



March 16, 2023

The Honorable Tammy Baldwin
Chair
Senate Appropriations Subcommittee on Labor,
HHS, Education, and Related Agencies

The Honorable Shelley Moore Capito
Ranking Member
Senate Appropriations Subcommittee on Labor,
HHS, Education, and Related Agencies

The Honorable Jeanne Shaheen
Chair
Senate Appropriations Subcommittee on
Commerce, Justice, Science, and Related Agencies

The Honorable Jerry Moran
Ranking Member
Senate Appropriations Subcommittee on
Commerce, Justice, Science, and Related Agencies

Dear Chairs and Ranking Members,

On behalf of the Society of Hispanic Professional Engineers (SHPE), we ask that Congress uphold its promises to build and strengthen the workforce pipeline in the science, technology, engineering, and mathematic (STEM) fields. Having enacted the CHIPS and Science Act and having recognized the need for further investments for future generations in the STEM workforce, Congress should meet current STEM labor demands by appropriating funds for Fiscal Year 2024 as proposed in the President's Budget.

SHPE is a non-profit organization that, since 1974, has dedicated its mission to increasing and promoting access to STEM education and advancing workforce development opportunities for the Hispanic community through culturally relevant programming. SHPE's mission of bridging the gap between Hispanics and STEM will be an essential component to strengthening the domestic workforce for semiconductors, related NatSec industries, and emerging technologies by bringing Hispanics into the workforce of critical industries by way of early STEM education and stressing the importance of Hispanic-Serving Institutions.

President Biden's budget proposal devotes \$1.4 billion to expand the STEM workforce, advance gender equity, and accelerate workforce development opportunities under the National Science Foundation (NSF). His proposal includes \$420 million dedicated to increasing the participation of often overlooked communities in the STEM industry, such as Hispanics. These investments will ensure that programs like Advancing Informal STEM Learning (AISL) and Improving Undergraduate STEM Education: Hispanic-Serving Institutions (IUSE:HSI), have a significant role in the U.S. regaining its innovative leadership status, growing a high-quality STEM labor pipeline, while meeting its national security needs.

We believe the proposed FY24 investments have the ability to further support, positively impact, and advance vital STEM training capabilities for our nation's domestic workforce and U.S. National Security Interests. SHPE recommends robust funding for the programs listed below, as they focus on long-term solutions to create a strong and diverse STEM workforce with Hispanics in it:

The Advancing Informal STEM Learning program (Division of Research on Learning in Informal Settings at NSF): During and at after-school programs, SHPE yields STEM specific benefits such as pursuing STEM education and career paths later in life by increasing Hispanic youth's awareness of STEM fields and careers; belief in their ability to succeed in STEM; and a sense of identity in all STEM disciplines. Through informal

STEM learning opportunities, SHPE simultaneously provides financial literacy opportunities for Hispanic parents and caregivers in order to equip them for the future, so they may better support their young students throughout their STEM career journey.

- SHPE seeks \$100 million for this program. It is \$20 million above the FY24 budget proposal and \$14 million above FY23 and CHIPS and Science Act mandatory spending level.

The IUSE: HSIs Programs (Divisions of Equity for Excellence in STEM and Undergraduate Education (EES/DUE) at NSF): Offer colleges and universities the resources dedicate to growing or creating networks of undergraduate and graduate student SHPE chapters on campus. These networks not only ensure a sense of belongingness in STEM, but they also have a critical influence in ensuring college graduation and increasing overall representation in emerging STEM industries.

- SHPE seeks \$100 million for these programs. It is \$39.5 million above the FY24 budget proposal and \$44.5 million above the FY23 and CHIPS and Science mandatory spending level.

The Hispanic population is a significant contributor to the nation's economy. In 2021 Hispanics accounted for 19% of the U.S. population reaching 62.5 million. By 2060, that number is projected to grow to 111.2 million and accounting for 28% of the U.S. population.¹ Furthermore, according to the U.S. Bureau of Labor Statistics, the STEM sectors' employment projection is expected to outpace others through 2031 by 10.8%, as opposed to the 4.9% in non-STEM sectors².

Moreover, in order to complete the \$400 billion worth of already planned construction projects in advanced industries, including semiconductors, it's estimated that the United States would need about 200,000 to 300,000 more skilled laborers such as electricians, mechanical workers, welders, pipe fitters and engineers.³ This number does not include projects which will be funded with the \$550 billion available thanks to the CHIPS law. If we want to ensure that adequate investments for Hispanics STEM are made, in both urban and rural areas of the country, Congress must meet future investments at the nexus of our steadfast population growth, economic contributions, and desire for STEM employment opportunities.

We are grateful for the proposed investments, through the CHIPS and Science Act and other programs, that will allow SHPE to bring awareness to best practices that address long-term solutions for a stronger STEM education pipeline, STEM labor supply chain, and national security needs.

We appreciate the opportunity to share our recommendations in the above and thank you for your leadership and consideration of our priorities.

Sincerely,

Miguel Alemany
Chief Executive Officer, *Interim*
Society of Hispanic Professional Engineers

¹ [https://latino.ucla.edu/research/latino-population-2000-2020/#:~:text=Since%20then%2C%20Latinos%20have%20been,population%20\(see%20Figure%201\).](https://latino.ucla.edu/research/latino-population-2000-2020/#:~:text=Since%20then%2C%20Latinos%20have%20been,population%20(see%20Figure%201).)

² <https://www.bls.gov/emp/tables/stem-employment.htm>

³ <https://www.mckinsey.com/industries/semiconductors/our-insights/strategies-for-building-us-semiconductor-fabs-finding-skilled-labor>