

NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is responsible for promoting the progress of science and innovation, including advancing science education. The President's 2025 Budget for NSF builds on previous years' investments and furthers the goals of the CHIPS and Science Act, including: strengthening U.S. leadership in artificial intelligence (AI) and other critical emerging technologies; boosting research and development, including for combating the climate crisis; supporting the Nation's research infrastructure; advancing equity while promoting education and workforce development in science, technology, engineering, and mathematics (STEM); and increasing research security and oversight.

The Budget requests \$10.2 billion in discretionary budget authority for 2025, a \$644 million or 6.8-percent increase from the 2023 level.

The President's 2025 Budget:

- Accelerates Regional Innovation across the Nation. In support of a major priority of the CHIPS and Science Act, the Budget increases investments to translate the results of basic research into practical applications and processes that can benefit the Nation, including \$900 million for the Directorate for Technology, Innovation, and Partnerships, an increase of \$236 million from the 2023 enacted level. The Budget also includes \$205 million for the Regional Innovation Engines program, which facilitates the creation of regional innovation ecosystems, particularly in areas of the Nation that do not already have strong technology ecosystems, bringing good-paying jobs in in-demand industries to more areas.
- Strengthens U.S. Leadership in AI and Emerging Technologies. The Budget provides more than \$2 billion for research and development (R&D) in critical emerging technology areas in alignment with CHIPS and Science Act priorities of boosting U.S. competitiveness in science and technology, including AI, advanced manufacturing, advanced wireless, biotechnologies, microelectronics and semiconductors, and quantum information science. The Budget also includes \$30 million for the second year for a pilot of the National AI Research Resource, as highlighted in Executive Order 14110, "Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence," which aims to democratize access to resources to support the research and innovation needed to build the next generation of safe and trustworthy AI.
- Advances Climate Research and Development. The Budget includes \$1.4 billion for R&D on climate and clean energy technologies, an increase of \$80 million from the 2023 enacted level. This investment supports a broad portfolio of research that includes: atmospheric composition; water and carbon cycles; renewable energy technologies; climate resilience technologies for communities heavily affected by climate change; and social, behavioral, and economic research on human responses to climate change, among other topics.

- Bolsters the Nation's Research Infrastructure. The Budget includes \$300 million for research infrastructure at NSF to support the construction and procurement of research facilities and instrumentation across the Nation to enable scientific and technological advances. The Budget provides support for: upgrades to the Large Hadron Collider, the world's largest particle accelerator; construction of the Leadership-Class Computing Facility to support science and engineering research that requires the largest and most computationally intensive capabilities; and long-term upgrades of NSF's major Antarctic infrastructure. The Budget also includes support for continued design and development work for a single extremely large telescope, which has the potential to advance ground-based astronomy observing capabilities for U.S. researchers.
- Promotes Equity in STEM Education and Workforce Training. In support of the CHIPS and Science Act's priority of building a diverse, STEM-capable workforce, the Budget provides \$1.4 billion for STEM education and workforce development programs at NSF that have an emphasis on diversity, equity, inclusion, and accessibility. Within this amount, the Budget includes \$592 million, an increase of \$51 million from the 2023 enacted level, for programs focused on increasing the participation of groups historically underrepresented in science and engineering fields, including women and girls and people of color, by supporting: curriculum design; research on successful recruitment and retention methods; development of outreach or mentorship programs; fellowships; and building science and engineering research and education capacity at Historically Black Colleges and Universities, Tribally Controlled Colleges and Universities, and Minority-Serving Institutions.
- Increases Research Security and Oversight. The Budget includes \$18 million for research security activities at NSF, an increase of \$6 million from the 2023 enacted level, to identify risks to the U.S. research enterprise and to develop policies and best practices to mitigate against those risks. The Budget also includes support for the expanded role of the Office of the Inspector General to conduct oversight and prosecution cases of sexual assault and harassment in the United States Antarctic Program.