

October 20, 2022

The Honorable Charles Schumer
Senate Majority Leader
United States Senate
Washington, DC 20510

The Honorable Mitch McConnell
Senate Republican Leader
United States Senate
Washington, DC 20510

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
Washington, DC 20515

The Honorable Kevin McCarthy
House Republican Leader
U.S. House of Representatives
Washington, DC 20515

The Honorable Patrick Leahy
Chairman
Committee on Appropriations
United States Senate
Washington, DC 20510

The Honorable Richard Shelby
Vice Chairman
Committee on Appropriations
United States Senate
Washington, DC 20510

The Honorable Rosa DeLauro
Chair
Committee on Appropriations
House of Representatives
Washington, DC 20515

The Honorable Kay Granger
Ranking Member
Committee on Appropriations
House of Representatives
Washington, DC 20515

Dear Speaker Pelosi, Leader Schumer, Leader McCarthy, Leader McConnell, Chairman Leahy, Vice Chairman Shelby, Chair DeLauro, and Ranking Member Granger:

We, the undersigned business and national security leaders, call on Congress to fund the National Science Foundation's (NSF) FY23 budget at **\$11.89 billion**, as authorized by the historic and bipartisan *CHIPS and Science Act of 2022 (H.R. 4346)*. Now, more than ever, our companies and our country require expanded investment in basic and applied research to fuel the United States' economic competitiveness and to strengthen our national security.

Having watched and learned, other countries are now investing heavily in their own innovation ecosystems, cultivating human talent, expanding their knowledge and skilled technical workforce, and constructing the advanced digital and physical infrastructure needed to facilitate discovery, economic growth, and defense capabilities. In the midst of this rising global economic competition, the United States now finds its global scientific and engineering leadership increasingly at risk, and the margin of our leadership continues to decline. We cannot afford to lose our leadership.

NSF has seeded foundational research that has spawned the commercialization of technologies that have revolutionized our world — including semiconductors, GPS, search engines, and the Internet itself. NSF has helped companies like ours flourish by supporting the fundamental breakthroughs on which our products and services — and in some cases our companies and entire industries — have been built. NSF helps us assess and realize the commercialization potential of science and engineering research and develops a pipeline of STEM talent at all educational levels.

For Congress to preserve U.S. economic and national security, it must sufficiently fund NSF, including its new Directorate for Technology, Innovation, and Partnerships, to deliver for America and remain ahead of our global competitors. Take, for example, the outsized importance of software across all industries in

driving economic growth and productivity. There is no business or national security effort in America that does not hinge on software and advances in computation to drive growth and innovation. We also cannot overlook the importance of hardware in today's technologies and the engineers need to support these and future innovations. Unbeknownst to many, NSF serves as a champion of STEM talent: *the agency funds a remarkable 78% of all federally-funded academic computer science research in the United States.* Given that 60% of graduate students in computer science and 74% of graduate students in electrical engineering are now foreign born, and that the United States faces a massive shortage in key disciplines, NSF will play a decisive role in fueling a STEM-trained workforce that propels research, commercialization, and industries of the future.

Spreading the benefits of basic research and technology-fueled innovation across America are key aims of the *CHIPS & Science Act of 2022*. We call on you to fully fund the NSF authorization levels in *CHIPS and Science* in FY23 – and in each of the next four fiscal years – so that NSF can pursue the expanded mission with which Congress has entrusted the agency. It will grow and educate our domestic workforce and scale the geography of innovation across the United States.

We and the nation are depending on it.

CC: Chair Shaheen, Ranking Member Moran, Chairman Cartwright, Ranking Member Aderholt

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IBM

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Flash SteelWorks, Inc.

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