













April 14, 2025

The Honorable Mike Johnson Speaker of the House of Representatives Washington, DC 20515

The Honorable Hakeem Jeffries Minority Leader U.S. House of Representatives Washington, DC 20515

Dear Speaker Johnson and Minority Leader Jeffries:

The undersigned organizations, representing over 800,000 engineering professionals, ask that you protect America's key technology research budgets in the FY2026 appropriations process.

Since the end of WWII, economic growth in the US has depended more on technological innovation than any other factor¹. From cars and manufacturing in the 1950's, to computing in the 1990's and AI today, new products, ideas, and processes have driven American strength and prosperity. America is the global leader in scientific research, and our economy demonstrates this. It took nearly a century to develop this ecosystem, and it was accomplished under the leadership of both Republican and Democrat Administrations. A disruption in this support would severely hamper the further development of key sectors within the U.S. technical workforce.

¹ Government-funded R&D Produces Long-term Productivity Gains, Federal Research Bank of Dallas, February 13, 2024

We believe it is vital to continue to support and expand federally funded research that leverages federal R&D resources through government-university-industry partnerships. R&D programs foster research that will help maintain a steady flow of talent and technologies to organizations across the U.S both in the private and the public sectors. America became the most innovative country in history by forming a partnership between private companies, academia, government, financial markets, and entrepreneurs. But this partnership also depended upon sustained investments from the federal government into research. Driven by a few key agencies, federal technology research funding has primed America's innovation pump for the past three generations and remains essential to America's prosperity.

Consider that federally funded research has historically generated a high return-oninvestment. A 2020 report by the National Academy of Sciences found that every dollar spent on publicly funded research results in up to an \$8 increase in GDP over time. Further, the Small Business Innovation Research (SBIR) program at agencies like NASA and the Department of Energy has contributed to over 70,000 patents and more than \$41 billion in economic output. Of all the investments made by government, technology research has the largest, fastest, and most direct impact on the daily lives of the average American. Technological innovation creates jobs, raises productivity, and increases incomes. This is evident through NSF and DOE programs that fund the research that trains the next generation of engineers and scientists. The NSF reports that STEM jobs grew 79% from 1990 to 2018, compared to 34% for non-STEM jobs. This is a clear return on investment for the federal government. Possibly the best example of this is Google (Alphabet), which got its start from a \$20,000 NSF Graduate Research Fellowship grant supporting the development of digital library technologies. The annual tax revenue from Alphabet alone, projected at \$20 billion in 2024, could now fund more than two times the NSF's annual budget.

Continued funding for our nation's research agencies is critical. The contributions of NASA speak for themselves, and the DOE's Office of Science continues its' progress in energy storage, advanced nuclear reactors, grid resilience and quantum computing technologies. The National Institute of Standards and Technology (NIST) effectively promotes the use of American codes and standards in countries and industries around the world as a means of enhancing U.S. infrastructure and competitiveness, and the NSF, with its new TIP Directorate, is in need of support more now than perhaps ever before.

As you consider the FY26 budget, we urge you to maintain research investment for these critical agencies. They have proven their value to the country and will continue to produce the ideas, insights, and inspirations America needs to remain the world's most productive and inventive country.

Sincerely,

Victor Bohnert Interim CEO AIChE

Feniosky Peña-Mora, Sc.D., P.E., NAS, CCM, F.CIOB, NAC, Dist.M.ASCE President Tom Smith, CAE, ENV SP, NAC, F.ASCE Executive Director American Society of Civil Engineers

Thomas Costabile, P. E., FASME Executive Director / CEO ASME

Ronald E. Ashburn Executive Director Association for Iron & Steel Technology

Timothy T. Lee President, IEEE-USA

James J. Robinson Executive Director The Minerals, Metals & Materials Society

David L. Kanagy, CAE Executive Director and CEO Society for Mining, Metallurgy, Exploration, Inc.

cc. The Honorable Tom Cole, Chair, House Committee on Appropriations The Honorable Rosa DeLauro, Ranking Member, House Committee on Appropriations The Honorable Brian Babin, Chair, House Committee on Science, Space, and Technology

The Honorable Zoe Lofgren, Ranking Member, House Committee on Science, Space, and Technology