$622,910,000****Organizational Excellence Funding Summary<sup>1</sup>**

(Dollars in Millions)

FY 2024		Change over		
Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Percent
\$753.26		\$622.91	-\$130.35	-17.3%

<sup>1</sup> The above levels include estimated Administrative Cost Recoveries (ACRs) of \$5.0 million for the FY 2024 Current Plan and \$2.02 million for FY 2026 Request.

NSF's FY 2026 Request funding for the Organizational Excellence portfolio is \$622.91 million, about 16 percent of the total NSF FY 2026 Request. The Organizational Excellence portfolio underpins the agency's programmatic activities and is critical to the accomplishment of NSF's mission, "to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense..." The FY 2026 Request represents NSF's commitment to organizational excellence, illustrates the agency's needs, and reflects the agency's RIF and Reorganization Plans (ARRP) submitted to OMB. The following chapter begins with a section that presents the FY 2026 funding for the Organization Excellence portfolio by appropriation and is followed by a section presenting the same information but organized by Major Component.

**Organizational Excellence by Appropriation**

The following presentation details NSF's Organizational Excellence portfolio by appropriation, which is funded through all of NSF's appropriation accounts.

**Organizational Excellence by Appropriation**

(Dollars in Millions)

	FY 2024		Change over		
	Current Plan	FY 2025 (TBD)	FY 2026 Request	FY 2024 Current Plan Amount	Percent
Agency Operations & Award Management <sup>1</sup>	\$463.00		\$355.00	-\$108.00	-23.3%
Research and Related Activities <sup>2</sup>	251.92		243.89	-8.03	-3.2%
Office of Inspector General	24.41		18.00	-6.41	-26.3%
Office of the National Science Board	5.09		3.00	-2.09	-41.1%
Major Research Equipment and Facilities Construction	1.00		1.00	-	-
<b>Subtotal</b>	<b>\$745.42</b>		<b>\$620.89</b>	<b>-\$124.53</b>	<b>-16.7%</b>
Administrative Cost Recoveries (ACRs)	5.00		2.02	-2.98	-59.6%
FY 2023 R&RA Carryover into FY 2024	2.84		-	-2.84	-100.0%
<b>Total Organizational Excellence</b>	<b>\$753.26</b>		<b>\$622.91</b>	<b>-\$130.35</b>	<b>-17.3%</b>

<sup>1</sup> FY 2024 Current Plan includes the \$15 million transfer of FY 2023 appropriated funding from R&RA to AOAM.

<sup>2</sup> FY 2024 Current Plan restated for comparability with the FY 2026 Request to show consolidation of NSF mission support activities and reflect the consolidation of EDU directorate within R&RA.

Agency Operations and Award Management (AOAM)

The AOAM account provides the fundamental framework through which the Foundation's science and engineering research and education programs are administered. This account funds the essential services NSF needs to operate, and investments in the AOAM account continue to be an NSF priority. As such, in FY 2026, NSF proposes to shift the AOAM account from one-year to two-year budget authority to bring the availability of funds into alignment with the program funds in the R&RA account.

At the FY 2026 Request level, AOAM funding is \$355.0 million representing 57 percent of the Organizational Excellence portfolio but just nine percent of the total NSF FY 2026 Request. For information on NSF's AOAM account by object class, see the AOAM by Object Class table within this narrative.

Research and Related Activities (R&RA)

Funding from the R&RA (\$243.89 million) program account covers approximately 39 percent of the total Organizational Excellence portfolio. In FY 2026, NSF proposes to move all activities funded by the EDU account into the R&RA account and eliminate the EDU account.

This account supports Mission Support Services (MSS), formerly termed Program Related Administration (PRA). Two major components are included in the MSS investment: 1) Program Related Technology (PRT) investments and 2) Other Program Related Administration (Other PRA) investments. In FY 2026, to align with the Administration's priorities, funding that supports budget activities with an agency-wide benefit, including IT, were shifted from the AOAM account to the R&RA account under MSS.

As has been NSF's practice, PRT and Other PRA will continue to be the major components of MSS and will be managed as separate investments.

- Program Related Technology: PRT investments support NSF's programmatic activities and associated services, are mission-related IT, and include Data Management investments that support the merit review process. FY 2026 reflects the centralization of all IT funding from the AOAM account into the R&RA account under PRT within MSS, so all IT funding resides in one budget account.
- Other Program Related Administration: NSF's Other PRA investment includes funding for the following Foundation-wide activities: 1) NSF support for federal E-Government initiatives that are mission-related; 2) mission-related program administration activities that are managed by BFA; and 3) general planning and evaluation activities that support investments on broad programmatic and strategic matters of NSF-wide scope and benefit, and externally mandated Foundation-wide activities. FY 2026 reflects the centralization of budget activities with an agency-wide benefit from the AOAM account to the R&RA account under Other PRA within MSS, so these activities reside in one budget account.

Office of Inspector General

FY 2026 funding for the OIG is \$18.0 million. The staffing and operations of the OIG are supported through a separate OIG appropriation. Details about the OIG FY 2026 Request can be found in the OIG narrative.

Office of the National Science Board

FY 2026 funding for the NSB is \$3.0 million. The staffing and operations of the NSB office are supported through a separate NSB appropriation. Details about the NSB FY 2026 Request can be found in the NSB narrative.

Major Research Equipment and Facilities Construction

The FY 2026 Request includes \$1.0 million within the MREFC account for oversight of NSF's major facility projects. For more information on this activity, see the MREFC narrative within the Research Infrastructure section of the NSF-Wide Investments chapter.

**AOAM by Object Class**

<b>AOAM by Object Class</b>					
(Dollars in Thousands)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current Plan	
	Plan <sup>1</sup>	(TBD)	Request	Amount	Percent
Personnel Compensation	\$242,750		\$209,242	-\$33,508	-13.8%
Personnel Benefits	83,590		70,392	-13,198	-15.8%
Travel and Transportation of Persons	6,104		7,500	1,396	22.9%
Transportation of Things	769		300	-469	-61.0%
Rental Payments to GSA	25,000		26,000	1,000	4.0%
Rental Payments to Others	875		450	-425	-48.6%
Communications, Utilities and Misc. Charges	1,100		1,500	400	36.4%
Printing and Reproduction	140		-	-140	-100.0%
Advisory and Assistance Services	54,554		20,450	-34,104	-62.5%
Other Services	27,165		10,450	-16,715	-61.5%
Purchases of Goods & Svcs from Gov't. Accts	17,000		7,864	-9,136	-53.7%
Operations and Maintenance of Equipment	3		2	-1	-33.3%
Supplies and Materials	450		400	-50	-11.1%
Equipment	3,500		450	-3,050	-87.1%
<b>Total</b>	<b>\$463,000</b>		<b>\$355,000</b>	<b>-\$108,000</b>	<b>-23.3%</b>

<sup>1</sup> Includes the \$15 million transfer of FY 2023 appropriated funding from R&RA to AOAM.

**Personnel Compensation and Benefits:** Personnel compensation funds payroll, awards/bonuses, reimbursable details to NSF, overtime, and terminal leave. Personnel Benefits include the Government's contribution towards retirement systems, health and life insurance, thrift saving plans, special overseas allowances, unemployment insurance, transit subsidies, and employee relocations.

**Travel and Transportation of Persons:** These resources fund travel required for planning, outreach, and the increased oversight of existing awards recommended by the agency's Inspector General.

**Transportation of Things:** This category consists of household moves associated with bringing new staff to NSF.

**Rental Payments to GSA:** This category includes the rent charged by GSA for NSF's facility in Alexandria, Virginia.

**Rental Payments to Others:** This category includes rent paid for the parking structure to the owner of the new headquarters building in Alexandria.

**Communications, Utilities, and Miscellaneous Charges:** This category includes all costs for telephone and other communication lines and services, both local and long distance, and postage.

**Printing and Reproduction:** This category includes contract costs of composition and printing of NSF's publications, announcements, and forms, as well as printing of stationery and specialty items.

**Advisory and Assistance Services:** This category includes development, learning, and career enhancement opportunities offered through the NSF Academy; contracts for human capital operational activities, work life initiatives, outreach, and related services; assistance in award oversight and monitoring; and support for OMB Circular A-123 reviews.

**Other Services:** This category includes warehousing and supply services, mail handling, equipment repair and maintenance, building-related costs, furniture repair, contract support for conference room services, security investigations, and miscellaneous administrative contracts.

**Purchases of Goods and Services from Government Accounts:** This category includes reimbursable services purchased from other government agencies. Examples include Department of Homeland Security/Federal Protection Agency for security guard services; General Service Administration for some electrical upgrades and modest renovation services; and Department of the Interior for payroll services.

**Operation and Maintenance of Equipment:** This category includes operation, maintenance, repair, and storage of equipment, when done by contract with the private sector or another Federal Government account.

**Supplies and Materials:** This category includes office supplies, library supplies, paper and supplies for the NSF central computer facility, and miscellaneous supplies.

**Equipment:** This category includes new and replacement computing equipment, desktop computers, data communications equipment, video-teleconferencing equipment, office furniture, filing cabinets, and support equipment such as audio-visual equipment.

### **Appropriations Language and Explanation of Carryover**

For more information on AOAM appropriations language see the Technical Information chapter.

## Organizational Excellence by Major Component

The following narrative focuses on the four main components of Organization Excellence – Human Capital, Information Technology, Administrative Support, and Travel.

### Human Capital

The Human Capital component of Organizational Excellence includes personnel compensation and benefits (PC&B) of NSF's federal employees and reflects the guidance provided in Executive Order 14210, *Implementing the President's "Department of Government Efficiency" Workforce Optimization Initiative*<sup>1</sup> and OMB's subsequent memorandum.<sup>2</sup> The FTE level reflects the ARRP submitted to OMB.

#### Personnel Compensation and Benefits (PC&B)

Personnel Compensation & Benefits					
	(Dollars in Millions)				
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024	Current Plan
	Plan	(TBD)	Request	Amount	Percent
Base Salary <sup>1</sup>	\$232.24		\$198.47	-\$33.77	-14.5%
Other Compensation <sup>2</sup>	2.80		2.27	-0.53	-18.9%
Awards	9.77		8.50	-1.27	-13.0%
<b>Subtotal, FTE Compensation</b>	<b>\$244.81</b>		<b>\$209.24</b>	<b>-\$35.57</b>	<b>-14.5%</b>
Benefits	82.21		68.94	-13.27	-16.1%
Other Benefits <sup>3</sup>	1.38		1.45	0.07	5.3%
<b>Subtotal, Benefits</b>	<b>\$83.59</b>		<b>\$70.39</b>	<b>-\$13.20</b>	<b>-15.8%</b>
<b>Total, PC&amp;B</b>	<b>\$328.40</b>		<b>\$279.63</b>	<b>-\$48.77</b>	<b>-14.9%</b>

<sup>1</sup> FY 2024 Current Plan and FY 2026 Request include student salaries.

<sup>2</sup> FY 2024 Current Plan includes reimbursable details to NSF and terminal leave.

<sup>3</sup> Includes Federal Employee's Compensation Act (FECA) funding and transit subsidies.

The FY 2026 Request for PC&B is \$279.63 million and will support 1,227 regular FTE employees, as reflected in the ARRP submitted to OMB, associated cost of benefits, general workforce performance awards (GWFP), and Senior Executive Service (SES) bonuses.

#### Management of Human Capital

NSF will provide budgetary resources in the FY 2026 Request and contractual support activities for human capital initiatives while reducing its federal workforce. These budgetary resources reflect reductions and contract cancellations in alignment with Executive Order 14210, *Implementing the President's "Department of Government Efficiency" Cost Efficiency Initiative*. NSF's FY 2026 Management of Human Capital investments support Learning and Development Programs, Operations, Strategic

<sup>1</sup> [www.federalregister.gov/documents/2025/02/14/2025-02762/implementing-the-presidents-department-of-government-efficiency-workforce-optimization-initiative](https://www.federalregister.gov/documents/2025/02/14/2025-02762/implementing-the-presidents-department-of-government-efficiency-workforce-optimization-initiative)

<sup>2</sup> [www.opm.gov/policy-data-oversight/latest-and-other-highlighted-memos/guidance-on-agency-rif-and-reorganization-plans-requested-by-implementing-the-president-s-department-of-government-efficiency-workforce-optimization-initiative.pdf](https://www.opm.gov/policy-data-oversight/latest-and-other-highlighted-memos/guidance-on-agency-rif-and-reorganization-plans-requested-by-implementing-the-president-s-department-of-government-efficiency-workforce-optimization-initiative.pdf)

Human Capital, Workplace and Work-Life, and Human Resource Systems and Shared Services.

#### Intergovernmental Personnel Act Costs

A portion of NSF's workforce consists of temporary staff hired through the Intergovernmental Personnel Act (IPA) authority. The agency uses IPA science and engineering staff to help ensure that the Foundation's funding decisions are based on the best input from the field and reflect fresh ideas and creativity. The expertise provided by these IPAs is essential to help shape the NSF research portfolio and support transformational advances across the frontiers of all fields of science, engineering, and education. In FY 2026, NSF plans to reduce the number of IPAs to better support the Administration's priorities in artificial Intelligence, biotechnology, nuclear energy, quantum science, and translational science.

#### NSF Workforce

In FY 2026, NSF plans to hold its regular FTE to 1,227 in alignment with the ARRP submitted to OMB. The OIG and NSB sections of this chapter and the U.S. Arctic Research Commission section of the R&RA chapter include a discussion of their respective workforces.

<b>NSF Workforce</b>					
Full-Time Equivalents (FTE)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024	Current Plan
	Plan	(TBD)	Request	Amount	Percent
AOAM Regular FTE	1,435		1,227	-208	-14.5%
Office of Inspector General	92		66	-26	-28.3%
Office of the National Science Board	18		13	-5	-0
Arctic Research Commission	3		2	-1	-0
<b>Total, Federal Employees (FTE)</b>	<b>1,548</b>		<b>1,308</b>	<b>-240</b>	<b>-15.5%</b>
IPAs (FTE)	300		70	-230	-76.7%
<b>Total, NSF Workforce (FTE)<sup>2</sup></b>	<b>1,848</b>		<b>1,378</b>	<b>-470</b>	<b>-25.4%</b>

<sup>1</sup> AOAM Regular FTE excludes Pathways interns.

<sup>2</sup> Total NSF Workforce excludes detailees.

## Information Technology (IT)

NSF's IT is funded at \$176.28 million in the FY 2026 Request. In FY 2026, NSF proposes to centralize all IT funding from the AOAM account into the R&RA account under Program Related Technology (PRT) within Mission Support Services (MSS), so all IT funding resides in one budget account. This was done to meet the agency's reduced AOAM funding level and is aligned with operational efficiency and to streamline oversight and reporting.

In FY 2024, NSF established the Office of the Chief Information Officer (OCIO), which has provided increased coordination of NSF's internally focused IT initiatives and will allow NSF's IT functions to work even more effectively and efficiently. In FY 2025, PRT was consolidated under MSS.

### NSF IT Portfolio Investments by Appropriation

<b>IT Investments by Appropriation</b>						
(Dollars in Millions)						
	FY 2024		FY 2026 Request	Change over		Funding Source
	Current	FY 2025		FY 2024	Current Plan	
	Plan	(TBD)		Amount	Percent	
Program Related Technology (PRT) <sup>1,2</sup>	\$165.72		\$176.28	\$10.56	6.4%	R&RA

<sup>1</sup> FY 2024 Current Plan restated for comparability with the FY 2026 Request to show all IT funding in the R&RA account.

<sup>2</sup> FY 2026 Request reflects the centralization of all IT funding from the AOAM account into the R&RA account under Program Related Technology (PRT).

IT investments support all mission-related program and administrative activities. These investments ensure delivery of high-quality, secure, and reliable IT infrastructure and services across the agency. They enable essential functions such as administrative support, pre- and post-award processes, proposal review, award management, data dissemination, and overall mission delivery.

In alignment with Administration's Priorities, NSF's IT priorities for FY 2026 reflect NSF's commitment to delivering effective and secure Federal services and digital experiences in accordance with the Foundation's mission. FY 2026 IT priorities will enable NSF to continue its shift to a resilient and secure data-centric technology base while maintaining critical cybersecurity capabilities.

In FY 2026, NSF will preserve secure, reliable information technology operations of the IT infrastructure and systems that support the business and mission operations of the agency, facilitating innovation and adoption of advanced technologies to support NSF's strategic objectives, promote the nation's economic competitiveness, and maintain national security. Advances supported by this submission include IT initiatives to: (1) Support NSF-wide priorities that accelerate technology and innovation, enabling science to advance society and solve problems through better technology and data; (2) Enable data-driven decision making to augment IT services with intelligence using predictive and prescriptive technologies; (3) Adapt IT at speed by leveraging commercial user-driven capabilities to ensure an effective and engaged workforce; and (4) Integrate artificial intelligence (AI) into NSF business processes, increasing the use of AI capabilities to support NSF business processes.

In FY 2026, NSF proposes to move all non-central ("distributed") IT investments into the R&RA account, as part of the funding centralization mentioned earlier, so all IT funding resides in one budget account.



These IT costs are included in the FY 2026 IT Portfolio summary reporting.

#### NSF IT Portfolio Investments by Category

Investments in NSF's IT Portfolio can be grouped across five main categories: Administrative Applications Services and Support; Mission-Related Applications and Services; IT Operations and Infrastructure; IT Security and Privacy; and IT Management. FY 2026 funding for the activities under these investment categories is entirely provided by the R&RA account under PRT within MSS.

#### *Administrative Applications Services and Support*

Investments in this category support mission-related administrative applications, such as the NSF website, NSF's human resources management systems, and NSF's financial management system.

#### *Mission-Related Applications and Services*

Investments in this category fund the applications and services that support the end-to-end merit review process and associated activities including solicitations, proposal submission, reviews and reviewer management, and award management.

#### *IT Operations and Infrastructure*

Investments in this category support NSF's capabilities related to network, infrastructure, computing power including data center and cloud, customer support, and database administration.

#### *IT Security and Privacy Services*

Investments in this category support the portion of NSF's IT security program which provides security and compliance oversight for NSF's administrative applications and mission support systems. In FY 2026, NSF will continue to support secure, reliable operations and monitoring and fund modern cybersecurity measures to protect agency systems and sensitive information.

#### *IT Management*

Investments in this category support the functions that support NSF IT management, including the NSF Chief Information Officer, Chief Technology Officer, Chief Information Security Officer, Chief Data Officer, Chief AI Officer, and Senior Agency Official for Privacy. In FY 2026, investments in this category will enable NSF to continue support for policy and compliance efforts associated with IT management, as well as continued implementation of the Technology Business Management (TBM) framework, as required by OMB.

#### NSF Funding for E-Government Initiatives

The table below show NSF's contributions and service fees for various E-Government and Line of Business (LoB) initiatives. These costs are not part of the IT budget discussed in this narrative but are included in the agency's IT Portfolio summary reporting and mentioned here for transparency. The FY 2026 levels are consistent with the funding amounts provided by the initiatives' respective managing partners and are all funded by the R&RA account. This is a shift from previous fiscal years in which E-rulemaking and part of Integrated Acquisition Environment (IAE) were funded out of the AOAM account, is done to meet the agency's reduced AOAM funding level and is aligned with operational efficiency and to streamline oversight and reporting.

**NSF FY 2026 Request Funding for E-Government and  
Line of Business (LoB) Initiatives**

Initiative	NSF Total	Appropriations Account
		R&RA <sup>1</sup>
Budget Formulation/Execution LoB	\$125,000	\$125,000
E-Rulemaking	24,385	24,385
Federal Audit Clearing House	115,080	115,080
Financial Management LoB	139,094	139,094
Geospatial LoB	25,000	25,000
Grants.gov	397,000	397,000
Human Resources Management LoB	68,478	68,478
Integrated Acquisition Environment (IAE)	530,417	530,417
Performance LoB	100,000	100,000
<b>Total</b>	<b>\$1,524,454</b>	<b>\$1,524,454</b>

<sup>1</sup> FY 2026 Request reflects the centralization of all funding from the AOAM account into the R&RA account under Mission Support Services (MSS).

## Administrative Support

The FY 2026 Request for Administrative Support includes Space Rental, Operating Expenses, Building and Administrative Services, and Mission Support Services.

### Space Rental

<b>Space Rental</b>					
(Dollars in Millions)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current Plan	
	Plan	(TBD)	Request	Amount	Percent
Building Rental & Taxes	\$25.61		\$25.89	\$0.28	1.1%
Utilities	1.10		1.23	0.13	12.0%
Security	5.66		4.36	-1.30	-23.0%
Parking Rental <sup>1</sup>	0.88		0.71	-0.16	-18.3%
<b>Total</b>	<b>\$33.24</b>		<b>\$32.19</b>	<b>-\$1.05</b>	<b>-3.2%</b>
<i>Net adjustments for forward funding<sup>2</sup></i>	<i>-18.61</i>				
<b>Revised Rent Total</b>	<b>\$14.63</b>		<b>\$32.19</b>	<b>\$17.56</b>	<b>120.0%</b>

<sup>1</sup> Parking Rental includes parking credits.

<sup>2</sup> Forward funding is an appropriation of budget authority that becomes available for obligation in the last quarter of the fiscal year for the financing of ongoing contracts during the next fiscal year. The budget authority for such contracts is included in the budget totals for the year in which it is appropriated. NSF is provided this budget authority within its annual Appropriation for the AOAM account.

Space Rental includes services provided by the General Services Administration (GSA) related to rent and taxes, utilities, and security provided by the Department of Homeland Security (DHS). In addition, rent paid for the parking structure to the owner of the NSF headquarters building in Alexandria, Virginia is included. In FY 2026, NSF will occupy over 700,000 square feet of space, primarily in one leased office building located in Alexandria, Virginia. The FY 2026 Request for Space Rental is \$32.19 million. Security, utilities, and parking estimates are derived from historical billing and actual contract costs.

NSF continues to take steps to improve and evaluate occupancy data of the Alexandria office building in accordance with M-2015-01, M-22-14, M-23-15, and M-25-25. These steps include monitoring utilization to ensure space efficiency and supporting the return of NSF staff to full-time in-person work.

### Operating Expenses

Operating Expenses support the agency's operational and administrative needs. These include funding for strategic investments in areas of science and security and strategic planning of evidence-building activities in support of the Agency's mission; support for a wide variety of activities focused on continuous organizational improvement; and federal FTE training and supplies.

### Building and Administrative Services

Building and Administrative Services include three broad activities: Information Dissemination; Workplace Management; and Panel Support, Meeting Management, and Proposal Services.

## *Organizational Excellence Portfolio*

### *Information Dissemination*

Investments in this category fund activities that support records management; extensive web-based and electronic information distribution tools that provide information to both NSF staff and the public; graphic design; and regulatory reporting processing and production.

### *Workplace Management*

Workplace Management provides funding for a wide range of core business activities and infrastructure support related to space management and facility operations, property management, as well as personnel security, emergency management, and information security.

### *Panel Support, Meeting Management, and Proposal Services*

This category supports NSF's merit review process by providing various services for NSF staff, panelists, members of advisory committees statutorily required and associated committees of visitors (COVs), and guests. The FY 2026 Request provides resources for these investments supporting the full estimated cost necessary to manage current services level workload requirements and maintain agency services.

### Mission Support Services: Other Program Related Administration

Historically, Other Program Related Administration (Other PRA) investments are funded via NSF's program accounts under an umbrella term called Program Related Administration (PRA). In FY 2025, Other PRA was consolidated within the R&RA account and PRA was renamed to Mission Support Services (MSS). Beginning in FY 2025, NSF established MSS as a formal Activity line within the R&RA account. In FY 2026, NSF proposes to centralize funding for all budget activities with an agency-wide benefit from the AOAM account to the R&RA account under Other PRA within MSS. This was done to meet the agency's reduced AOAM funding level and is aligned with operational efficiency and to streamline oversight and reporting.

In FY 2026, NSF's Other PRA includes funding for the following Foundation-wide activities: 1) NSF support for federal E-Government initiatives that are mission-related; 2) mission-related program administration activities that are managed by BFA; and 3) general planning and evaluation activities that are Foundation-wide, including externally mandated activities. As noted above, resources for these Other PRA activities are consolidated within the R&RA account and will be funded under the new formal R&RA activity line Mission Support Services.

## **Travel**

FY 2026 funding for NSF employee full-time equivalent (FTE) travel reflects the travel freeze that went into effect in February 2025 and activity associated with mission critical travel only. Mission critical travel includes:

- (1) Travel to or from an NSF-funded facility or location that is necessary for the protection of life or property.
- (2) Travel that is required by statute, regulation, or law, or is necessary to support Administration priorities.

## OFFICE OF INSPECTOR GENERAL (OIG)

**\$18,000,000**

The Appropriations Act that funds the U.S. National Science Foundation (NSF) contains a separate appropriation for NSF's Office of Inspector General (OIG). Accordingly, this FY 2026 Budget Request identifies the resources needed to support OIG, including amounts for personnel compensation and benefits (PC&B), contract services, training, travel, supplies, materials, and equipment.

The FY 2026 Budget Request for the Office of Inspector General is \$18 million, a decrease of \$6.41 million from the FY 2024 Appropriation of \$24.41 million.

<b>OIG Funding</b>					
(Dollars in Millions)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024	Current Plan
	Plan	(TBD)	Request	Amount	Percent
<b>Total</b>	<b>\$24.41</b>		<b>\$18.00</b>	<b>-\$6.41</b>	<b>-26.3%</b>
Full-Time Equivalents (FTEs)	92		66	-26	-28.3%

## OIG Responsibilities and Structure

OIG provides independent oversight of NSF to improve the effectiveness, efficiency, and economy of its programs and operations and to prevent and detect fraud, waste, and abuse. By statute, NSF OIG is organizationally independent from the agency, with the Inspector General (IG) reporting directly to the National Science Board and Congress. Given the geographic breadth of the projects NSF funds, OIG must be equipped to conduct audits and investigations across the continental U.S., Alaska, Hawaii, Puerto Rico, and Antarctica. To fulfill its mission OIG employs a staff of investigators, auditors, attorneys, management analysts, data analysts, and information technology (IT) specialists. OIG's FY 2025 appropriation was just 0.27 percent of NSF's nearly \$9.06 billion in funding and less than 0.06 percent of its approximately \$41.9 billion portfolio of active awards (as of 7/31/2024).

OIG's work is divided into two functional areas: the Office of Audits, Inspections, and Evaluations and the Office of Investigations. These offices are supported by the OIG's Office of Management, Office of Counsel, and Immediate Office. Highlights of the OIG's operational impact and FY 2026 strategic focus by functional area follow.

## Appropriations Language

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, \$18,000,000, of which \$1,300,000 shall remain available until September 30, 2027.

**Office of Inspector General**  
**FY 2026 Summary Statement**

(Dollars in Millions)

	Estimate/ Request	Unobligated Balance Available Start of Year	Unobligated Balance Available End of Year	Unobligated Balance Expired	Obligations Actual/ Estimates
FY 2024 Appropriation	\$24.41	\$0.40	-\$1.30	-\$0.03	\$23.48
FY 2025 Enacted	\$24.41	\$1.30	-	-	25.71
FY 2026 Request	\$18.00			-	18.00
\$ Change from FY 2024 Appropriation					-\$6.41
% Change from FY 2024 Appropriation					-26.3%

Totals exclude reimbursable amounts.

### Explanation of Carryover

Within the OIG two-year account, \$1,299,218 was carried over into FY 2025.

#### Office of Inspector General

- Amount: \$1,299,218
- Purpose: Funds are expected to be used for (1) travel expenses to Antarctica because the austral summer crosses fiscal years, to address allegations of sexual assault, stalking, other crimes related to the Special Maritime Territorial Jurisdiction, and conduct risk-based audits of Antarctic operations; and (2) to procure performance audit services. The selection of awards and institutions to be audited requires careful preparation and is subject to changing circumstances and new information that may require additional time to process.
- Obligation: Anticipated FY 2025 Quarters 1, 3 and 4.

### Audit Impact and Strategic Focus

OIG's Office of Audits, Inspections, and Evaluations (OAIE) conducts internal audits and reviews of NSF's programs and operations, as well as audits, inspections, evaluations, and other reviews of NSF's contracts, cooperative agreements, and grants to universities and other research institutions. These audits help ensure that financial, administrative, and programmatic activities are conducted economically, effectively, and in compliance with applicable regulations. OAIE also responds to congressional requests and reviews hotline complaints to build a comprehensive oversight program.

#### Areas of Risk for Potential Audit Coverage in FY 2026

Much of OIG's audit work is required, including the annual financial statement audit and the annual audit of NSF's information security program, which is required by the Federal Information Security Modernization Act of 2014 (FISMA). Additionally, in FY 2026, OIG must review NSF's FY 2025 Agency Financial Report for compliance with the Payment Integrity Information Act of 2019.

For the remainder of the oversight portfolio, OAIE uses a risk-based approach to identify the highest priority areas that would benefit from OIG oversight. At the FY 2026 Budget Request level, OAIE will be able to conduct three audits from the following high-risk areas or other areas that may emerge during the year:

*NSF's and Award Recipients' Compliance with Research Security Requirements*

NSF and award recipients must comply with numerous requirements designed to protect federally supported R&D against foreign government exploitation. For example, *National Security Presidential Memorandum 33* (NSPM-33) requires research organizations with more than \$50 million per year in total federal research funding to have a research security program; the *CHIPS and Science Act of 2022* enacted research security requirements that are applicable to both NSF and its award recipients; and NSF's *Proposal and Award Policies and Procedures Guide* (PAPPG) includes pre-award and post-award disclosure requirements in addition to guidance on conflicts of interest. OAIE plans to assess NSF's and award recipients' compliance with applicable research security requirements.

*NSF's Processes for the Re-competition and Management of the Antarctic Support Contract*

The current Antarctic Support Contract (ASC), for the United States Antarctic Program (USAP) is nearing expiration. The ASC, NSF's largest contract, has a total obligated amount of more than \$2.6 billion and a period of performance of more than 13 years. OAIE is undertaking a series of audits involving the closeout of the current ASC contract, and the competition for and management of the new contract.

*Information Technology Security and Controls*

FISMA requires federal agencies to develop systems to ensure security of electronic data, and OIG examines a selection of NSF's controls through annual FISMA audits. However, those audits follow a prescribed path, and OIG does not have additional resources to examine other issues that may arise during the audit or review other high-risk areas in NSF's information technology systems. At the FY 2026 Budget Request level, OAIE will continue to rely on third-party contractors with expertise in specific risk areas to fulfill this critical oversight mission, but will explore options for building an in-house IT audit capacity at a later date.

*Directorate for Technology, Innovation and Partnerships (TIP)*

NSF created the Technology, Innovation, and Partnerships (TIP) Directorate, which was authorized by the *CHIPS and Science Act of 2022*, to support use-inspired research and development (R&D), to bring new technologies to market rapidly, and to address major economic and social challenges. In April 2024, OAIE created a division dedicated to agile oversight of NSF awards and operations. One of the core functions of this division is ongoing monitoring and oversight of the early lifecycle of TIP's project portfolio, including TIP's flagship Regional Innovation Engines Program. The goal of the Engines Program is to promote economic growth in regions that have not fully participated in past technological development. Each award recipient, known as an Engine, can receive up to \$160 million for up to 10 years (Type-2 awards) with a possible two years' funding for planning (Type-1 awards). OAIE plans to review policies and procedures for the operation and implementation of the Engines program, the award selection process, and early-stage management of the initial Type-2 awards.

*NSF's Preparation for a Broader Use of Award Instruments*

As an assistance award agency, NSF has traditionally used grants and cooperative agreements to accomplish its mission. However, NSF is using a broader range of award instruments, including contracts, other arrangements, and other transaction agreements, particularly in its TIP Directorate. These funding instruments are significantly different from grants and cooperative agreements and require stronger oversight and compliance with other federal regulations, such as the Federal Acquisition Regulation (FAR). OAIE will review NSF's use of these award instruments, including plans for increased staffing, training, and modernizing its contract management system to ensure



compliance with the FAR and efficient and effective operations.

#### Audits of Recipients of NSF Grant Funds

Audits of NSF recipients are an essential part of OAIE's efforts to protect NSF funds. All statutorily mandated audits and most in-house performance audits focus on NSF's internal operations. Because the bulk of NSF's funding is provided to the academic community through grants and cooperative agreements, robust oversight of that funding is imperative. Audits of NSF recipients determine whether awardees follow the financial and administrative terms and conditions of the awards. They address the highest risk areas at institutions, identifying systemic issues, recapturing misused funds, and making recommendations ensuring proper stewardship of federal funds going forward. These audits also help identify systemic issues resulting from NSF policy and/or guidance, leading to recommendations for NSF to make internal adjustments and improvements.

NSF award recipients often enter into agreements with other organizations to conduct portions of an award's objective. These agreements, known as subawards, establish a contractual relationship between the prime recipient and subrecipient. Prior NSF OIG audits have identified subawards as a high-risk area that is susceptible to misspending and noncompliance with federal regulations and NSF terms and conditions. At the FY 2026 Budget Request level, OAIE will continue to conduct limited audits of NSF award recipients' management of their subawards and costs claimed, and may write a capstone report summarizing common findings and/or identifying promising practices.

Historically the OIG has procured audits of NSF recipients to provide this much-needed audit coverage over the recipient community. The coverage of each of these audits at recipients ranged from \$5.3 million to \$216.5 million from FY 2020 through March 31, 2025. Beyond the findings specific to the institutions being audited, these audits may identify evidence of behavior that could violate criminal or civil laws, which OAIE would refer to the Office of Investigations. Additionally, these audits may identify inconsistent treatment of similar charges across the academic community, which OAIE would share with NSF staff so they could address the inconsistencies. The impact of this work is not limited to the entities that are audited: NSF recipients carefully monitor the results of these audits to identify situations where they need to strengthen their own policies and procedures. OAIE will continue its risk-based modelling to ensure our limited oversight resources are directed toward the highest-risk grant recipients and NSF funding programs. OAIE will also continue to monitor the quality of single audits.

#### **Investigative Impact and Strategic Focus**

OIG's Office of Investigations (OI) investigates criminal, civil, and administrative wrongdoing related to NSF programs and operations and research misconduct including allegations involving all entities and individuals that receive NSF funds. OI also evaluates and investigates allegations of research misconduct—data fabrication, data falsification, and plagiarism—related to NSF-funded research, and allegations of whistleblower retaliation. OI's vigilance ensures that those who seek or receive NSF research funds are held accountable and serves as a meaningful deterrent to grant fraud, research misconduct, and other wrongdoing.

The OIG Hotline annually receives and reviews hundreds of complaints and allegations of wrongdoing. OI opens investigations based upon a variety of considerations, including OIG's strategic goals, NSF's Management Challenges, the seriousness and magnitude of the offense, the

significance of programmatic vulnerability, and the high-risk status of the program or institution. OI also strategically leverages the use of advanced data analysis tools and techniques to design and conduct targeted proactive investigations.

#### Investigative Action on Research Security Threats

OI continues to be a leader in the response to the threats to U.S. federally funded research and development by foreign states that use “talent plans” to exploit the openness of American universities and the federal research enterprise. OI initiated its first criminal investigations focused on foreign talent plan members’ misuse of NSF funding in FY 2018. Since then, these cases have become increasingly complex, and they continue to account for a significant portion of OI’s workload.

OI’s investigative work on research security threats has resulted in award suspensions and terminations, recoveries of NSF funds, and many referrals to the U.S. Attorney’s Office for prosecution. In addition, OI conducts proactive investigative activities to identify previously unidentified research security risks affecting the U.S. research enterprise. These proactive initiatives have resulted in both civil and criminal investigations and prosecutions. Equally important, these activities identified noncompliance with federal requirements at several major academic research institutions and have led to both financial recoveries and major systemic changes at those institutions. In FY 2024, for example, one of OI’s proactive efforts resulted in two significant civil settlements with NSF awardees.

To help combat research security threats, OI delivers robust outreach and training to its stakeholders and investigative partners. Specifically, OI:

- Founded and now co-leads a Council of the Inspectors General on Integrity and Efficiency (CIGIE) Working Group, which informs and assists investigative colleagues with threat identification, case predication, and best practices in conducting research security investigations.
- Collaborates with the FBI and other investigative partners to conduct outreach to internal and external stakeholders (e.g., grantees, institutions) to explain the risks posed by foreign talent plan membership.
- Conducts outreach and provides education to NSF, which has resulted in the issuance of new or amended agency advisories and policies to address the threat, including an express prohibition of talent plan members serving as federal employees or Intergovernmental Personal Act (IPA) rotators, the requirement that IPA rotators be U.S. citizens, and increased disclosure requirements for researchers seeking NSF funding.
- Supports the operation of a Sensitive Compartmented Information Facility at NSF to enhance the efficiency and effectiveness of research security investigations by facilitating essential communication and coordination with investigative partners across the government.

#### Investigative action on SBIR/STTR Program Risks

Protecting NSF’s nearly \$640 million portfolio of active Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards from fraud and abuse remains a significant priority. The intent of the SBIR/STTR program is to develop novel technologies for the betterment of the U.S. economy and it has been deemed a national security portfolio. As a result, OI focused its proactive investigative efforts on identifying SBIR/STTR companies performing NSF-funded research outside of the U.S., in violation of the rules. Several of these investigations recently concluded with civil settlement agreements and funds returned to NSF.

OI has successfully partnered with NSF program managers to greatly improve SBIR/STTR processes and procedures to reduce the opportunity for fraud to occur. OI's efforts have produced significant programmatic improvements and enhanced understanding throughout the research community. OI also contributes to SBIR/STTR-related outreach at NSF awardee workshops, which provide guidance to the small business community on how to properly handle federal funds and the consequences of not following the rules. Further, OI co-founded and has led a governmentwide special agent working group focused on fighting SBIR/STTR fraud for over a decade. This group allows agents to identify potential investigative partners, deconflict cases, and share best practices and lessons learned.

#### Investigative Focus on Sexual Assault Investigations in Antarctica

In response to the *Sexual Assault/Harassment Prevention and Response (SAHPR) Report* that was commissioned by NSF and released in August 2022, OIG has expanded its investigative mission to provide a criminal investigative response capability for the United States Antarctic Program (USAP) in Antarctica. The SAHPR report indicated that sexual assault and stalking are problems in the USAP community. Sexual assault and stalking are criminal offenses. When they occur in Antarctica and are committed by or against a U.S. national, these offenses can be prosecuted under the Special Maritime and Territorial Jurisdiction, which includes "any place outside the jurisdiction of any nation with respect to an offense by or against a national of the United States." Historically, NSF relied upon the USAP McMurdo Station Manager, authorized as a Special Deputy U.S. Marshal, to serve as the on-ice law enforcement official. After conferring with NSF, the U.S. Department of Justice, the FBI, and the U.S. Marshals Service, OI assumed responsibility for investigating allegations of sexual assault, stalking, and other crimes occurring in Antarctica. In July 2023, OI began receiving allegations of sexual assault and stalking from current and former USAP participants and initiated investigations into these criminal offenses. OI also hired an expert in the investigation of sexual assault in late FY 2023.

OI was authorized to hire three additional criminal investigators specifically trained and highly skilled in sexual assault and fraud investigations to provide an on-site law enforcement presence at McMurdo Station. OI hired one such criminal investigator, who along with the investigator hired in FY 2023, will travel to Antarctica for extended periods of temporary duty during austral summers and lead remote investigations on an as-needed basis during the winter season.

To ensure the success of this new investigative mission, OI and NSF's Office of Polar Programs and Office of the Director formed a Coordination Group on Law Enforcement in Antarctica. The group's charter is to determine an appropriate and feasible law enforcement posture and develop a plan for the longer-term posture. In addition, OI established and leads a government-wide Sexual Assault Investigations Working Group through CIGIE. This working group enables criminal investigators handling sexual assault cases to leverage resources and share best practices and lessons learned.

#### Investigating Research Misconduct

Research misconduct – plagiarism, fabrication, and falsification – damages the scientific enterprise, is a potential misuse of taxpayer funds, and undermines the public's trust in government-funded research. NSF-funded researchers must carry out their projects with the highest ethical standards. In 1991, NSF delegated its authority to investigate research misconduct to OIG. As a result, OI hired investigative scientists with the necessary scientific backgrounds to investigate these allegations.

At the beginning of FY 2025, OI had six investigative scientists on staff responsible for investigating research misconduct. After two staff departures for other agencies and four staff electing the Deferred Resignation Program, OI has no investigative scientists remaining. OIG and NSF have discussed NSF reassuming the delegated authority for research misconduct investigations; however, NSF is unable to take the mission back in the near term. In the interim, OIG has agreed to serve as the intermediary – OI will receive complaints and refer matters to the awardee university for investigation, and upon receipt of the university's report, OI will provide the report to NSF for adjudication.

## **Support Offices' Actions and Impacts**

### Office of Management

OIG's Office of Management (OM) directs OIG's human resources, information technology, data analytics, financial management, procurement, and other critical mission support functions. Working in partnership with the other OIG offices, OM guides the strategic vision of the OIG and ensures that all operational needs are met. Critical functional areas include:

#### *Human Capital*

Having a strong human capital strategy is vital to the success of any organization. OIG's competitive advantage has long been its highly skilled staff. However, the recent loss of many tenured and highly skilled staff and the optimization of the remaining workforce have been challenging for the OIG. As a result, the remaining human resources staff have been focused on these challenges and the development of plans to assist offices across OIG throughout this process. One of the priorities is, and will continue to be, the development of additional automated tools in partnership with the IT team to further optimize the human capital and technology resources in executing the OIG mission. The goal is to allow OIG personnel to spend less time on administrative tasks and more on executing OIG's mission.

#### *Information Technology*

OM strives for continuous process improvement. Investment in IT plays a critical part in achieving that goal. From providing recommendations to senior management on modernization to protecting OIG information systems and data to handling day-to-day hardware and software issues, OM supports all aspects of IT. For example, to safeguard the independence of OIG audits and investigations, OM established a dedicated Starlink satellite network at McMurdo Station, Antarctica. This secure network enables reliable, direct access to OIG systems in this remote environment without dependence on NSF-controlled infrastructure. The IT team is now more than ever focused on automating processes across the OIG enterprise to ensure OIG personnel are focused on mission execution.

#### *Data Analytics*

A robust data analytics capacity is a core component of OIG's ability to provide effective oversight. OM uses data analytics to streamline internal processes such as human capital, procurement oversight, and budget execution. These applications yield great efficiency and allow OIG management to make more informed decisions. However, because of workforce optimization efforts, personnel in OM's Data Operations Group were reassigned to the Office of Audits, Inspections, and Evaluations (OAIE) as auditors. Therefore, the work performed by these data analysts across all OIG components now falls on the existing IT team.

### *Budget and Financial Management*

Sound budget and financial management are key to the success of the OIG. Personnel working in these areas are responsible for developing, executing, and monitoring budgets in alignment with OIG goals, federal regulations, and fiscal policies. By analyzing financial data, forecasting expenditures, and assessing funding requirements, these professionals help guide strategic decision-making and promote fiscal accountability. Their work ensures that taxpayer dollars are spent efficiently, programs are adequately funded, and financial risks are mitigated, thereby supporting the OIG's mission and maintaining public trust in government operations.

### Office of Counsel

The Office of Counsel (OC) consists of the General Counsel to the IG, two assistant counsels, the Chief of Staff, and a vacant Freedom of Information Act (FOIA) analyst position. OC provides comprehensive legal advice and critical analysis to the IG and all OIG offices, including legal review of externally issued OIG work products and correspondence. OC is responsible for the OIG Ethics and FOIA programs and handles a myriad of subject areas, including audit-related support, ethics, appropriations law, contract law, information disclosure, privacy, federal personnel law, and IG Act authorities. On average, OC handles about 350 actions per year, including reviews for legal sufficiency, information security, and information governance for reports and other externally focused documents; proposed procurements; FOIA requests; Antarctic-focused work, which presents unique and complex issues; and legal opinions on various matters. OC attorneys also participate in key meetings and decisions, conduct training, and publish legal updates. This level of involvement enables the office to identify and address potential legal issues and risk areas before they mature. OC also supports the larger IG community through active participation in CIGIE projects and committees.

The Chief of Staff also directly supports the IG and handles all matters relating to external affairs, including congressional relations and media contacts.

### Immediate Office

The Immediate Office includes the Inspector General and Deputy Inspector General. Both positions are vacant. The Assistant Inspector General for Investigations is performing the Inspector General's duties until the position can be filled.

### **Government-wide Impact**

Though small relative to many other OIGs, NSF OIG continues to make outsized contributions to the Inspector General community and the government at large. For example:

- NSF's Acting Inspector General serves as the co-chair of the CIGIE AIGI Committee.
- The Assistant Inspector General for Audits serves on CIGIE's Audit Committee, Inspection and Evaluation Committee, and Professional Development Committee.
- The Assistant Inspector General for Management coordinates a CIGIE Management and Policy forum and serves as the Director of the Executive Core Qualification Review Board, which is part of CIGIE's Professional Development Committee and Leadership Innovation Subcommittee.
- NSF OIG established five IG community working groups to:
  - Prevent fraud within the SBIR/STTR programs,
  - Increase the use of government-wide suspension and debarment to deter and reduce instances of fraud, waste, and abuse,
  - Foster the next generation of senior investigative leaders within the IG community,

- Address threats to research security, and
- Investigate sexual assaults occurring in federal environments.

## Financial Discussion

Office of Inspector General					
Personnel Compensation and Benefits and General Operating Expenses					
(Dollars in Thousands)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current	
	Plan	(TBD)	Request	Amount	Percent
Personnel Compensation & Benefits <sup>1</sup>	\$19,682		\$16,369	-\$3,313	-16.8%
Travel & Transportation of Persons	600		100	-500	-83.3%
Advisory & Assistance Services <sup>2</sup>	2,940		1,100	-1,840	-62.6%
Information Technology	460		75	-385	-83.7%
Communications, Supplies, Equipment, and Other	728		356	-372	-51.1%
Training	350		60	-290	-82.9%
Other <sup>3</sup>	280		224	-56	-20.0%
CIGIE Assessment <sup>4</sup>	98		72	-26	-26.5%
<b>Total</b>	<b>\$24,410</b>		<b>\$18,000</b>	<b>-\$6,410</b>	<b>-26.3%</b>
Full-Time Equivalents	92		66	-26	-28.3%

<sup>1</sup> FY 2026 PC&B includes base salary costs and anticipated within grade and promotion increases.

<sup>2</sup> This includes the mandated annual financial statement audit and associated evaluations, and other support services.

<sup>3</sup> Starting in FY 2025, this line includes the operations cost for the Sensitive Compartmented Information Facility (SCIF).

<sup>4</sup> In FY 2024, the CIGIE assessment increased from 0.36% to 0.40% of OIG's appropriation.

## FY 2026 Budget Request

The FY 2026 Budget Request for NSF OIG represents a 26.3 percent decrease and a reduction of 26 FTE from the FY 2024 Plan.

OIG's staff on board has already been reduced to 70 through the Deferred Resignation Program, regular attrition, and the hiring freeze. OIG will further reduce staff to reach the 66 FTE authorized by the FY 2026 Budget Request.

## Inspector General Reform Act Statement

Section 6(g)(1) of the IG Act, 5 U.S.C. app. 3, was amended by the Inspector General Reform Act of 2008 (Pub. L. 110-409) to require a summary statement concerning OIG's annual Budget Request.

In accordance with this, OIG submits the following summary:

- FY 2026 Budget Request for NSF OIG is \$18 million.
- The portion for training is \$60,000.
- The portion for operation of the CIGIE is \$74,000.<sup>1</sup>

<sup>1</sup> This is an estimate of CIGIE's annual membership assessment, which is tied to each member OIG's annual appropriation.

The portion of the FY 2026 Budget Request for staff training is not expected to suffice for all training needs in FY 2026.

**OFFICE OF THE NATIONAL SCIENCE BOARD (NSB)****\$3,000,000**

The Appropriations Act that funds the National Science Foundation (NSF) contains a separate appropriation for NSF's National Science Board (NSB, Board). This FY 2026 Budget Submission identifies the resources needed to enable execution of the Board's statutory functions and ensure its independence, including amounts for personnel compensation and benefits (PC&B), contract services, training, travel, supplies, materials, and equipment.

The FY 2026 Budget Request for the Office of the National Science Board is \$3.0 million, a decrease of \$2,090,000 below the FY 2024 Appropriation of \$5.09 million. This FY 2026 Request level will allow the NSB to fulfill its essential policymaking and oversight responsibilities for NSF and its statutory responsibilities as outlined in the NSF Act, including *Science and Engineering Indicators*.

<b>NSB Funding</b>					
(Dollars in Millions)					
	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024	Current Plan
	Plan	(TBD)	Request	Amount	Percent
<b>Total</b>	<b>\$5.09</b>		<b>\$3.00</b>	<b>-\$2.09</b>	<b>-41.1%</b>
Full-Time Equivalents	18		13	-5.00	-27.8%

**Appropriations Language**

For necessary expenses (including payment of salaries, authorized travel, hire of passenger motor vehicles, the rental of conference rooms in the District of Columbia, and the employment of experts and consultants under section 3109 of title 5, United States Code) involved in carrying out section 4 of the National Science Foundation Act of 1950 (42 U.S.C. 1863) and Public Law 86-209 (42 U.S.C. 1880 et seq.), \$3,000,000: *Provided*, That not to exceed \$2,500 shall be available for official reception and representation expenses.

<b>National Science Board</b>			
<b>FY 2025 Summary Statement</b>			
(Dollars in Millions)			
	Estimate/ Request	Expired	Obligations Actual/ Estimates
FY 2024 Appropriation	\$5.09	-\$0.14	\$4.95
FY 2025 (TBD)			
FY 2026 Request	3.00		3.00
\$ Change from FY 2024 Appropriation			-\$2.09
% Change from FY 2024 Appropriation			-41.1%

**National Science Board in Context**

The NSB was established by the NSF Act of 1950 with dual responsibilities: to provide national science policy advice to the President and Congress, and to establish policies for NSF within the framework of applicable national policies and priorities set forth by the President and the Congress. The Board



consists of 24 presidentially appointed members, along with the Director of NSF as an ex-officio member. Representing the broad landscape of the U.S. science and engineering (S&E) research and education community, the Board serves as an advisory body on S&E issues critical to the Nation. Board members serve six-year terms with staggered appointments. They are eminent researchers with records of distinguished service in multiple sectors who "provide representation of the views of scientific and engineering leaders in all areas of the Nation."

The Board convenes at least four formally scheduled public meetings per year, with additional meetings as needed, to review and approve major NSF awards; consult with the Director on new programs; oversee and provide policy direction and strategic guidance to NSF; oversee the lifecycle of large facilities, including conducting site visits; and address significant S&E-related national policy issues. The Board initiates and conducts studies and reports on a range of policy topics and engages NSF's stakeholders nationwide. The Board reviews NSF's priorities to ensure progress and consistency along the strategic direction set for NSF and to ensure balance among new investments and core programs.

### **Policy Responsibilities**

The Board examines issues of importance to the S&E research and education communities, in general, and to NSF, in particular. Topics are determined through requests from Congress or the President, and as the Board identifies in consultation with the community and NSF management. Recent NSB reports have examined the macroscale changes to the global and U.S. S&E landscape, the skilled technical workforce, and our dependence on foreign S&E talent.

Recognizing the imminent threat that the People's Republic of China's S&E investments pose to U.S. S&E leadership and the growing share of U.S. basic research funded by industry, NSB is focused on renewing NSF and American S&E to respond to this changed S&E landscape and ensure America's global scientific and technological leadership in years ahead.<sup>1</sup> In its NSF-facing role, NSB is focused on fostering a nimble, results-oriented, next generation NSF that responds to national priorities (including AI, Quantum, and biotechnology), helps the nation avoid technological surprise, and complements other federal and non-government investments. NSB is focused on implementing the findings of its recent reexamination of NSF's merit review policies, especially as they relate to strengthening the agency's focus on the societal benefits of NSF-supported research. In its national S&E advisory role, NSB is exploring new models to collaborate across sectors to optimize U.S. R&D and educate domestic STEM talent with an eye toward the approaches and institutions needed to ensure a golden era of U.S. leadership.

### **Structure**

The Board has several standing committees to assist with its responsibilities.

The **Executive Committee** (EC) includes the Director of NSF, who chairs the Committee, and four elected members from the Board, two of whom are the NSB Chair and Vice-Chair. The Committee has been given the authority by the Board to approve awards in the rare instances when immediate action is required between Board meetings.

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<sup>1</sup> [www.nsf.gov/nsb/publications/2024/changedlandscape.pdf](https://www.nsf.gov/nsb/publications/2024/changedlandscape.pdf)

The **Committee on Oversight** (CO) conducts independent oversight of NSF's operations, processes for risk management, audit plans and results, and processes for complying with laws and regulations; reviews Office of the Inspector General (OIG) activities and NSF management responses; monitors audits and makes related recommendations to the Board; and oversees the Board's compliance with the Sunshine Act.

The **Committee on Strategy** (CS) provides a forum for developing the Board's strategic discussions of NSF's budget, programs, organization structure and agency vision; makes recommendations to the Board on annual Budget Requests and quadrennial Strategic Plans; and provides strategic guidance to the Board on NSF's programs.

The **Committee on National S&E Policy** (SEP) oversees development and production of the congressionally-mandated *Science and Engineering Indicators (Indicators)* report in collaboration with NSF's National Center for Science and Engineering Statistics (NCSES); helps ensure that the S&E information and policy resources developed by the NSB are high-quality, policy-relevant, and accessible in order to meet stakeholder needs; and helps fulfill the NSB's charge to provide ongoing information and policy advice to Congress and the President on S&E research, education, and workforce issues.

The **Committee on Awards and Facilities** (A&F) addresses strategic issues and recommends policies to the Board related to awards and MREFC projects; makes recommendations to the Board on awards and facilities; and provides lifecycle oversight on facilities and awards.

The **Committee on External Engagement** (EE) leads the NSB's communication and engagement efforts with government, industry, the public and the research and education communities, and helps the Board advance the pursuit of national policies for the promotion of research and education in S&E. EE also reviews nominations for two awards established by the Board: the Vannevar Bush Award and the Science and Society Award.

Ongoing activities of the Board include reviewing and making recommendations on:

- Large awards, MREFC projects, and other proposals, as needed;
- NSF's Management Response to the OIG Semi-annual Reports to Congress;
- Transmittal of the NSF, OIG, and NSB budget submissions to the Office of Management and Budget;
- Priority order of projects in the MREFC Account;
- Inclusion of new projects requiring funding under the MREFC Account;
- NSF's financial management reports; and
- NSF's strategic plan and longer-term budget plans, including NSF's research infrastructure portfolio.

## Financial Discussion

This FY 2026 Submission will enable the NSB to fulfill its statutory governance responsibilities including oversight, and to respond to Administration priorities and Congressional requests.

**Office of the National Science Board**  
**Personnel Compensation and Benefits and Other Operating Expenses**

(Dollars in Thousands)

	FY 2024			Change over	
	Current	FY 2025	FY 2026	FY 2024 Current Plan	
	Plan	(TBD)	Request	Amount	Percent
Personnel Compensation & Benefits	\$3,800		\$2,889	-\$911	-24.0%
Staff Development & Training	21		0	-21	-100.0%
Advisory & Assistance Services	991		32	-959	-96.8%
Travel & Transportation of Persons	250		74	-176	-70.4%
Communications, Supplies, & Equipment	25		2	-23	-92.0%
Representation Costs	3		3	-	0.0%
<b>Total</b>	<b>\$5,090</b>		<b>\$3,000</b>	<b>-\$2,090</b>	<b>-41.1%</b>
Full-Time Equivalents (FTE)	18		13	-5.00	-28%

<sup>1</sup> PC&B includes base salary costs and anticipated within grade and promotion increases.

### Personnel Compensation and Benefits

The Board's FY 2026 Submission allows the NSBO to maintain a core of full-time policy, communications, administrative, and legal staff. In addition to providing institutional memory for the Board, the NSBO staff provides both the resources and expertise for coordinating and conducting science and education policy analyses and developing and implementing broad communication and outreach programs. Staff also advise the Board on legal aspects of its policies and activities and provide operational and administrative support that are essential for the Board to fulfill its mission.

The Submission includes reduced staffing levels; reflects planned increases in NSBO staff pay; and assumes two in-person Board meetings in FY 2026. This staffing level will enable the NSBO to continue to support the NSB.

### Other Operating Expenses

The Staff Development and Training budget line is eliminated.

The Board's Advisory and Assistance Services budget line supports the Administration's priorities, including resources needed to produce policy products related to the Congressionally mandated *Indicators 2026* and transcription services necessary for compliance with the *Government in the Sunshine Act*.

The NSB's Travel and Transportation of Persons budget line primarily covers costs related to Board member travel to NSF headquarters for two annual meetings.

The Communications, Supplies, and Equipment budget line funds a minimal purchase of essential office supplies.

The Submission sets aside funds that the NSB will use, if necessary, to cover costs associated with reception and representation activities connected to official NSF business, per GAO guidance.

## PERFORMANCE AND MANAGEMENT

**For definitions of common acronyms used throughout NSF's FY 2026 Budget Request, see the NOTES found at the beginning of the entire document on pages iii-iv.**

FY 2026 Annual Performance Plan .....	Performance & Management - 3
GAO-IG Act Exhibits.....	Performance & Management - 11



## FY 2026 ANNUAL PERFORMANCE PLAN

The U.S. National Science Foundation's (NSF) mission is to promote the progress of science; advance the national health, prosperity and welfare; and secure the national defense. NSF's Annual Performance Plan fulfills key aspects of the Government Performance and Results Act (GPRA) Modernization Act of 2010 by outlining the agency's goals in four priority areas: 1) STEM talent and capacity, 2) Tools and knowledge, 3) Societal benefit and impact, 4) NSF operations and management.

### 1. STEM Talent and Capacity

#### **Annual Goal 1.1: Expand geography of STEM research**

Goal statement: Increase the percentage of NSF's research funding to institutions in Established Program to Stimulate Competitive Research (EPSCoR) jurisdictions.

About this Goal: EPSCoR seeks to advance research capacity in jurisdictions (states and territories) that receive relatively small proportions of the federal research budget.<sup>1</sup> EPSCoR invests in research infrastructure, co-funding in partnership with NSF directorates and offices, and outreach to investigators and institutions in EPSCoR jurisdictions. NSF is developing tools and strategies to track and achieve these targets, including prioritization of funding that enables sustainable growth in the research competitiveness of EPSCoR jurisdictions.

		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Percentage of NSF funding to institutions in EPSCoR jurisdictions <sup>2</sup>	Target				15.5%	16.0%	16.5%	17.0%
	Results				15.9%	19.6%		

Discussion of FY 2026 Target: The FY 2026 target was established in statute.

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<sup>1</sup> A map of all EPSCoR eligible jurisdictions is available at [www.nsf.gov/funding/initiatives/epscor/epscor-criteria-eligibility](http://www.nsf.gov/funding/initiatives/epscor/epscor-criteria-eligibility).

<sup>2</sup> Targets for FY 2023 through FY 2026 are provided in Section 10325 of the CHIPS and Science Act of 2022. [www.congress.gov/117/plaws/publ167/PLAW-117publ167.pdf](http://www.congress.gov/117/plaws/publ167/PLAW-117publ167.pdf).

## Annual Goal 1.2: Increase utilization of NSF's Education and Training Application (ETAP)

Goal Statement: Increase the percentage of awards utilizing ETAP within targeted programs.<sup>3</sup>

About this Goal: ETAP provides a secure online application platform for collecting applicant level information from individuals interested in NSF-funded education and training opportunities, such as research experiences, scholarships, and fellowships. Greater use of ETAP will improve NSF's data on participants in NSF-funded education and training programs, and improve the agency's ability to make informed program and policy decisions. Such information enables NSF to understand each program's reach and to conduct evaluations with increasing levels of rigor.

### Exhibit 1.2. Annual Goal: Increase utilization of the Education and Training Application (ETAP)

Annual Goal 1.2: Increase utilization of ETAP		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Number of NSF programs using ETAP	Target				7	14	16	
	Results			4	13	14		
Percentage of awards using ETAP in Research Experiences for Undergraduates (REU) Program	Target				30%	33%	40%	45%
	Results			14%	27%	36%		
Percentage of awards using ETAP in Research Experiences for Teachers (RET) program	Target				30%	30%	30%	26%
	Results			13%	13%	23%		

Discussion of FY 2026 Target: NSF anticipates restructuring programs by the start of FY 2026. Thus, NSF plans to discontinue the target related to the number of NSF programs using ETAP and prioritize increasing the percentage of awards using ETAP in the REU and RET areas. The NSF ETAP system has primarily been used by research experiences programs for undergraduates and for teachers, with most NSF divisions encouraging ETAP use for these programs. FY 2026 targets are informed by FY 2024 and 2025 results.

<sup>3</sup> More information on ETAP can be found at <https://etap.nsf.gov>.

## 2. Tools and Knowledge

### **Annual Goal 2.1: Ensure that Major Facility Infrastructure Investments are on Track**

Goal Statement: Keep negative cost and schedule variance at or below 10 percent for all Major Facility projects in the Construction Stage that are between 10 and 90 percent complete.

About this Goal: This goal helps ensure program integrity and responsible stewardship of Major Facility investments that have a Total Project Cost (TPC) greater than \$100 million. Modern and effective research infrastructure is critical to maintaining U.S. international leadership in science and engineering. The use of Earned Value Management (EVM) is required for all Major Facilities in the Construction Stage. Cost and schedule variance are key EVM indicators of whether a project is on track relative to the project plan.

### **Exhibit 2.1. Annual Goal: Ensure that Major Facility Infrastructure Investments are on Track**

Annual Goal 2.1: Ensure that Major Facility Infrastructure Investments are on Track		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Major Facility Construction Projects: Percentage Meeting Cost and Schedule Targets	Target	100%	100%	100%	100%	100%	100%	100%
	Results	75%	40%	40%	60%	50%		

Discussion of FY 2026 Target: Building on the progress and lessons learned from prior years, NSF's objective for FY 2026 remains consistent: to maintain negative cost and schedule variances at or below 10 percent for all Major Facilities in the Construction Stage that are between 10 percent and 90 percent complete. This continued focus ensures rigorous project management and adherence to budget and schedule expectations.



## Annual Goal 2.2: Ensure that Mid-Scale Infrastructure Investments are on Track

**Goal Statement:** Keep negative cost and schedule variance at or below 10 percent for all Mid-Scale Research Infrastructure projects that are between 10 and 90 percent complete.

**About this Goal:** NSF's Mid-Scale Research Infrastructure programs are intended to meet the research community's needs for modern and effective research infrastructure at a scale that is otherwise difficult for individual institutions to acquire. Projects tracked under this goal have costs that fall below the \$100 million threshold for a Major Facility project but exceed \$20 million.<sup>4</sup> Tracking project performance through EVM metrics is one method for ensuring proper NSF oversight and stewardship of Federal funds. Use of EVM is optional for Mid-Scale Research Infrastructure projects, and nine of the 11 mid-scale projects with costs above \$20 million are using EVM.

### Exhibit 2.2. Annual Goal: Ensure that Mid-Scale Infrastructure Investments are on Track

Annual Goal 2.2: Ensure that Mid-Scale Infrastructure Investments are on Track		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Mid-Scale Research Infrastructure Projects: Percentage Meeting Cost and Schedule Targets	Target	Track cost and schedule for all defined projects		100%	100%	100%	100%	100%
	Results	N/A	Achieved	60%	67%	89%		

**Discussion of FY 2026 Target:** For FY 2026, NSF aims to maintain negative cost and schedule variances at or below 10 percent for all Mid-Scale Research Infrastructure projects that utilize Earned Value Management (EVM) and are between 10 percent and 90 percent complete.

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<sup>4</sup> Although Mid-Scale Research Infrastructure projects begin at the threshold of \$4 million, this goal tracks those most likely to propose using Earned Value Management principles, with total project costs of \$20 million or more.

### 3. Societal Benefit and Impact

#### Annual Goal 3.1: Grow Partnerships

##### Goal Statements:

- 3.1a: Increase the funding invested from industry and non-profits that NSF programs leverage to support the science, technology, engineering, and mathematics (STEM) enterprise, by 20 percent over the prior fiscal year.
- 3.1b: Increase the funding invested from other federal agencies that NSF programs leverage to support the science, technology, engineering, and mathematics (STEM) enterprise, by five percent over the prior fiscal year.

About this Goal: Partnerships are essential to growing research and innovation ecosystems across the country. This goal measures NSF's ability to leverage funding from partnerships. It focuses on partnerships that are shaping research directions and accelerating translation of knowledge gained through NSF's research portfolio to address the Nation's most pressing technological, societal, and economic needs.

Increase funding that NSF programs leverage to support the STEM enterprise.		FY 2023	FY 2024	FY 2025	FY 2026
3.1a: obligated funds (\$ millions) from industry and non-profits	Target	Establish baseline	\$30.3	\$36.3	\$43.6
	Result	\$25.2	\$43.9		
3.1b: obligated funds (\$ millions) through partnerships with other federal agencies	Target	Establish baseline	\$133.6	\$140.3	\$147.3
	Result	\$127.3	\$163.5		

Discussion of FY 2026 Targets: The FY 2026 target for 3.1a reflects a 20 percent increase above the prior year's level for funding from industry and non-profits, and for 3.1b a five percent increase above the prior year's level for funding from other federal agencies. Funds will be attributed to the year in which they are committed to specific NSF investments.

#### 4. NSF Operations and Management

##### **Annual Goal 4.1: IT systems availability**

Goal Statement: Ensure availability of IT resources for NSF staff and the broader research community.

About this Goal: The availability of information technology (IT) systems is integral to delivering excellent and secure Federal services and customer experience. NSF prioritizes the availability of its IT services and coordinates downtime for critical maintenance and service releases to minimize disruption. This goal measures NSF's success in keeping critical IT systems available. Unexpected downtime due to a system issue or incident will lead to reductions in NSF's IT systems availability percentage.

Annual Goal 4.1: Provide robust and reliable IT services		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
NSF IT systems availability (percentage)	Target	99.6	99.6	99.6	99.6	99.6	99.6	99.6
	Result	99.8	99.8	99.8	99.9	99.9		

Discussion of FY 2026 Target: Consistent with prior years, NSF aims to maintain or exceed 99.6 percent availability for IT systems, excluding planned downtime of 375 hours for maintenance and upgrades. In FY 2026, NSF will continue to carefully plan for system upgrades and scheduled maintenance to maintain high levels of system availability.

**Annual Goal 4.2: Make Timely Proposal Decisions**

Time to decision or “dwell time” represents the amount of time that passes between receipt of a proposal and notification to the proposer about the funding decision. This indicator tracks the percent of applicants informed whether their proposals have been declined or recommended for funding within 182 days, approximately six months, of the proposal deadline, target date, or receipt date. NSF considers timeliness indicators to be in balance with review quality. A review period that is too long inhibits the progress of research as it delays the funding process, and a review period that is too short inhibits review quality.

Make Timely Proposal Decisions		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Percent of proposals declined or recommended for funding within 182 days. (percentage)	Target <sup>5</sup>	75	75	75	70	70	Re-baseline	TBD
	Result	68	65	66	70	66		

Discussion of FY 2026 Target: NSF will use the FY 2025 baseline to set targets for FY 2026 and future years.

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<sup>5</sup> In FY 2025, reporting for this measure changed from being a targeted goal to an indicator.

### **Annual Goal 4.3. Time to Hire (T2H)**

#### Goal Statements:

- 4.4a: Decrease the average number of calendar days it takes to hire staff in the General Schedule (GS) workforce to 80 days.
- 4.4b: Decrease the average number of calendar days it takes to hire staff in Administratively Determined positions by 10 percent from FY 2025 levels.

About This Goal: Time to Hire (T2H) begins with the submission of a requested hiring need to the human resources office and ends on the date the new employee enters on duty. Reducing the time to hire and onboard staff improves NSF's ability to fulfill its mission by placing qualified staff in key roles.

NSF's unique hiring authority supports hiring from the academic sector, where it is common to conduct a hiring process six months or more before the anticipated start time of the new hire. In order to take steps to improve time to hire, NSF must look at each hiring process separately to make improvements. NSF is developing tools and strategies to empower hiring managers and provide insight into the timing of each stage in the hiring process.

Annual Goal 4.4: Time to hire		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Average number of days to hire a General Schedule (GS) employee	Target				Re-Baseline	80
	Result	124	143	142		
Average number of days to hire an Administratively Determined (AD) employee	Target				Re-Baseline	10% reduction from FY 2025
	Result	153	167	158		

Discussion of Targets: The FY 2026 target for hires in GS positions is 80-days, in accordance with Executive Order *Reforming the Federal Hiring Process and Restoring Merit to Government Service*. The separate FY 2026 target for hires in AD positions reflects that NSF's unique hiring authority supports hiring from the academic sector, where it is common to conduct a hiring process six months or more before the anticipated start time of the new hire.

## GAO-IG ACT EXHIBITS

Pursuant to P.L. 115-414, the Good Accounting Obligation in Government Act (GAO-IG Act), the following table includes U.S. Government Accountability Office (GAO) recommendations open for more than one year and their associated statuses as of April 30, 2025.

### Open GAO Recommendations, as of April 30, 2025

GAO Report Number	Report Title (Date)	GAO Recommendation	Timeline to Implement
GAO-24-106380	National Science Foundation: Additional Steps Would Improve Cost Estimate for Antarctic Research Infrastructure Project	The Director of NSF should ensure that the Antarctic Infrastructure Modernization for Science cost estimate meets the well-documented characteristic of a reliable cost estimate, as defined in GAO's cost guide. (Recommendation 1)	NSF has provided an initial set of revised documentation on select AIR projects to GAO to illustrate the cost estimates now meet the "well-documented" characteristic. On April 28, 2025, GAO indicated they have the information they need and will advise on the status of closing this recommendation. Additional cost estimate documentation for completion of AIMS Lodging can be provided to GAO upon request.

GAO Report Number	Report Title (Date)	GAO Recommendation	Timeline to Implement
GAO-22-104411	Research Reliability: Federal Actions Needed to Promote Stronger Research Practices	The Director of NSF should collect information on relevant indicators of rigor to assess the research projects the agency funds, and implement steps, as needed, to promote strong research practices in future work. (Recommendation 3)	NSF continues collecting, examining, and compiling practices pertaining to indicators of rigor in science and engineering research that promote robust and reliable research. It is also working collaboratively across the agency to continue to promote transparency around research results by instituting and supporting practices such as assigning persistent identifiers (PIDs) for research products and updating the PAPPG to reflect these practices.
GAO-22-104411	Research Reliability: Federal Actions Needed to Promote Stronger Research Practices	The Director of NSF should take steps to collect information to determine whether current policies and requirements are adequate to achieve transparency by ensuring research results and data are findable, accessible, and usable, and implement programmatic or policy changes, if needed. (Recommendation 4)	NSF has taken steps to achieve transparency, such as including the NSF's Public Access Initiative to develop new guidelines for required Data Management and Sharing Plans. These proposed guidelines were released when the Proposal & Award Policies & Procedures Guide (PAPPG) went out for public comment in December 2024. The Public Access Initiative team submitted replies to the public comments in April 2025, which are currently being reviewed by senior management with the goal of releasing them with the revised PAPPG in Fall 2025.

GAO Report Number	Report Title (Date)	GAO Recommendation	Timeline to Implement
GAO-22-105016	Earthquakes: Opportunities Exist to Further Assess Risk, Build Resilience, and Communicate Research	The Director of NSF should, in collaboration with NIST, develop strategies to better communicate NEHRP's priorities to research entities. (Recommendation 4)	NSF is in the process of implementing the recommendation. NSF officials are developing strategies to better communicate NEHRP priorities and relevant research findings to appropriate audiences. These strategies include 1) adding information about research priorities to relevant solicitations and program descriptions; 2) adding information about priorities to NSF web pages; and 3) discussing the priorities during outreach events attended by relevant research entities. NSF will continue working towards implementation of the recommendation with anticipated implementation in FY 2025.
GAO-21-152	Data Governance: Agencies Made Progress in Establishing Governance, but Need to Address Key Milestones	The Director of the National Science Foundation should direct the Chief Data Officer to conduct a gap analysis between the current staff's skills and the skills the agency requires, and establish a baseline performance plan to close the identified data skills and literacy gaps. (Recommendation 9)	NSF completed the Evidence Act skill gap analysis in December 2023 and has been working on a broader IT workforce assessment (to include a focus on data skills/literacy gaps) in light of agency staffing changes. Based on the results of the 2023 analysis and more recent assessments, NSF still intends to establish a baseline performance plan to address skill gaps and recommend approaches for closure. NSF will continue to work toward implementation of the recommendation, but the timeline for completion is still to be determined.



GAO Report Number	Report Title (Date)	GAO Recommendation	Timeline to Implement
GAO-19-227	National Science Foundation: Cost and Schedule Performance of Large Facilities Construction Projects and Opportunities to Improve Project Management	The Director of NSF should assess the agency's large facilities oversight workforce to identify any project management competency gaps, develop a plan to address any gaps and time frames for doing so, and monitor progress in closing them. (Recommendation 1)	NSF completed implementation of this recommendation when internal standard operating guidance was revised in 2023 to incorporate the latest PMIAA competency model and establish the cadence for future staff self-assessments. As part of the implementation of the Program Management Improvement and Accountability Act (PMIAA), NSF has developed a competency model for staff overseeing major facilities and mid-scale research infrastructure, completed gap analyses through self-assessment and supervisor surveys, and expanded available learning options. NSF has also implemented OPM's new "identifier" as PMIAA-related position descriptions were updated in 2024 and 2025 to incorporate the latest competency requirements. On April 28, 2025, GAO indicated they have the information they need and will advise on the status of closing this recommendation. Additional PMIAA implementation documentation can be provided to GAO upon request.

## Open OIG Recommendations - Internal Audits, as of April 30, 2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Status as of [date]	Timeline to Implement
22-2-006	Audit of NSF's Divestment of Major Facilities (September 2, 2022)	[NSF should] improve policies, procedures, and guidance to clearly define the last major facility life cycle stage and define how NSF will carry out these transitions. These documents should identify steps for managing the transition, for designating and identifying internal resources to facilitate the process, and for obtaining required reviews and approvals.	Resolved and Open	12/31/2025
22-3-001	Inspection of NSF's Compliance with International Telework Requirements (September 14, 2022)	[NSF should] implement a process to monitor connections to the NSF network from outside the U.S., ensuring the system accurately captures the user's country location, and take any necessary measures to protect NSF's network and data when unauthorized connections are identified.	Resolved and Open	12/31/2025
23-2-003	Audit of NSF's Vetting Process for Individuals Assigned under the Intergovernmental Personnel Act	[NSF should] improve the coordination and procedures for the NSF offices involved in the Intergovernmental Personnel Act assignee vetting process to ensure issues identified during the process are elevated to an appropriate office or position for resolution.	Resolved and Open	12/31/2025**
23-2-003	Audit of NSF's Vetting Process for Individuals Assigned under the Intergovernmental Personnel Act	[NSF should] strengthen the vetting process for Intergovernmental Personnel Act assignees to address foreign influence-related issues.	Resolved and Open	12/31/2025*

\* NSF's completion of the corrective actions are contingent upon the overall agency size and budget as well as agency resources to implement.

**GAO-IG Act Exhibits**

Pursuant to P.L. 115-414, the Good Accounting Obligation in Government Act (GAO-IG Act), the following table includes unresolved NSF Office of Inspector General recommendations open for more than one year and their associated statuses as of April 30, 2025. In total, there are 66 unresolved recommendations and \$1,137,609 in questioned costs.

**Open OIG Recommendations - Unresolved External Audit Recommendations, as of April 30, 2025**

<b>OIG Report Number</b>	<b>Audit Report Title (Date)</b>	<b>OIG Recommendation</b>	<b>Costs Questioned</b>	<b>Timeline to Implement</b>
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	1.1) Resolve the \$169,950 in questioned consulting and subaward costs and direct OSU to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$169,950.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	1.2) Direct OSU to establish a policy to ensure that OSU employees are not paid as both employees and independent contractors.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	1.3) Direct OSU to strengthen its administrative and management procedures over awarding subawards	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	2.1) Resolve the \$78,153 in questioned costs	\$78,512.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	2.2) Direct OSU to strengthen its administrative and management procedures for obtaining NSF's approval	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	2.3) Direct OSU to strengthen its administrative and management procedures for allocating salary expenses to sponsored projects.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	2.4) Direct OSU to strengthen its administrative and management procedures for allocating travel expenses to sponsored projects.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	2.5) Direct OSU to strengthen its administrative and management procedures for allocating equipment to sponsored projects.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	2.6) Direct OSU to strengthen its administrative and management procedures over use of PSC funding under NSF awards.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	3.1) Resolve the \$65,153 in questioned indirect costs	\$65,153.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	3.2) Direct OSU to strengthen its administrative and management procedures for applying indirect costs to Federal awards.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	4.1) Resolve \$31,319 in questioned supplies, equipment, and travel costs	\$31,319.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	4.2) Direct OSU to strengthen its administrative and management procedures for purchases at end of a project's POP	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	4.3) Direct OSU to strengthen its administrative and management procedures for travel taken within the final 90 days of an award's POP.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	5.1) Resolve \$10,574 in Questioned Unallocable Costs	\$10,574.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	5.2) Direct OSU to strengthen its administrative and management procedures for allocating expenses to sponsored projects.	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	5.3) Direct OSU to encourage PIs to identify all award participants.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	6.1) Resolve the \$8,820 in questioned costs.	\$8,820.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	6.2) Direct OSU to strengthen its administrative and management procedures for honorarium payments.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	7.1) Resolve \$5,563 in questioned lodging and M&IE costs.	\$5,563.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	7.2) Direct OSU to strengthen its administrative and management procedures for reimbursing M&IE expenses.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	7.3) Direct OSU to strengthen its administrative and management procedures for reimbursing lodging expenses.	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	8.1) Direct OSU to strengthen its administrative and management procedures for travel, procurement, PSCs, effort certifications, cost transfers, fellowship appointments, and currency conversions.	\$0.00	9/30/2025
19-1-017	Performance Audit of Incurred Costs – Oregon State University (09/13/2019)	9.1) Direct OSU to strengthen its administrative and management procedures for establishing indirect cost rates for Federal awards.	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	1.1) Resolve the \$412,363 in questioned subaward costs	\$412,363.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	1.2) Direct UF to strengthen the administrative and management internal controls and processes over transferring significant parts of NSF funded research to other organizations	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	2.1) Resolve the \$47,226 in questioned participant support, travel, and publication expenses for which UF has not agreed to reimburse NSF	\$47,226.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	2.2) Direct UF to provide documentation that it has repaid or otherwise credited the \$66,590	\$66,590.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	2.3) Direct UF to establish clear guidance regarding the use of participant support cost funding	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	2.4) Direct UF to strengthen its administrative and management procedures and internal controls surrounding the purchase of airfare and the approval of travel expense reports	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	2.5) Direct UF to strengthen its administrative and management procedures and internal controls	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	2.6) Direct UF to establish clear guidance regarding the allowability of publication expenses	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	3.1) Resolve the \$83,227 in questioned supplies, software, severance and publication costs	\$83,227.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	3.2) Direct UF to provide documentation that it has repaid or otherwise credited the \$29,600	\$29,600.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	3.3) Direct UF to strengthen its administrative and management procedures, internal controls, and processes for allocating salary, publication, material and supply, travel, and tuition expenses	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	4.1) Direct UF to provide documentation that it has repaid or otherwise credited the \$1,717	\$1,717.00	9/30/2025



OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	4.2) Direct UF to update its current procedures and internal controls for reviewing stipend costs charged to Graduate Research Fellowship Program awards	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	5.1) Direct UF to strengthen its directives/procedures and internal controls for procuring goods and services	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	5.2) Direct UF to strengthen its directives/procedures and internal controls surrounding the completion of Cost Accounting Standards exemptions	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	5.3) Direct UF to strengthen its directives/procedures and internal controls for incurring travel costs	\$0.00	9/30/2025
21-1-004	Performance Audit of Incurred Costs – University of Florida (01/15/2021)	6.1) Direct UF to update its current award set-up practices	\$0.00	9/30/2025
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	1.1) Direct UNH to provide documentation supporting that it has repaid or otherwise credited the \$4,604 in questioned long-term visa and travel costs for which it has agreed to reimburse NSF.	\$4,604.00	6/30/2025
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	1.2) Direct UNH to create additional resources that provide guidance regarding the allowable charging of visa fees on NSF awards.	\$0.00	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	1.3) Direct UNH to update its travel policies and procedures to address the allowability of early departure expenses, as well as the importance of appropriately allocating conference registration expenses.	\$0.00	6/30/2025
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	2.1) Resolve the \$3,150 in questioned inadequately supported service expenses and direct UNH to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$3,150.00	6/30/2025
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	2.2) Direct UNH to strengthen its policies and procedures for establishing consulting service agreements	\$0.00	6/30/2025
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	3.1) Direct UNH to strengthen its internal controls to ensure Principal Investigators approve—and UNH pays—subrecipient invoices within the 30-day requirement.	\$0.00	6/30/2025
24-1-004	Performance Audit of Incurred Costs – University of New Hampshire (1/26/2024)	3.2) Direct UNH to strengthen its internal controls to ensure: (i) Supplemental Pay Request Forms are appropriately approved prior to allowing individuals to earn additional salary	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.1) Resolve the \$72,578 in questioned indirect costs for which MSU has not agreed to reimburse NSF and direct MSU to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$72,578.00	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.2) Direct MSU to provide documentation supporting that it has repaid or otherwise credited the \$14,303 in questioned airfare, participant support costs, and Graduate Research Fellowship Program (GRFP) expenses for which it has agreed to reimburse NSF.	\$14,303.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.3) Strengthen policies and procedures related to the capitalization of constructed equipment	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.4) Direct MSU to develop formal policies and procedures for reviewing subawardee invoices to verify that the subawardee is appropriately applying indirect costs using the rate(s) included in the subawardee's approved Negotiated Indirect Cost	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.5) Strengthen procedures for booking and approving travel expenses.	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.6) Direct MSU to implement additional procedures that require routine reviews of all expenses charged to NSF awards as participant support costs to verify that MSU incurred the costs to support NSF award participants.	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	1.7) Direct MSU to strengthen its procedures surrounding GRFP stipend payments. Updated procedures should ensure that MSU pays GRFP stipends using the stipend rate identified in the relevant NSF GRFP solicitation.	\$0.00	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	2.1) Resolve the \$9,702 in questioned inadequately supported lodging expenses for which MSU has not agreed to reimburse NSF and direct MSU to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$9,702.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	2.2) Direct MSU to provide documentation supporting that it has repaid or otherwise credited the \$12,313 in questioned airfare and internal service expenses for which it has agreed to reimburse NSF.	\$12,313.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	2.3) Direct MSU to strengthen its policies and procedures surrounding the review of expense reports to require reviewers to verify that travelers have supported all costs claimed as allowable per federal and NSF regulations before charging the costs to	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	2.4) Develop policies for establishing internal service provider rate agreements and for verifying rate agreements have been reviewed and approved	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	3.1) Direct MSU to provide documentation supporting that it has repaid or otherwise credited the \$6,439 in questioned publication and tuition expenses for which it has agreed to reimburse NSF.	\$6,439.00	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Questioned	Timeline to Implement
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	3.2) Direct MSU to strengthen its policies and procedures and internal controls for allocating expenses to sponsored projects.	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	4.1) Direct MSU to provide documentation supporting that it has repaid or otherwise credited the \$3,906 in questioned Award Cash Management \$ervice drawdowns for which it has agreed to reimburse NSF.	\$3,906.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	4.2) Direct MSU to strengthen the administrative and management internal controls and procedures surrounding its Award Cash Management \$ervice reconciliation process.	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	5.1) Direct MSU to verify that all of its current subaward policies accurately reflect its subaward invoice approval requirements.	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	5.2) Direct MSU to implement internal controls that require personnel to create contract service agreements to support all consultant services and maintain the agreements throughout the contract's period of performance and after its expiration date	\$0.00	6/30/2025
24-1-006	Performance Audit of Incurred Costs – Montana State University (1/31/2024)	5.3) Direct MSU to conduct annual travel expense reporting trainings for individuals who may travel for sponsored projects	\$0.00	6/30/2025

**GAO-IG Act Exhibits**

Pursuant to P.L. 115-414, the Good Accounting Obligation in Government Act (GAO-IG Act), the following table includes resolved NSF Office of Inspector General recommendations open for more than one year and their associated statuses as of April 30, 2025. In total, there are 111 resolved open recommendations reflecting \$2,571,508

**Open OIG Recommendations - Resolved External Audit Recommendations, as of April 30, 2025**

<b>OIG Report Number</b>	<b>Audit Report Title (Date)</b>	<b>OIG Recommendation</b>	<b>Costs Disallowed</b>	<b>Costs Allowed</b>	<b>Timeline to Implement</b>
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	1.1) Resolve the \$136,024 in questioned conference, travel, and AURA service costs and direct UNC to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$36,336.00	\$99,688.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	1.2) Direct UNC to provide support verifying that it has repaid or otherwise credited the \$39,389 of questioned equipment, internal service center, salary, and other direct costs for which it has agreed to reimburse NSF.	\$39,389.00	\$0.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	2.1) Resolve the \$164,313 in questioned subaward costs and direct UNC to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$164,313.00	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	3.1) Direct UNC to provide support verifying that it has repaid or otherwise credited the \$103,250 of questioned unsupported ACM\$ cash drawdowns for which it has agreed to reimburse NSF.	\$103,250.00	\$0.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	4.1) Resolve the \$26,505 in inappropriately allocated materials and supplies, travel, and equipment costs for which UNC has not agreed to reimburse NSF and direct UNC to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$17,823.00	\$8,682.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	4.2) Direct UNC to provide support verifying that it has repaid or otherwise credited the \$61,496 of questioned materials and supplies, travel, equipment, and other direct costs for which it has agreed to reimburse NSF.	\$61,496.00	\$0.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	5.1) Resolve the \$11,542 in meal and lodging per diem expenses for which UNC has not agreed to reimburse NSF and direct UNC to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$11,542.00	\$11,542.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	5.2) Direct UNC to provide support verifying that it has repaid or otherwise credited the \$75,065 in questioned pre-award, PSC, airfare, and other direct cost expenses for which it has agreed to reimburse NSF.	\$75,065.00	\$75,065.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	6.1) Direct UNC to provide support verifying that it has repaid or otherwise credited the \$65,314 of questioned indirect costs for which it has agreed to reimburse NSF.	\$65,314.00	\$65,314.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	7.1) Resolve the \$30,435 in questioned costs related to inappropriately procured equipment and services for which UNC has not agreed to reimburse NSF and direct UNC to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$7,957.00	\$22,478.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	7.2) Direct UNC to provide support verifying that it has repaid or otherwise credited the \$5,143 in server costs for which it has agreed to reimburse NSF.	\$5,143.00	\$5,143.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	8.1) Direct UNC to provide support to verify that it has repaid or otherwise credited the \$17,136 of questioned costs caused by accounting issues for which it has agreed to reimburse NSF.	\$17,136.00	\$17,136.00	9/30/2025
20-1-004	Performance Audit of Incurred Costs – University of North Carolina, Chapel Hill (07/13/2020)	9.1) Direct UNC to provide support to verify that it has repaid or otherwise credited the \$9,059 of questioned costs in inappropriately treated GRFP expenses for which it has agreed to reimburse NSF.	\$9,059.00	\$9,059.00	9/30/2025



OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	1.2) Direct UH to provide documentation that it has repaid or otherwise credited the \$21,513 in questioned conference, travel, and workshop costs for which it has agreed to reimburse NSF.	\$21,513.00	\$21,513.00	9/30/2025
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	2.1) Resolve the \$17,787 in questioned conference, supply, currency conversion, and publication expenses for which UH has not agreed to reimburse NSF and direct UH to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$4,402.00	\$13,385.00	9/30/2025
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	2.2) Direct UH to provide documentation that it has repaid or otherwise credited the \$19,790 in questioned fringe, conference, airfare, parking, and lodging costs for which it has agreed to reimburse NSF.	\$19,790.00	\$19,790.00	9/30/2025
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	2.8) Direct UH to establish clear guidance regarding the allowability of publication expenses.	\$0.00	\$0.00	9/30/2025
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	4.2) Direct UH to provide documentation that it has repaid or otherwise credited the \$3,306 of questioned costs that it has agreed to reimburse.	\$3,306.00	\$3,306.00	9/30/2025
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	5.1) Direct UH to provide documentation that it has repaid or otherwise credited the \$9,954 in questioned costs for which it has agreed to reimburse NSF.	\$9,954.00	\$9,954.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	6.1) Direct UH to provide documentation that it has repaid or otherwise credited the \$1,707 of questioned costs for which it has agreed to reimburse NSF.	\$1,707.00	\$1,707.00	9/30/2025
20-1-005	Performance Audit of Incurred Costs – University of Houston (07/23/2020)	7.3) Direct UH to strengthen its administrative and management procedures surrounding effort reporting.	\$0.00	\$0.00	9/30/2025
21-1-002	Texas A&M University (12/17/2020)	1.6) Direct TAMU to strengthen its administrative and management procedures and internal controls surrounding the purchase of airfare and the approval of travel expense reports.	\$0.00	\$0.00	6/30/2025
21-1-002	Texas A&M University (12/17/2020)	1.7) Direct TAMU to establish clear guidance regarding the allowability of publication expenses, including the need to acknowledge NSF funding sources.	\$0.00	\$0.00	6/30/2025
21-1-002	Texas A&M University (12/17/2020)	2.5) Direct TAMU to strengthen its administrative and management processes and internal controls related to establishing and documenting compensation rates for individuals who perform additional work outside the scope of their regular duties.	\$0.00	\$0.00	6/30/2025
21-1-002	Texas A&M University (12/17/2020)	3.3) Direct TAMU to strengthen its administrative and management procedures and internal controls for allocating expenses to sponsored projects.	\$0.00	\$0.00	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
21-1-002	Texas A&M University (12/17/2020)	4.2) Direct TAMU to provide documentation supporting that it has repaid or otherwise credited the \$13,362 of questioned indirect costs for which it has agreed to reimburse NSF.	\$13,362.00	\$0.00	6/30/2025
21-1-002	Texas A&M University (12/17/2020)	4.3) Direct TAMU to strengthen its administrative and management processes and internal controls for applying indirect costs to Federal awards.	\$0.00	\$0.00	6/30/2025
21-1-002	Texas A&M University (12/17/2020)	6.3) Direct TAMU to strengthen its administrative and management procedures and internal controls related to procurement processes.	\$0.00	\$0.00	6/30/2025
21-1-007	Clemson University (4/30/2021)	1.3) Direct Clemson to strengthen its monitoring procedures and internal control processes for applying indirect costs to Federal awards.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	2.1) Resolve the \$20,471 in questioned unallocable equipment, travel, other direct cost, and publication expenses for which Clemson has not agreed to reimburse NSF and direct Clemson to repay or otherwise remove the sustained QC from its NSF awards.	\$20,471.00	\$20,471.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	2.2) Direct Clemson to provide documentation supporting that it has repaid or otherwise credited the \$36,847 of questioned equipment, travel, other direct costs, and publication costs for which it has agreed to reimburse NSF.	\$36,847.00	\$36,847.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	2.3) Direct Clemson to strengthen its administrative and management controls and processes for allocating expenses to sponsored projects.	\$0.00	\$0.00	

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
21-1-007	Clemson University (4/30/2021)	2.4) Direct Clemson to encourage Principal Investigators to identify and report all award-related travel in their annual reports to NSF.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	2.5) Direct Clemson to implement a process to ensure that personnel review the reasonableness of all employee, non-employee, and participant travel days and charges at the time of reimbursement.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	2.6) Direct Clemson's Office of Grants and Contracts Admin to provide training on how to assess the methodology for allocating publication costs across each sponsored award acknowledged in the publication and document the justification methodology.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	3.1) Resolve the \$58,000 in questioned computer cluster node expenses for which Clemson has not agreed to reimburse NSF and direct Clemson to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$58,000.00	\$58,000.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	3.2) Direct Clemson to periodically assess the fee structure and period allotted for access to the computer cluster node infrastructure.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	3.3) Direct Clemson to strengthen its administrative and management procedures and internal controls for allocating expenses to sponsored projects.	\$0.00	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
21-1-007	Clemson University (4/30/2021)	4.1) Resolve the \$4,396 in questioned consultant, participant support, and service center expenses for which Clemson has not agreed to reimburse NSF and direct Clemson to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$4,396.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	4.3) Direct Clemson to strengthen its policies and procedures related to creating and retaining documentation to help ensure that it appropriately creates and maintains all documentation to support the allowability of expenses charged to sponsored programs	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	5.1) Resolve the \$2,151 in questioned travel and salary costs for which Clemson has not agreed to reimburse NSF and direct Clemson to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$1,906.00	\$245.00	
21-1-007	Clemson University (4/30/2021)	5.3) Direct Clemson to strengthen its policies and procedures related to creating and retaining documentation.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	5.4) Direct Clemson to strengthen its administrative and management processes and procedures surrounding the approval of travel expense reports.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	5.5) Direct Clemson to establish clear guidance regarding the allowability of participant support funding for employee travel.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	5.6) Direct Clemson to establish procedures to ensure that its salary payments do not exceed the employee's Institutional Base Salary.	\$0.00	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
21-1-007	Clemson University (4/30/2021)	6.2) Direct Clemson to update its current proposal submission and award set-up practices to require that for NSF awards, personnel ensure that the accounts apply indirect costs as directed by the supplemental funding letter	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	7.1) Direct Clemson to ensure that it has performed risk evaluations for all subawards issued prior to June 2018 and that these risk evaluations remain active, to validate the agreements in accordance with Federal regulations.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	8.1) Direct Clemson to update its current pre-award procedures and internal controls for reviewing NSF proposal budgets to ensure that all costs included within the participant support cost budget comply with NSF terms and conditions.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	8.2) Direct Clemson to update its current procedures and internal controls to ensure that Principal Investigators submit final reports to NSF in accordance with NSF's terms and conditions.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	9.1) Direct Clemson to strengthen its admin & mgt procedures for equipment expenditures to ensure that the Office of GCA approves all equipment purchased with non-sponsored funds and subsequently transferred to sponsored funds.	\$0.00	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
21-1-007	Clemson University (4/30/2021)	9.2) Direct Clemson to strengthen its administrative and management procedures to confirm it has completed the subrecipient documentation package before approving non-budgeted subawards.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	9.3) Direct Clemson to strengthen its administrative and management procedures and internal controls related to the effort certification process.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	9.4) Direct Clemson to strengthen its administrative and management processes surrounding document retention for purchases on sponsored awards.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	9.5) Direct Clemson to strengthen its directives, procedures, and internal controls for obtaining approval for foreign travel before the trip occurs.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	9.6) Direct Clemson to strengthen its directives, procedures, and internal controls for procuring contract services on sponsored projects.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	9.7) Direct Clemson to strengthen its procedures and internal controls for reviewing account codes that are required to incur indirect costs.	\$0.00	\$0.00	9/30/2025
21-1-007	Clemson University (4/30/2021)	10.1) Direct Clemson to update its current award set-up practices to require that personnel ensure that the accounts apply indirect costs using the rates that were established in the NICRA in effect as of the date of the NSF grant award.	\$0.00	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
21-1-007	Clemson University (4/30/2021)	10.2) Direct Clemson to require subawardees to apply indirect costs using the rates that were established in the NICRA in effect as of the date the subaward was granted, rather than using the rates included within the subaward budget and proposal.	\$0.00	\$0.00	9/30/2025
21-1-017	Tennessee State University (7/20/2021)	1.3) Direct TSU to strengthen the administrative and management controls and processes over obtaining and maintaining sufficient supporting documentation.	\$0.00	\$0.00	9/30/2025
21-1-017	Tennessee State University (7/20/2021)	2.3) Direct TSU to strengthen its administrative and management controls and processes over the proper allocation of costs.	\$0.00	\$0.00	9/30/2025
21-1-017	Tennessee State University (7/20/2021)	3.3) Direct TSU to update its administrative and management processes and internal control procedures related to assigning participant support costs within its accounting system.	\$0.00	\$0.00	9/30/2025
21-1-017	Tennessee State University (7/20/2021)	4.2) Direct TSU to update its administrative and management processes and internal control procedures surrounding the ACM\$ system.	\$0.00	\$0.00	9/30/2025
21-1-017	Tennessee State University (7/20/2021)	5.1) Direct TSU to strengthen the administrative and management procedures over certifying time and effort reports in a timely manner.	\$0.00	\$0.00	9/30/2025
21-1-017	Tennessee State University (7/20/2021)	5.2) Direct TSU to strengthen the administrative and management procedures to require the inclusion of pertinent information on time and effort reports such as fund codes, award numbers, and work descriptions.	\$0.00	\$0.00	9/30/2025



OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
22-1-002	Univ. of Texas at Dallas (12/9/2021)	1.1) Resolve the \$91,220 in questioned inadequately supported subaward expenses, internal service provider rates, and meal expenses	\$91,220.00	\$0.00	9/30/2025
22-1-002	Univ. of Texas at Dallas (12/9/2021)	1.2) Direct UTD to provide documentation that it has repaid or otherwise credited the \$551 of questioned travel costs	\$551.00	\$0.00	9/30/2025
22-1-002	Univ. of Texas at Dallas (12/9/2021)	2.1) Resolve the \$65,226 in questioned materials and supplies and travel costs	\$65,226.00	\$0.00	9/30/2025
22-1-002	Univ. of Texas at Dallas (12/9/2021)	2.2) Direct UTD to provide documentation supporting that it has repaid or otherwise credited the \$5,378 of questioned airfare, participant, repair, and travel costs	\$5,378.00	\$0.00	9/30/2025
22-1-002	Univ. of Texas at Dallas (12/9/2021)	3.1) Resolve the \$63,753 in questioned subaward expenses	\$63,753.00	\$0.00	9/30/2025
22-1-002	Univ. of Texas at Dallas (12/9/2021)	4.1) Direct UTD to provide documentation supporting that it has repaid or otherwise credited the \$23,082 in questioned fringe benefit, travel, indirect costs, and Cost of Education allowance costs	\$23,082.00	\$0.00	9/30/2025
22-1-006	California Polytechnic State University Fdn (6/21/2022)	1.3) Direct Cal Poly to implement additional administrative and management procedures surrounding the payment of intra-Institution of Higher Education consulting services.	\$0.00	\$0.00	9/30/2025
22-1-006	California Polytechnic State University Fdn (6/21/2022)	1.4) Direct Cal Poly to strengthen its processes and procedures surrounding the booking and approval of travel expenses.	\$0.00	\$0.00	9/30/2025
22-1-006	California Polytechnic State University Fdn (6/21/2022)	2.2) Direct Cal Poly to strengthen its administrative and management controls and processes for supporting the allocation of expenses to sponsored projects.	\$0.00	\$0.00	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
22-1-006	California Polytechnic State University Fdn (6/21/2022)	3.2) Direct Cal Poly to strengthen its monitoring procedures and internal control processes for applying indirect costs to federal awards.	\$0.00	\$0.00	9/30/2025
22-1-006	California Polytechnic State University Fdn (6/21/2022)	4.3) Direct Cal Poly to strengthen its policies and procedures for creating and retaining documentation, including introducing additional controls, to support the allowability of travel expenses.	\$0.00	\$0.00	9/30/2025
22-1-006	California Polytechnic State University Fdn (6/21/2022)	5.1) Direct Cal Poly to strengthen its administrative and management procedures to ensure the appropriate personnel complete and authorize an independent contractor agreement before a consultant begins work on a project.	\$0.00	\$0.00	9/30/2025
22-1-006	California Polytechnic State University Fdn (6/21/2022)	5.2) Direct Cal Poly to (i) strengthen its admin & mgt procedures to ensure travelers submit their travel expense reports within 10 days of returning and/or (ii) update its policies and procedures to reflect its current expense policies.	\$0.00	\$0.00	9/30/2025
22-1-008	Education Development Center (6/28/2022)	1.2) Direct EDC to provide documentation supporting that it has reimbursed or otherwise credited the \$8,375 in questioned participant support, conference, and consultant travel costs for which it has agreed to reimburse NSF.	\$8,375	\$0	6/30/2025
22-1-008	Education Development Center (6/28/2022)	1.3) Direct EDC to establish clear guidance regarding the allowable uses of participant support cost funding.	\$0	\$0	6/30/2025
22-1-008	Education Development Center (6/28/2022)	1.4) Direct EDC to strengthen its administrative and management processes related to the approval of conference registration fees.	\$0	\$0	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
22-1-008	Education Development Center (6/28/2022)	1.5) Direct EDC to strengthen its administrative and management processes to ensure advertising costs associated with sponsoring conferences are not charged to federal awards unless specifically approved by the award sponsor.	\$0	\$0	6/30/2025
22-1-008	Education Development Center (6/28/2022)	1.6) Direct EDC to strengthen its policies and procedures for creating and retaining documentation, including introducing additional controls to help ensure that it appropriately creates and maintains all documentation necessary to support the allow costs	\$0	\$0	6/30/2025
22-1-008	Education Development Center (6/28/2022)	3.1) Direct EDC to strengthen its administrative and management procedures for travel reimbursements to ensure that its employees utilize the Deltek Expense Report Summary for travel reimbursements.	\$0	\$0	6/30/2025
22-1-009	BSCS Science Learning (6/28/2022)	1.1) Resolve the \$117,804 in questioned indirect costs, travel allowances, and gift card expenses	\$117,804	\$0	6/30/2025
22-1-009	BSCS Science Learning (6/28/2022)	2.1) Resolve the \$39,912 in questioned inadequately supported consultant and participant support expenses	\$40.00	\$39,782	6/30/2025
22-1-009	BSCS Science Learning (6/28/2022)	3.1) Resolve the \$334 in questioned salary expenses	\$334	\$0	6/30/2025
23-1-002	Computing Research Association (10/28/2022)	1.1) Resolve the \$209,767 in Unsupported ACM\$ draws	\$160,903	\$101,606	6/30/2025
23-1-002	Computing Research Association (10/28/2022)	1.2) Direct CRA to provide support it has repaid \$52,742 in agreed to questioned cost	\$52,742	\$52,742	6/30/2025
23-1-002	Computing Research Association (10/28/2022)	2.1) Resolve the \$24,051 in questioned meal expenses	\$24,051	\$24,051	6/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
23-1-002	Computing Research Association (10/28/2022)	2.2) Direct CRA to provide support for the agreed-to-repay \$1,479 in questioned meal expenses	\$1,479	\$1,479	6/30/2025
23-1-002	Computing Research Association (10/28/2022)	3.2) Direct CRA to provide support for the agreed-to-repay \$991 in questioned travel	\$991	\$991	6/30/2025
23-1-002	Computing Research Association (10/28/2022)	4.1) Resolve the \$1,928 in questioned travel and conference expenses	\$949	\$979	6/30/2025
23-1-002	Computing Research Association (10/28/2022)	4.2) Direct CRA to provide support for the agreed-to-repay \$7,010 in questioned alcohol, travel, flight upgrade, meal, and indirect expenses	\$0	\$7,010	6/30/2025
23-1-003	University of Mississippi (11/18/2022)	1.1) Resolve the \$5,000 in questioned inadequately supported service expenses for which UM has not agreed to reimburse NSF and direct UM to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$5,000	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	1.3) Direct UM to strengthen its policies and procedures related to creating and retaining documentation, including introducing additional internal controls to help ensure that it appropriately creates and maintains all documentation necessary to support	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	2.2) Direct UM to strengthen its administrative and management controls and processes for supporting the allocation of expenses to sponsored projects.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	2.3) Direct UM to provide training on how to assess and document the methodology used to allocate publication costs across each sponsored award acknowledged in the publication.	\$0	\$0	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
23-1-003	University of Mississippi (11/18/2022)	3.1) Resolve the \$8,750 in questioned materials and supplies and lodging expenses for which UM has not agreed to reimburse NSF and direct UM to repay or otherwise remove the sustained questioned costs from its NSF awards.	\$8,750	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	3.3) Direct UM to implement additional controls or procedures that ensure costs incurred after an award's period of performance has expired are not charged to NSF awards.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	3.4) Direct UM to strengthen its administrative and management processes and procedures surrounding lodging reservations.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	3.5) Direct UM to establish clear guidance regarding the allowability of publication expenses on sponsored projects, including the requirement to acknowledge NSF funding sources.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	3.6) Direct UM to update its grant close out procedures to require that appropriate personnel verify all participant support cost funds were used to cover participant support cost expenses.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	4.1) Direct UM to strengthen its administrative and management procedures regarding its equipment purchase process to ensure personnel verify, and document that they verified, that equipment is not otherwise available on-campus prior to purchasing new equipment.	\$0	\$0	9/30/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
23-1-003	University of Mississippi (11/18/2022)	4.2) Direct UM to provide annual training for employees on travel requirements and compliance to ensure travelers timely complete any applicable Waiver Request Forms reconcile travel advances as appropriate.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	4.3) Direct UM to require annual trainings for Principal Investigators who execute and monitor subawardees to ensure that UM appropriately completes the Request to Issue Subcontract Form prior to charging subawardee costs to NSF awards and, at the end of the subaward's period of performance, appropriately completes and certifies to close-out of active subawards.	\$0	\$0	9/30/2025
23-1-003	University of Mississippi (11/18/2022)	4.4) Direct UM to implement internal controls to flag invoices submitted by consultants with expired agreements post-expiration of the executed agreement.	\$0	\$0	9/30/2025
23-1-005	IRIS (EarthScope in MTS) (2/7/2023)	2.1) Direct IRIS to Meet with NSF to Establish or Update NICRAs Related to Fringe Benefits	\$0	\$0	9/30/2025
23-1-005	IRIS (EarthScope in MTS) (2/7/2023)	3.1) Direct IRIS to Meet with NSF to Establish or Update its NICRA Related to Indirect Costs	\$0	\$0	9/30/2025
23-1-006	Performance Audit of Incurred Costs – Rensselaer Polytechnic Institute (3/22/2023)	2.1) Resolve the \$5,928 in questioned inappropriately allocated publication costs	\$5,928.00	\$0	8/29/2025
23-1-006	Performance Audit of Incurred Costs – Rensselaer Polytechnic Institute (3/22/2023)	5.1) Resolve the \$611 in questioned inadequately supported travel expenses	\$611.00	\$0	8/29/2025

OIG Report Number	Audit Report Title (Date)	OIG Recommendation	Costs Disallowed	Costs Allowed	Timeline to Implement
24-1-008	Performance Audit of Incurred Costs – University of Oklahoma (03/6/2024)	1.1) Resolve the \$1,124,864 in questioned subaward expenses for which OU has not agreed to reimburse NSF.	\$1,124,864.00	\$0	5/30/2025

## TECHNICAL INFORMATION

**For definitions of common acronyms used throughout NSF's FY 2026 Budget Request, see the NOTES found at the beginning of the entire document on pages iii-iv.**

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## **FY 2026 APPROPRIATIONS LANGUAGE**

### **National Science Foundation**

#### **RESEARCH, AND RELATED ACTIVITIES**

For necessary expenses in carrying out the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.), and Public Law 86-209 (42 U.S.C. 1880 et seq.); services as authorized by section 3109 of title 5, United States Code; maintenance and operation of aircraft and purchase of flight services for research support; acquisition of aircraft; and authorized travel; \$3,276,150,000, to remain available until September 30, 2027: *Provided*, That of the amounts appropriated under this heading, not to exceed \$500,000,000 shall remain available until expended for polar research and operations support, and for reimbursement to other Federal agencies for operational and science support and logistical and other related activities for the United States Antarctic program: *Provided further*, That of the amounts in the preceding proviso, not less than \$109,310,000 shall be for U.S. Antarctic Logistical Support: *Provided further*, That receipts for scientific support services and materials furnished by the National Research Centers and other National Science Foundation supported research facilities may be credited to this appropriation.

#### **MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION**

For necessary expenses for the acquisition, construction, commissioning, and upgrading of major research equipment, facilities, and other such capital assets pursuant to the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.), including authorized travel, \$251,000,000, to remain available until expended.

#### **AGENCY OPERATIONS AND AWARD MANAGEMENT**

For agency operations and award management necessary in carrying out the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.); services authorized by section 3109 of title 5, United States Code; hire of passenger motor vehicles; uniforms or allowances therefor, as authorized by sections 5901 and 5902 of title 5, United States Code; rental of conference rooms in the District of Columbia; and reimbursement of the Department of Homeland Security for security guard services; \$355,000,000, to remain available until September 30, 2027: *Provided*, That not to exceed \$8,280 is for official reception and representation expenses: *Provided further*, That contracts may be entered into under this heading in fiscal year 2027 for maintenance and operation of facilities and for other services to be provided during the next fiscal year.

#### **OFFICE OF THE NATIONAL SCIENCE BOARD**

For necessary expenses (including payment of salaries, authorized travel, hire of passenger motor vehicles, the rental of conference rooms in the District of Columbia, and the employment of experts and consultants under section 3109 of title 5, United States Code) involved in carrying out section 4 of the National Science Foundation Act of 1950 (42 U.S.C. 1863) and Public Law 86-209 (42 U.S.C. 1880 et seq.), \$3,000,000: *Provided*, That not to exceed \$2,500 shall be available for official reception and representation expenses.

**OFFICE OF INSPECTOR GENERAL**

For necessary expenses of the Office of Inspector General as authorized by the Inspector General Act of 1978, \$18,000,000, of which \$1,300,000 shall remain available until September 30, 2027.

**ADMINISTRATIVE PROVISIONS  
(INCLUDING TRANSFER OF FUNDS)**

Not to exceed 5 percent of any appropriation made available for the current fiscal year for the National Science Foundation in this Act may be transferred between such appropriations, but no such appropriation shall be increased by more than 10 percent by any such transfers. Any transfer pursuant to this paragraph shall be treated as a reprogramming of funds under section 504 of this Act and shall not be available for obligation except in compliance with the procedures set forth in that section.

The Director of the National Science Foundation (NSF) shall notify the Committees on Appropriations of the House of Representatives and the Senate at least 30 days in advance of any planned divestment through transfer, decommissioning, termination, or deconstruction of any NSF-owned facilities or any NSF capital assets (including land, structures, and equipment) valued greater than \$2,500,000.

This title may be cited as the “Science Appropriations Act, 2026”.

**SUMMARY OF FY 2026 BUDGETARY RESOURCES BY ACCOUNT**

(Dollars in Millions)

	FY 2024 Actual	FY 2025 Enacted	FY 2026 Request	Change Over FY 2025 Enacted	
				Amount	Percent
<b>Discretionary Accounts</b>					
<b>RESEARCH AND RELATED ACTIVITIES</b>					
Appropriation	\$7,176.50	\$7,176.50	\$3,276.15	-\$3,900.35	-54.3%
Unobligated Balance Available Start of Year	405.29	-132.90		132.90	
Unobligated Balance Available End of Year	132.90				
Unobligated Balance Transferred to other accounts	-22.99				
Adjustments to Prior Year Accounts <sup>1</sup>	29.60				
<b>Total Budgetary Resources</b>	<b>\$7,721.30</b>	<b>\$7,043.60</b>	<b>\$3,276.15</b>	<b>-\$3,767.45</b>	<b>-53.5%</b>
<b>STEM EDUCATION</b>					
Appropriation	1,172.00	1,172.00	-	-1,172.00	-100.0%
Unobligated Balance Available Start of Year	112.68	80.39		-80.39	
Unobligated Balance Available End of Year	-80.39				
Unobligated Balance Transferred to other accounts	-0.55				
Adjustments to Prior Year Accounts <sup>1</sup>	3.48				
<b>Total Budgetary Resources</b>	<b>\$1,207.21</b>	<b>\$1,252.39</b>	<b>-</b>	<b>-\$1,252.39</b>	<b>-100.0%</b>
<b>MAJOR RESEARCH EQUIPMENT &amp; FACILITIES CONSTRUCTION</b>					
Appropriation	234.00		251.00	251.00	N/A
Unobligated Balance Available Start of Year	361.32	342.37		-342.37	
Unobligated Balance Available End of Year	-342.37				
Adjustments to Prior Year Accounts <sup>1</sup>	0.50				
<b>Total Budgetary Resources</b>	<b>\$253.45</b>	<b>\$342.37</b>	<b>\$251.00</b>	<b>-\$91.37</b>	<b>-26.7%</b>

Technical Information

**SUMMARY OF FY 2026 BUDGETARY RESOURCES BY ACCOUNT**

(Dollars in Millions)

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>Change Over</b>	
	<b>Actual</b>	<b>Enacted</b>	<b>Request</b>	<b>FY 2025 Enacted</b>	<b>Percent</b>
<b>Discretionary Accounts</b>				<b>Amount</b>	<b>Percent</b>
<b>AGENCY OPERATIONS AND AWARD MANAGEMENT</b>					
Appropriation	\$448.00	\$448.00	\$355.00	-\$93.00	-20.8%
Unobligated Balance Available Start of Year	0.02	0.04			
Unobligated Balance Available End of Year	-0.02				
Unobligated Balance Transferred from other accounts	23.54				
Adjustments to Prior Year Accounts <sup>1</sup>	0.02				
Unobligated Balance - Expired	0.17				
<b>Total Budgetary Resources</b>	<b>\$471.73</b>	<b>\$448.04</b>	<b>\$355.00</b>	<b>-\$93.04</b>	<b>-20.8%</b>
<b>NATIONAL SCIENCE BOARD</b>					
Appropriation	5.09	5.09	3.00	-2.09	-41.1%
Unobligated Balance - Expired	-0.14				
<b>Total Budgetary Resources</b>	<b>\$4.95</b>	<b>\$5.09</b>	<b>\$3.00</b>	<b>-\$2.09</b>	<b>-41.1%</b>
<b>OFFICE OF INSPECTOR GENERAL</b>					
Appropriation	24.41	24.41	18.00	-6.41	-26.3%
Unobligated Balance Available Start of Year	0.40	-1.30		1.30	
Unobligated Balance Available End of Year	1.30				
Unobligated Balance - Expired	-0.03				
<b>Total Budgetary Resources</b>	<b>\$26.08</b>	<b>\$23.11</b>	<b>\$18.00</b>	<b>-\$5.11</b>	<b>-22.1%</b>
<b>TOTAL DISCRETIONARY, NATIONAL SCIENCE FOUNDATION</b>	<b>\$9,684.72</b>	<b>\$9,114.60</b>	<b>\$3,903.15</b>	<b>-\$5,211.45</b>	<b>-57.2%</b>

Totals exclude reimbursable amounts.

<sup>1</sup>Adjustments include upward and downward adjustments to prior year obligations in unexpired accounts.

## SUMMARY OF FY 2026 BUDGETARY RESOURCES BY ACCOUNT

(Dollars in Millions)

	FY 2024 Actual	FY 2025 Enacted	FY 2026 Request	Change Over FY 2025 Enacted	
				Amount	Percent
<b>Mandatory Accounts</b>					
<b><i>STEM EDUCATION, H-1B</i></b>					
Appropriation, Mandatory (H1-B Non-Immigrant Petitioner Fees)	\$158.87	\$138.93	\$150.46	\$11.53	8.3%
Unobligated Balance Available Start of Year	80.04	141.56		-141.56	
Sequestration Previously Unavailable	7.69	9.06	7.92	-1.14	
Sequestration Pursuant OMB M-13-06	-9.06	-7.92	-8.58	-0.66	
Unobligated Balance Available End of Year	-141.56				
Adjustments to Prior Year Accounts <sup>1</sup>	9.32				
<b>Total Budgetary Resources</b>	<b>\$105.32</b>	<b>\$281.62</b>	<b>\$149.80</b>	<b>-\$131.82</b>	<b>-46.8%</b>
<b><i>Creating Helpful Incentives to Produce Semiconductors (CHIPS) for American Workforce and Education</i></b>					
Appropriation, Mandatory (CHIPS H.R. 4346)	25.00	\$50.00	50.00	-	-
Unobligated Balance Available Start of Year	-	\$25.00		-25.00	
Unobligated Balance Available End of Year	-25.00				
<b>Total Budgetary Resources</b>	<b>-</b>	<b>\$75.00</b>	<b>\$50.00</b>	<b>-\$25.00</b>	<b>-33.3%</b>
<b><i>DONATIONS</i></b>					
Mandatory Programs (Special or Trust Fund)	30.87	40.00	40.00	-	-
Unobligated Balance Available Start of Year	27.50	23.45		-23.45	
Unobligated Balance Available End of Year	-23.45				
Adjustments to Prior Year Accounts <sup>1</sup>	0.00				
<b>Total Budgetary Resources</b>	<b>\$34.92</b>	<b>\$63.45</b>	<b>\$40.00</b>	<b>-\$23.45</b>	<b>-37.0%</b>
<b>TOTAL MANDATORY ACCOUNTS, NATIONAL SCIENCE FOUNDATION</b>	<b>\$140.24</b>	<b>\$420.08</b>	<b>\$239.80</b>	<b>-\$180.27</b>	<b>-42.9%</b>

Totals exclude reimbursable amounts.

<sup>1</sup>Adjustments include upward and downward adjustments to prior year obligations in unexpired accounts.

**OBJECT CLASSIFICATION**  
**NSF Consolidated Obligations**  
(Dollars in Millions)

<b>Object</b>		<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
<b>Class Code</b>	<b>Standard Title</b>	<b>Actual<sup>1</sup></b>	<b>Estimate</b>	<b>Request</b>
<b>11.1</b>	Full-time permanent	\$233	\$253	\$205
<b>11.3</b>	Other than full-time permanent	13	13	11
<b>11.5</b>	Other personnel compensation	9	9	8
<b>11.8</b>	Special personal service payment	70	69	28
	Total personnel compensation	\$325	\$344	\$252
<b>12.1</b>	Civilian personnel benefits	87	93	75
<b>21.0</b>	Travel and transportation of persons	17	13	11
<b>22.0</b>	Transportation of things	1	1	-
<b>23.1</b>	Rental payments	26	33	32
<b>23.2</b>	Rental payments to others	-	-	-
<b>23.3</b>	Communications, utilities, and miscellaneous charges	2	2	2
<b>25.1</b>	Advisory and assistance services	325	297	121
<b>25.2</b>	Other services	71	51	19
<b>25.3</b>	Purchases of goods and services from Government Accounts	216	210	99
<b>25.4</b>	Operation and maintenance of facilities	335	334	167
<b>25.5</b>	Research and development contracts	66	65	28
<b>25.7</b>	Operation and maintenance of equipment	1	1	-
<b>26.0</b>	Supplies and materials	-	-	-
<b>31.0</b>	Equipment	9	7	2
<b>41.0</b>	Grants, subsidies, and contributions	7,926	7,903	3,094
<b>99.5</b>	Adjustment for rounding	1	-	-
	<b>Total, Direct obligations<sup>2</sup></b>	<b>\$9,408</b>	<b>\$9,354</b>	<b>\$3,902</b>

<sup>1</sup> FY 2024 Actual obligations include \$316 million from the Disaster Relief Supplemental Appropriation Act.

<sup>2</sup> Excludes obligations for reimbursable and mandatory accounts.

**REIMBURSABLE ACTIVITY**

Funding in the table represents incoming funding NSF received and obligated under the reimbursable authority from other agencies. Outgoing interagency agreement funding is not represented in this table. NSF enters into agreements (including Memoranda of Understanding) with other U.S. government agencies, as authorized by the NSF Act, 42 U.S.C. 1870 (c), and 42 USC 1873(f), under which NSF assumes some responsibility for activities supported by these agencies. These activities can include jointly funded projects and programs, support of research operations and logistics, and access to NSF supported research facilities.

<b>NSF Reimbursements by Agency</b>	
(Dollars in Millions)	
	FY 2024
DEPARTMENT/AGENCY	Actual
Defense	
<i>Air Force</i>	\$16.00
<i>Defense</i>	9.38
<i>Navy</i>	6.96
<i>Army</i>	5.85
Subtotal, DoD	\$38.19
Commerce (Including Census, NOAA, & NIST)	13.09
Interior	1.45
Energy	4.74
Health & Human Services	23.70
Homeland Security	8.16
NASA	3.51
State	1.50
Education	2.37
Treasury	3.31
National Endowment for the Humanities	0.54
Other (less than \$500,000)	1.19
<b>TOTAL REIMBURSEMENTS</b>	<b>\$101.75</b>
Totals may not add due to rounding.	

Consistent with applicable legislation and GAO decisions, agreements include reimbursement for costs that are incurred in the management and administration of these awards.



## EXPLANATION OF FY 2024 CARRYOVER INTO FY 2025 BY ACCOUNT

The National Science Foundation's total unobligated balance of \$755.97 million (\$565.96 million from Discretionary accounts, and \$190.01 million from Mandatory accounts) is described below.

**Discretionary and Mandatory Accounts:**  
**Distribution of NSF FY 2024 Carryover into FY 2025**  
(Dollars in Millions)

<b>Discretionary Accounts:</b>	
Polar-Research and Related Activities No Year	\$24.11
Emergency - Research and Related Activities No Year (P.L. 115-123)	7.98
Research and Related Activities	109.82
STEM Education	80.39
Major Research Equipment and Facilities Construction	180.83
Major Research Equipment and Facilities Construction Emergency Funding	161.54
Office of Inspector General	1.30
<b>Total, Discretionary</b>	<b>\$565.96</b>
<b>Mandatory Accounts:</b>	
Creating Helpful Incentives to Produce Semiconductors (CHIPS)	25.00
H-1B Non-Immigrant Petitioner	141.56
Donations	23.45
<b>Total, Mandatory</b>	<b>\$190.01</b>
<b>TOTAL, NSF</b>	<b>\$755.97</b>

### Discretionary (Appropriated) Accounts

#### Polar - Research and Related No Year Activities (OPP)

Within the R&RA account, \$24.11 million was carried over into FY 2025.

##### *OPP - Antarctic Operations Support*

- Amount: \$13.88 million
- Purpose: Integration award for the Arctic Research Vessel (ARV).
- Obligation: Anticipated FY 2025 Quarter 3 and Quarter 4

The remaining \$10.23 million within the Polar-R&RA consists of funds for projects not funded in FY 2024.

#### Research and Related No Year Activities (P.L. 115-123)

Within the R&RA account, \$7.98 million is estimated for carryover into FY 2025.

##### *R&RA Emergency Fund – DEFC C*

- Amount: \$7.98 million

- Purpose: For possible redirection of Hurricane Supplemental funding to other projects that was returned due to the collapse of Arecibo Observatory; discussions are pending with congressional components.
- Obligation: TBD

#### Research and Related Activities (R&RA)

Within the R&RA account, \$109.82 million is estimated for carryover into FY 2025.

##### *CISE - Office of Advanced Cyberinfrastructure*

- Amount: \$6.47 million
- Purpose: For an Open Artificial Intelligence Testbed for Edge Computing and Intelligent Sensing.
- Obligation: Obligated FY 2025 Quarter 1

##### *ENG - Emerging Frontiers and Multidisciplinary Activities (EFMA))*

- Amount: \$7.42 million
- Purpose: Funding of Engineering Research Center (ERC) increments in Emerging Industries. The planned partnership with Intel in the area of PFAS in Semiconductors has been delayed.
- Obligation: Approximately \$355,000 remains to be obligated in FY 2025 Quarter 3

##### *MPS - Astronomy*

- Amount: \$3.0 million
- Purpose: For a supplemental award to DKIST to cover instrument development needed to complete commissioning.
- Obligation: Obligated FY 2025 Quarter 2

##### *MPS-Astronomy*

- Amount: \$2.50 million
- Purpose: For a proposed supplement to support development of the NOIRLab Program Platform (NPP), a suite of user-based IT services with integrated data management and science data.
- Obligation: Obligated FY 2025 Quarter 2

##### *MPS-Chemistry*

- Amount: \$4.0 million
- Purpose: For late-arriving proposals through an MOU with ANR related to sustainable chemistry and catalysis with earth-abundant elements (\$2.0 million) and for Chemical Structure and Dynamics awards (\$2.0 million).
- Obligation: Obligated FY 2025 Quarter 1 and Quarter 2

##### *TIP - Translational Impact*

- Amount: \$6.87 million
- Purpose: SBIR/STTR actions unable to be processed by fiscal year-end due to the late receipt of final allocation.
- Obligation: Obligated FY 2025 Quarter 3

## *Technical Information*

### *TIP - Innovation & Technology Ecosystems*

- Amount: \$9.83 million
- Purpose: Convergence accelerator regionalization awards and NSF Engines that were unable to be processed by fiscal year-end due to the late receipt of final allocation.
- Obligation: Obligated FY 2025 Quarter 2

### *TIP - Technology Frontiers*

- Amount: \$39.75 million
- Purpose: Supporting several Emerging Technology projects that were unable to be processed by fiscal year-end due to the late receipt of final allocation.
- Obligation: \$5.10 million remains to be obligated in FY 2025 Quarter 4

### *IA – Integrative Activities*

- Amount: \$12.50 million
- Purpose: Funds will support procurements and new award activities that were not ready for obligation in FY 2024.
- Obligation: Obligated FY 2025 Quarter 2 and Quarter 3

### *Compliance in Research program (funds held within IA but managed by OCR)*

- Amount: \$2.11 million
- Purpose: For award activities that were not ready for obligation in FY 2024.
- Obligation: Obligated FY 2025 Quarter 3

### *Research Investment Communications (funds held within IA but managed by OLPA)*

- Amount: \$1.73 million
- Purpose: For NSF multimedia awards to support communications contracts that enable NSF to engage with stakeholders including Congress, elected officials, national and international institutions, and general public.
- Obligation: Obligated FY 2025 Quarter 3

### *Research Security Strategy and Policy (funds held within IA but managed by CRSP)*

- Amount: \$2.33 million
- Purpose: For activities to support the U.S. research community to identify and characterize attributes that distinguish research security from research integrity; to improve the understanding of the scale and scope of research security risks; and to develop methodologies to assess the potential impact of research security threats.
- Obligation: Anticipated FY 2025 Quarter 4

The remaining \$11.31 million within discretionary R&RA consists of cumulative funds from throughout the Foundation carried over for unspecified projects. These balances are planned for obligation in FY 2025 consistent with the approved FY 2024 Current Plan.

### STEM Education (EDU)

Within the EDU account, \$80.39 million was carried over into FY 2025.

### *Undergraduate Education (DUE)*

- Amount: \$39.97 million

- Purpose: For awards in DUE programs to include the National STEM Teacher Corps program that were delayed in starting.
- Obligation: \$33.14 million remains to be obligated in FY 2025 Quarter 4

*Division of Equity for Excellence in Stem (EES)*

- Amount: \$29.11 million
- Purpose: For awards delayed due to late solicitations.
- Obligation: \$14.07 million remains to be obligated in FY 2025 Quarter 4

*Division of Research on Learning (DRL)*

- Amount: \$1.62 million
- Purpose: To support programs where solicitation deadlines were too late in the fiscal year to process awards.
- Obligation: Anticipated FY 2025 Quarter 4

*Robert Noyce Teacher Scholarship Program (Noyce) - no year funds*

- Amount: \$9.69 million
- Purpose: To fund teacher preparation and/or support Noyce fellows.
- Obligation: Anticipated FY 2025 Quarter 3 and Quarter 4

Major Research Equipment and Facilities Construction (MREFC)

Within the MREFC account, \$180.83 million was carried over into FY 2025.

*Vera C. Rubin Observatory (Rubin)*

- Amount: \$13.78 million
- Purpose: For final obligations to Rubin Observatory
- Obligation: \$7.50 million obligated FY 2025 Quarter 2; anticipate remainder FY 2025 Quarter 4.

*Regional Class Research Vessel (RCRV)*

- Amount: \$8.53 million, including \$1.55 million from Hurricane Ida supplemental funding (P.L. 117-43)
- Purpose: For final obligations to RCRV.
- Obligation: NSF-held management reserve obligated based on need.

*Antarctic Infrastructure Modernization for Science (AIMS)*

- Amount: \$126.34 million
- Purpose: For completion of AIMS Lodging facility; re-programming to AIR for currently unfunded components of AIMS to be completed on future contract.
- Obligation: \$12.0 million obligated FY 2025 Quarter 2; anticipate \$10.0 million FY 2025 Quarter 4.

*Antarctic Infrastructure Recapitalization (AIR)*

- Amount: \$1.0 million
- Purpose: For obligations, which are proceeding as anticipated
- Obligation: Obligated FY 2025 Quarter 3

## *Technical Information*

### *High Luminosity-Large Hadron Collider Upgrade (HL-LHC)*

- Amount: \$23.03 million
- Purpose: For continuation of the HL-LHC projects (CMS & ATLAS)
- Obligation: \$10 million obligated FY 2025 Quarter 2; anticipate remainder FY 2025 Quarter 4

### *Research Infrastructure Office (Advanced Oversight)*

- Amount: \$220,000
- Purpose: For Advanced Oversight
- Obligation: Anticipate obligation in FY 2025 Quarter 3

The remaining \$7.93 million within the discretionary MREFC account consists of funds from throughout the Foundation for projects not funded in FY 2024.

### Major Research Equipment and Facilities Construction (MREFC) Disaster Funding

Within the MREFC account, \$161.54 million was carried over into FY 2025.

### *Vera C. Rubin Observatory (Rubin)*

- Amount: \$7.61 million
- Purpose: For final obligations to Rubin Observatory
- Obligation: Obligated FY2025 Quarter 2

### *Leadership Class Computing Facility*

- Amount: \$140,000
- Purpose: For continuation of LCCF
- Obligation: Obligated FY 2025 Quarter 3

### *Mid-scale Research Infrastructure Track 2 (Mid-scale RI-2)*

- Amount: \$57.07 million
- Purpose: For obligations, which are proceeding as anticipated. This portfolio has out-year mortgages on current awards.
- Obligation: \$7.50 million obligated FY 2025 Quarter 1 and Quarter 2; anticipate additional obligations FY 2025 Quarter 4.

### *Antarctic Infrastructure Recapitalization (AIR)*

- Amount: \$58.22 million
- Purpose: For the Antarctic Infrastructure Recapitalization (AIR) Program
- Obligation: \$4.50 million obligated FY 2025 Quarter 1; anticipate \$19.0 million FY 2025 Quarter 3 and \$10.0 million FY 2025 Quarter 4.

### *High Luminosity-Large Hadron Collider Upgrade (HL-LHC)*

- Amount: \$38.0 million
- Purpose: For continuation of the HL-LHC projects (CMS & ATLAS)
- Obligation: Anticipate obligation in FY 2025 Quarter 4

### *Research Infrastructure Office (Advanced Oversight)*

- Amount: \$500,000
- Purpose: For Advanced Oversight

- Obligation: Obligated FY 2025 Quarter 1

#### Office of Inspector General (OIG)

Within the OIG two-year account, \$1.30 million was carried over into FY 2025.

- Amount: \$1.30 million
- Purpose: To procure financial and performance audit services.
- Obligation: Anticipate obligation in FY 2025 Quarter 3

### **Mandatory Accounts**

#### Creating Helpful Incentives to Produce Semiconductors (CHIPS) for America Workforce and Education Fund

Within the CHIPS and Science Act P.L. 117-167, Chips for America Workforce and Education Fund, \$25.0 million was carried over into FY 2025.

#### *EDU - Undergraduate Education*

- Amount: \$12.50 million
- Purpose: National Network Microelectronics award
- Obligation: Obligated FY 2025 Quarter 2

#### *RRA - TIP - Technology Frontiers (TF)*

- Amount: \$12.50 million
- Purpose: National Network Microelectronics award
- Obligation: Obligated FY 2025 Quarter 2

#### H-1B Non-Immigrant Petitioner

Within the H-1B account, \$141.56 million was carried over into FY 2025.

#### *Innovation Technology Experiences for Students (ITEST)*

- Amount: \$83.39 million
- Purpose: NSF receives the largest payments of H-1B visa fees in August and September, leaving insufficient time to obligate the receipts on awards before the end of the fiscal year.
- Obligation: Obligated FY 2025 Quarters 1-2

#### *Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)*

- Amount: \$58.17 million
- Purpose: NSF receives the largest payments of H-1B visa fees in August and September, leaving insufficient time to obligate the receipts on awards before the end of the fiscal year.
- Obligation: Obligated FY 2025 Quarters 1-2

#### Donations

Within the Donations account, \$23.45 million was carried over into FY 2025. Donations are received from organizations and individuals to fund various cooperative efforts in science, research, and education.

## QUANTITATIVE DATA TABLE

### National Science Foundation Research and Development Special Analysis (Dollars in Millions)

	FY 2024 Actual <sup>1</sup>	FY 2025 Estimate	FY 2026 Request
Investment Activities			
Conduct of Research and Development			
Basic Research.....	5,802.96	5,606.25	2,417.15
Applied Research.....	1,145.56	1,171.25	359.00
Subtotal, Conduct of R&D.....	6,948.52	6,777.50	2,776.15
Physical Assets			
Research and Development Facilities.....	255.37	2.00	252.00
Research and Development Major Equipment.....	252.27	243.00	109.00
Subtotal, R&D Facilities & Major Equipment.....	507.65	245.00	361.00
Total, Research and Development.....	7,456.17	7,022.50	3,137.15
Conduct of Education and Training.....	785.85	735.00	118.00
Non-Investment Activities.....	1,168.78	1,128.09	698.00
<b>TOTAL.....</b>	<b>\$9,410.80</b>	<b>\$8,885.59</b>	<b>\$3,953.15</b>

<sup>1</sup>FY 2024 Actual includes \$316 million from the Disaster Relief Supplemental Appropriation Act.

## QUANTITATIVE DATA TABLE

**RESEARCH AND RELATED ACTIVITIES**  
**Research and Development Special Analysis**  
(Dollars in Millions)

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
	<b>Actual<sup>1</sup></b>	<b>Estimate</b>	<b>Request</b>
Investment Activities			
Conduct of Research and Development			
Basic Research.....	5,601.13	5,402.25	2,417.15
Applied Research.....	809.82	781.25	349.00
Subtotal, Conduct of R&D.....	6,410.95	6,183.50	2,766.15
Physical Assets			
Research and Development Facilities.....	1.92	2.00	1.00
Research and Development Major Equipment.....	252.26	243.00	109.00
Subtotal, R&D Facilities & Major Equipment.....	254.18	245.00	110.00
Total, Research and Development.....	6,665.13	6,428.50	2,876.15
Conduct of Education and Training.....	179.72	173.00	78.00
Non-Investment Activities.....	606.48	585.00	322.00
<b>TOTAL.....</b>	<b>\$7,451.33</b>	<b>\$7,186.50</b>	<b>\$3,276.15</b>

<sup>1</sup>FY 2024 Actual includes \$222 million from the Disaster Relief Supplemental Appropriation Act.



## QUANTITATIVE DATA TABLE

**STEM EDUCATION**  
**Research and Development Special Analysis**  
(Dollars in Millions)

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
	<b>Actual<sup>1</sup></b>	<b>Estimate</b>	<b>Request</b>
Investment Activities			
Conduct of Research and Development			
Basic Research.....	201.83	204.00	-
Applied Research.....	335.74	380.00	-
Subtotal, Conduct of R&D.....	537.57	584.00	-
Physical Assets			
Research and Development Facilities.....	-	-	-
Research and Development Major Equipment.....	0.02	-	-
Subtotal, R&D Facilities & Major Equipment.....	0.02	-	-
Total, Research and Development.....	537.59	584.00	-
Conduct of Education and Training.....	606.13	522.00	-
Non-Investment Activities.....	62.49	66.00	-
<b>TOTAL.....</b>	<b>\$1,206.21</b>	<b>\$1,172.00</b>	<b>-</b>

<sup>1</sup> FY 2024 Actual includes \$94 million from the Disaster Relief Supplemental Appropriation Act.

## QUANTITATIVE DATA TABLE

## MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION

## Research and Development Special Analysis

(Dollars in Millions)

	FY 2024	FY 2025	FY 2026
	Actual	Estimate	Request
Investment Activities			
Conduct of Research and Development			
Basic Research.....	-	-	-
Applied Research.....	-	-	-
Subtotal, Conduct of R&D.....	-	-	-
Physical Assets			
Research and Development Facilities.....	253.45	-	251.00
Research and Development Major Equipment.....	-	-	-
Subtotal, R&D Facilities & Major Equipment.....	253.45	-	251.00
Total, Research and Development.....	253.45	-	251.00
Conduct of Education and Training.....	-	-	-
Non-Investment Activities.....	-	-	-
<b>TOTAL.....</b>	<b>\$253.45</b>	<b>-</b>	<b>\$251.00</b>

## QUANTITATIVE DATA TABLE

## AGENCY OPERATIONS AND AWARD MANAGEMENT

## Research and Development Special Analysis

(Dollars in Millions)

	FY 2024	FY 2025	FY 2026
	Actual	Estimate	Request
Investment Activities			
Conduct of Research and Development			
Basic Research.....	-	-	-
Applied Research.....	-	-	-
Subtotal, Conduct of R&D.....	-	-	-
Physical Assets			-
Research and Development Facilities.....	-	-	-
Research and Development Major Equipment.....	-	-	-
Subtotal, R&D Facilities & Major Equipment.....	-	-	-
Total, Research and Development.....	-	-	-
Conduct of Education and Training.....	-	-	-
Non-Investment Activities.....	471.38	448.00	355.00
<b>TOTAL.....</b>	<b>\$471.38</b>	<b>\$448.00</b>	<b>\$355.00</b>

**QUANTITATIVE DATA TABLE**

**OFFICE OF THE NATIONAL SCIENCE BOARD**  
**Research and Development Special Analysis**  
(Dollars in Millions)

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
	<b>Actual</b>	<b>Estimate</b>	<b>Request</b>
Investment Activities			
Conduct of Research and Development			
Basic Research.....	-	-	-
Applied Research.....	-	-	-
Subtotal, Conduct of R&D.....	-	-	-
Physical Assets			
Research and Development Facilities.....	-	-	-
Research and Development Major Equipment.....	-	-	-
Subtotal, R&D Facilities & Major Equipment.....	-	-	-
Total, Research and Development.....	-	-	-
Conduct of Education and Training.....	-	-	-
Non-Investment Activities.....	4.95	5.09	3.00
<b>TOTAL.....</b>	<b>\$4.95</b>	<b>\$5.09</b>	<b>\$3.00</b>

**QUANTITATIVE DATA TABLE**

**OFFICE OF INSPECTOR GENERAL**  
**Research and Development Special Analysis**  
(Dollars in Millions)

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
	<b>Actual</b>	<b>Estimate</b>	<b>Request</b>
Investment Activities			
Conduct of Research and Development			
Basic Research.....	-	-	-
Applied Research.....	-	-	-
Subtotal, Conduct of R&D.....	-	-	-
Physical Assets			-
Research and Development Facilities.....	-	-	-
Research and Development Major Equipment.....	-	-	-
Subtotal, R&D Facilities & Major Equipment.....	-	-	-
Total, Research and Development.....	-	-	-
Conduct of Education and Training.....	-	-	-
Non-Investment Activities.....	23.48	24.00	18.00
<b>TOTAL.....</b>	<b>\$23.48</b>	<b>\$24.00</b>	<b>\$18.00</b>

## QUANTITATIVE DATA TABLE

**Creating Helpful Incentives to Produce Semiconductors (CHIPS) for American Workforce and  
Education**

**Research and Development Special Analysis**

(Dollars in Millions)

	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>
	<b>Actual</b>	<b>Estimate</b>	<b>Request</b>
Investment Activities			
Conduct of Research and Development			
Basic Research.....	-	-	-
Applied Research.....	-	10.00	10.00
Subtotal, Conduct of R&D.....	-	10.00	10.00
Physical Assets			
Research and Development Facilities.....	-	-	-
Research and Development Major Equipment.....	-	-	-
Subtotal, R&D Facilities & Major Equipment.....	-	-	-
Total, Research and Development.....	-	10.00	10.00
Conduct of Education and Training.....	-	40.00	40.00
Non-Investment Activities.....	-	-	-
<b>TOTAL.....</b>	<b>-</b>	<b>\$50.00</b>	<b>\$50.00</b>