March 22, 2021

The Honorable Jeanne Shaheen, Chairwoman
The Honorable Jerry Moran, Ranking Member
Subcommittee on Commerce, Justice, Science, and Related Agencies
Committee on Appropriations
United States Senate
Washington, DC 20510

Dear Chairwoman Shaheen and Ranking Member Moran,

As you draft the FY 2022 Commerce, Justice, Science and Related Agencies appropriations bill, the American Society of Civil Engineers (ASCE) requests a continued strong commitment to our science and research needs by investing in key programs. Significant investment in research and development will facilitate durable, secure, sustainable, and resilient infrastructure systems that will meet the needs of the 21st century. Among specific agencies:

- **National Science Foundation (NSF)** – ASCE requests funding of $10 billion for Fiscal Year 2022. 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. Given the importance of revitalizing the nation’s infrastructure, NSF programs such as the Civil, Mechanical and Manufacturing Innovation (CMMI) division’s Resilient and Sustainable Infrastructure research program are critical. Included in this request is $54 million for the NSF functions of the National Earthquake Hazards Reduction Program (NEHRP) and $9.7 million for the National Windstorm Impact Reduction Program (NWIRP).

- **National Institute of Standards and Technology (NIST)** – ASCE requests funding of $1.1 billion for Fiscal Year 2022. NIST is the premier, and in most cases, the only federal institution conducting resilience research focused on the impact of multiple hazards on buildings and communities and on post-disaster studies that can provide the technical basis for improved standards, codes, and practices used in the design, construction, operation, and maintenance of buildings and infrastructure systems. This request includes $9.7 million for NIST functions within NEHRP and $4.1 million for NWIRP.

ASCE’s [2021 Report Card for America’s Infrastructure](http://www.asce.org) graded our nation’s infrastructure as a C-. If we continue the current level of investment it will cost our nation $10.3 trillion in GDP and 3 million jobs in 2039. Today, underinvestment in our infrastructure already costs the average American family $3,300 per year, or $63 a week. Among the key solutions identified by ASCE is a commitment to
support research and development of innovative materials, technologies, and processes to modernize and extend the life of infrastructure, expedite repairs or replacements, and promote cost savings. Innovation should include a component of integration and utilization of big data, as well as the “internet of things.”

Simply put, we need to invest in NSF to provide funds for basic research across all disciplines of science and engineering, including innovative new materials, technologies, and processes. Meanwhile, ASCE strongly 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. We thank you for your consideration of our funding requests and look forward to working with the Committee.

Sincerely,

Emily A. Feenstra
Managing Director, Government Relations and Infrastructure Initiatives

cc: Chairman Patrick Leahy and Vice Chairman Richard Shelby, Committee on Appropriations, United States Senate