

April 25, 2023

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The Honorable Hal Rogers, Chair The Honorable Matt Cartwright, Ranking Member U.S. House of Representatives Committee on Appropriations Subcommittee on Interior, Environment, and Related Agencies H-310, The Capitol Washington, D.C. 20515

Dear Chairman Rogers and Ranking Member Cartwright:

As you draft the FY 2024 Commerce, Justice, Science and Related Agencies appropriations bill, the American Society of Civil Engineers (ASCE)¹ requests a strong commitment to our science and research needs by investing in key programs. The enactment last year of the bipartisan CHIPS and Science Act, which ASCE strongly supported, significantly increased authorizations for federal science and technology research and development programs. This revitalization of the nation's research and development enterprise is intended to support the nation's science and technology base — including interagency programs to boost technological innovation and help translate federally funded research to commercial applications.

ASCE believes it is imperative that Congress continue the support shown in the CHIPS and Science Act, and other commitments made to research and development by providing the needed funding to conduct the critical objectives set out in the legislation. ASCE believes that significant investment in R&D will accelerate the development of new and innovative materials and processes and keep the nation globally competitive.

Specifically:

• ASCE supports robust funding of \$11.3 billion for the National Science Foundation (NSF), matching the President's budget request, for the Fiscal Year (FY) 2024. NSF investments are critical for modernizing the existing research and development infrastructure, expanding the STEM workforce, and promoting equitable access to scientific learning and resources to unleash the full potential of the nation's R&D enterprise.

NSF funds basic research across all disciplines of science and engineering, including innovative new materials, technologies, and processes to modernize and extend the life of infrastructure. Perhaps no other agency was more impacted by the science provisions of the CHIPS and Science Act, which includes the creation of the first-of-its-kind Directorate for Technology, Innovation, and Partnerships ("TIP"). TIP has the goal of accelerating domestic development of national and economic-security critical technologies such as artificial intelligence, quantum computing, advanced manufacturing, 6G communications, energy, and material science. Full funding will

¹ ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 150,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c) (3) of the Internal Revenue Code. www.asce.org,

help support critical early-stage research that will create revolutionary innovative ideas, including in areas such as the food-energy-water system, sustainable chemistry, risk and resilience, clean water systems, and critical minerals.

ASCE supports funding for the Department of Commerce's National Institute of Standards and Technology (NIST) at the level of \$1.6 billion for FY 2024. NIST is the premier, and in most cases, the key federal institution conducting infrastructure and resilience research. ASCE supports NIST and its mission of promoting U.S. innovation and competitiveness by anticipating and meeting the needs of the U.S. building and fire safety industries for measurement science, standards, and technology.

Like NSF, the CHIPS and Science Act sought to transform NIST into a more robust agency, one better positioned to conduct its critical function in the nation's economy and its role to protect the public health, safety, and welfare. If fully funded, NIST will be able to expand its mission of advancing research and standards development for industries of the future, including quantum information science, artificial intelligence, cybersecurity, advanced communications technologies, and semiconductors. NIST plays a key role in the development of consensus-based design standards, such as those developed by ASCE, that inform building codes nationwide, creating resilient communities, and are the frontline defense in protecting the public from the increasing number of natural disasters.

ASCE's 2021 Report Card for America's Infrastructure rated the overall condition of the nation's infrastructure a cumulative grade of "C-" across 17 categories. One key solution to improving the grades is support for research and development of innovative materials, technologies, and processes to modernize and extend the life of infrastructure, expediate repairs or replacements, and promote cost savings. The recently enacted CHIPS and Science Act is pointing us in the right direction. However, it must be coupled with a significant, continued investment to ensure the promise is kept.

The U.S. research enterprise has been tremendously successful over the decades. This success has been guided by the scientific and engineering communities through a strong system of merit review and advisory committees, trust, and respect. ASCE supports efforts to enhance and revitalize these efforts.

We thank you for your consideration of our funding requests and look forward to working with the Subcommittee to fund these existing successful federal infrastructure programs.

Sincerely,

Emily a I

Emily A. Feenstra Chief Policy and External Affairs officer

cc: Chairwoman Kay Granger and Ranking Member Rosa DeLauro, House Committee on Appropriations