NATIONAL SCIENCE FOUNDATION

The National Science Foundation (NSF) is responsible for science education and promoting the progress of science and innovation. The President's 2024 Budget for NSF advances the goals of the CHIPS and Science Act by: strengthening U.S. leadership in emerging technologies; expanding the science, technology, engineering, and mathematics (STEM) workforce while advancing equity; boosting research and development (R&D) including research infrastructure; and combating the climate crisis.

The Budget requests $11.3 billion in discretionary budget authority for 2024, a $1.8 billion or 18.6-percent increase from the 2023 enacted level to support the CHIPS and Science Act.

The President's 2024 Budget:

- **Ensures the Future Is Made in America.** NSF plays a key role in the CHIPS and Science Act with its focus on U.S. leadership in new technologies—from artificial intelligence to biotechnology and computing—all of which are critical to both America's future economic competitiveness and U.S. national security. The $11.3 billion Budget request for NSF would strengthen U.S. global leadership in the technologies of the future by accelerating the development of key technologies and establishing dynamic, collaborative networks for research and innovation. By investing in American R&D, the Budget would generate benefits for a broad range of stakeholders and communities, including socially and economically disadvantaged workers and businesses.

- **Strengthens U.S. Leadership in Emerging Technologies.** The Budget provides NSF $1.2 billion for the CHIPS and Science Act authorized Directorate for Technology, Innovation, and Partnerships to help accelerate and translate scientific research into innovations, industries, and jobs. The purpose of the Directorate is to work with programs across the Agency and with other Federal and non-Federal entities to expedite technology development in emerging areas that are crucial for U.S. technological leadership. The Budget provides $300 million to invest in the Regional Innovation Engines program, bringing together State and local governments, institutions of higher education, labor unions, businesses, and community-based organizations across the Nation to galvanize use-inspired research, technology translation, and workforce development.

- **Spurs Climate Research and Development.** The Budget provides $1.6 billion for climate research and development, an increase of $630 million above the 2023 enacted level. This robust investment would support research in: atmospheric composition; water and carbon cycles; renewable energy technologies; climate resilience technologies for communities heavily affected by climate change; social, behavioral, and economic research on human responses to climate change; and more. In addidtion, the Budget proposes $15 million for a

new fellowship that would provide researchers studying disparate impacts of climate change with a broader skillset to address the interactions of science and policy in this complex area.

- **Expands STEM Workforce and Advances Racial and Gender Equity in STEM.** The Budget provides $1.4 billion, a $198 million increase from the 2023 enacted level, to accelerate STEM education and workforce development, and to help ensure the U.S. science and technology workforce reflects the Nation as a whole. In addition, the Budget includes $420 million to increase: the participation of historically underrepresented communities and women and girls in science and engineering fields; support for curriculum design; research on successful recruitment and retention methods; development of outreach or mentorship programs; fellowships; and science and engineering research and education capacity at Historically Black Colleges and Universities, Tribally Controlled Colleges and Universities, and Minority-Serving Institutions.

- **Fosters Scientific and Technological Advances.** The Budget provides $2 billion for research and development to maintain America's edge in the industries of tomorrow, including advanced manufacturing, advanced wireless, artificial intelligence, biotechnology, microelectronics and semiconductors, and quantum information science.

- **Strengthens the Nation's Research Infrastructure.** The Budget provides $2.4 billion 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 supports major NSF research facilities, including: long-term upgrades of NSF's major Antarctic infrastructure; finishing construction of the Vera C. Rubin Observatory, which would conduct deep surveys of the night sky, creating an unprecedented data set to unlock some of the universe's biggest mysteries; upgrades to the Large Hadron Collider, the world's largest particle accelerator; and construction of the Leadership-Class Computing Facility to support science and engineering research that requires the largest and most computationally intensive capabilities.