



# Task Force on American Innovation

*Securing the future through research in the physical sciences and engineering*

June 11, 2024

Senator Jeanne Shaheen  
506 Hart Senate Office Building  
Washington, DC 20510

Senator Jerry Moran  
521 Dirksen Senate Office Building  
Washington, DC 20510

Congressman Hal Rogers  
2406 Rayburn House Office Building  
Washington, DC 20515

Congressman Matt Cartwright  
2102 Rayburn House Office Building  
Washington, DC 20515

Dear Chairwoman Shaheen, Chairman Rogers, Ranking Member Moran, and Ranking Member Cartwright:

The Task Force on American Innovation (TFAI)—an alliance of industry, scientific societies, and university organizations dedicated to supporting federally funded basic research—commends you and your colleagues for your work to complete fiscal year 2024 (FY24) appropriations and encourages you to continue your support for basic science research in FY25's Commerce, Justice, Science (CJS) appropriations bill.

With the FY25 appropriations process underway, we urge you to build upon the successes of earlier budgets by maximizing federal investments in our nation's innovation ecosystem, which drives our global competitiveness and maximizes our national security. We would also like to remind you of the bipartisan Congressional commitment made in the CHIPS and Science Act of 2022, which authorized the funding necessary to continue research investments through agencies like the National Institute of Standards and Technology (NIST) and the National Science Foundation (NSF).

Companies, academic institutions, and other federal agencies rely on NIST's Scientific and Technical Research and Services (STRS) to provide foundational research and materials development for their products and programs. NIST also plays an essential role in the industries of the future, such as quantum information science, artificial intelligence (AI), and semiconductor manufacturing, which all require foundational measurements and R&D to enable U.S. leadership. For example, NIST is currently researching the performance and reliability of AI systems to assist in the development of international standards and increase public trust, encouraging widespread adoption and innovation.

NSF is a vitally important research agency which continues to drive innovation across all 50 states and U.S. territories. NSF is the only federal agency whose mission includes support for all fields of fundamental science and engineering. NSF provides grants for basic research in various fields in the academic and industrial sectors and is responsible for keeping America on the leading edge of innovation. The research supported by NSF would not otherwise happen, as it is often too risky for industry to invest in basic science. To that end, it is critical that NSF receive the full funding authorized by the CHIPS and Science Act.

Unfortunately, during the most recent appropriations cycle, we moved in the wrong direction. NIST saw a 10% cut in their operating budget (\$200 million). Additionally, NSF saw a 6% cut, and has announced cuts to

existing grants and reduced funding for sponsored programs. These cuts are detrimental to researchers across the country and have significant negative impacts on our ability to compete on the global stage.

Lastly, while CHIPS and Science did not include a full authorization for NASA, the agency is just as vital for our competitiveness. NASA supports jobs, procurement, and research in all 50 states while playing a central role expanding our knowledge of the cosmos, fostering a U.S.-led space economy, and igniting a passion for science among the next generation. But rising costs and funding challenges have led to delays, cancellations, and uncertainty around even Decadal-priority science missions, while the elimination of over \$500 million from the NASA budget in FY 2024 has us moving in the wrong direction. Failure to invest will limit the ability of scientists and innovators to keep the U.S. at the forefront of diverse fields like planetary science, hypersonics, or orbital manufacturing – all while China deploys an increasingly ambitious strategy for space leadership.

The Task Force acknowledges the budget constraints imposed by the Fiscal Responsibility Act. However, we will continue to emphasize the importance of fully funding basic science research programs. Global competitors like China have increased their research and development spending by close to 10%; meanwhile, the U.S. is has fallen short of the bipartisan funding targets authorized in the CHIPS and Science Act. If we are to lead the world in critical emerging technologies including artificial intelligence and quantum, we must invest at the levels that Congress established.

Thank you for your leadership and continued support of federally funded research in the physical sciences and engineering. The United States needs stable, sustained, and strong funding for the programs at NIST and NSF that help bolster the U.S. economy, develop the U.S. workforce, and maintain U.S. leadership in science, technology, and innovation. Sincerely,

The Task Force on American Innovation