

May 10, 2023

The Honorable Kay Granger
Chair
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

The Honorable Rosa DeLauro
Ranking Member
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

The Honorable Patty Murray
Chair
Committee on Appropriations
U.S. Senate
Washington, DC 20510

The Honorable Susan Collins
Vice Chair
Committee on Appropriations
U.S. Senate
Washington, DC 20510

Dear Chair Granger, Ranking Member DeLauro, Chair Murray, and Vice Chair Collins:

As a broad community of research organizations, professional societies, universities, and private companies, we write to urge you to provide the highest possible fiscal year (FY) 2024 302(b) allocation for the Commerce, Justice, Science, and Related Agencies (CJS) Appropriations Subcommittees to enable robust funds for the competitiveness, security, innovation, and resilience programs in the CJS portfolio.

At a time when Congress is facing critical budgetary decisions, significant resources are urgently needed for CJS agencies, which are vital for addressing the challenges facing our nation, including protecting our national security; enhancing innovation, economic growth, and prosperity; ensuring our resilience; and promoting equity and justice. This work involves many agencies and programs, including the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), the National Institute of Standards and Technology (NIST), the Office of Science and Technology Policy (OSTP), the Census Bureau, the Department of Commerce statistical agencies, and the Department of Justice (DOJ) Office of Justice Programs.

As the country's largest source of funding for basic research, the federal government has a unique role in supporting R&D crucial for our competitiveness and keeping the United States at the forefront of innovations that improve our health, grow our economy, and enhance our quality of life. However, relative to GDP, federal spending on R&D is at its lowest point since 1953.¹ Moreover, while the U.S. was once the uncontested leader in science and technology globally, we have seen our competitive advantage erode as other nations have dramatically increased their investments in research. For example, between 2010 and 2019, R&D expenditures in China have grown by approximately 11 percent annually, nearly double the rate of the U.S.² China is also on a path to reach nearly double the number of STEM PhD graduates compared to the U.S. by 2025.³ If our country is to remain a leader in fields such as artificial intelligence, space exploration, quantum science, and other critical areas, the nation must recommit to strong investments in research and technology, including CJS programs.

¹ [Research and Development: U.S. Trends and International Comparisons. Science and Engineering Indicators Report, January 2022](#)

² [U.S. and Global Research and Development. The State of U.S. Science and Engineering 2022. Science and Engineering Indicators, January 2022](#)

³ [China is a Determined and Formidable Competitor with the U.S. in Science & Technology, February 2023](#)

To this end, Congress passed the bipartisan CHIPS & Science Act last year, in which CJS agencies and programs figure prominently. The bill initiated new and expanded programs at the Department of Commerce to accelerate innovation and domestic manufacturing. It also authorized the creation of a new Technology, Innovation and Partnerships (TIP) Directorate within NSF, which is focused on both use-inspired research and solutions to societal and economic challenges. TIP is already working to enhance innovation around the nation with the launch of its Regional Innovation Engines. Given the scope and ambition of these efforts, significant additional appropriations for CJS are needed to fund these new initiatives while also supporting the growth of existing R&D programs that form the foundation of the U.S. research enterprise.

The science provisions of CHIPS & Science further direct NSF to address growing workforce gaps in emerging technology areas by expanding its efforts in STEM education and broadening participation programs, as well as address many priorities in foundational research programs that power our science and innovation ecosystem. NSF cannot realize this congressional vision without new funding. CHIPS provided semiconductor funding and now Congress must appropriate funding for NSF and Commerce to achieve the *and Science* goals laid out in the legislation. To ensure our national security and to stay economically competitive, our nation needs to remain at the forefront of scientific and technological innovation across all fields of research.

Agencies within the CJS portfolio have major roles in protecting our environmental resilience. NSF, NASA, and NOAA together fund over 60 percent of our nation's federal investment in environmental research, as well as funding a large portion of our civilian observational capabilities. They support research to model extreme weather, understand changing effects on the Earth's ecosystems, advance resilience efforts to protect our natural resources and built environment, and develop clean energy technologies.^{4,5,6} CJS agencies also collaborate with others across the federal government to help advance coordinated efforts to assess and address the effects of climate change on all aspects of our society and develop effective strategies to become a climate-ready nation.⁷ For example, disaster resilience research headed by NIST, including investment in post-disaster impact research and pre-impact mitigation, helps address threats from high winds, fire, or flood. Research programs supported by the CJS bill are therefore central to addressing global environmental crises.

A robust CJS allocation will allow the Department of Commerce to fund programs that are important to the future of the U.S. economy and society. CHIPS & Science has directed the Department to create regional technology hubs, which would further expand the geography of innovation, and expand manufacturing partnerships. NIST received substantial funding in CHIPS for microelectronics programs but was additionally charged with new roles in critical technology initiatives, such as the Bioeconomy Initiative, and continues to face huge infrastructure upkeep shortfalls. Programs such as the American Community Survey continue to collect high quality socioeconomic and demographic data that scientists and policymakers use to inform basic, clinical, and applied research and research training activities.⁸ To fulfill their potential and benefit American workers, additional funding is necessary for these programs to stimulate new economic activity, train the future workforce, and create jobs.

⁴ [NOAA Oceanic and Atmospheric Research](#)

⁵ [Global Climate Modeling, NASA Goddard Institute for Space Studies](#)

⁶ [NIST Alternative Energy](#)

⁷ [U.S. Global Change Research Program](#)

⁸ [American Community Survey](#)

CJS research programs also play an important role in advancing racial justice. As our nation continues to struggle with violence, racism, and crime challenges, research supported by DOJ, including the National Institute of Justice, provides important insights on a range of topics including the study of hate crimes, prison and sentencing reform policies, and policing strategies. These research programs provide vital data and reinforce other efforts across the government to address homelessness, school violence, racial prejudice, and other key societal challenges.

In sum, we respectfully urge you and your colleagues to provide a robust CJS 302(b) allocation in fiscal year 2024 so Congress can make the R&D investments necessary to meet our nation's challenges and aspirations.

Sincerely,

The Census Project
Coalition for Aerospace and Science
Coalition for National Science Funding
Crime and Justice Research Alliance
Friends of NOAA
The NIST Coalition

cc:

Office of the Speaker of the House of Representatives
Office of the House Minority Leader
Office of the Senate Majority Leader
Office of the Senate Minority Leader
House Committee on the Budget
Senate Committee on the Budget
House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies
Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies
House Committee on Science, Space, and Technology
Senate Committee on Commerce, Science, and Transportation