TECHNET
THE VOICE OF THE INNOVATION ECONOMY

1420 New York Avenue NW, Suite 825
Washington, D.C. 20005
www.technet.org | @TechNetUpdate

May 16, 2023

The Honorable Mike Gallagher
Chairman
House Select Committee on the CCP
548 Cannon House Office Building
Washington, D.C. 20515

The Honorable Raja Krishnamoorthi
Ranking Member
House Select Committee on the CCP
548 Cannon House Office Building
Washington, D.C. 2051

Dear Chairman Gallagher and Ranking Member Krishnamoorthi:

In advance of tomorrow's hearing entitled "Leveling the Playing Field: How to Counter the Chinese Communist Party's Economic Aggression," I am writing to share TechNet's views on the importance of investing in American innovation and strengthening the STEM talent pipeline as matters essential to our economic competitiveness.

TechNet is the national, bipartisan network of technology CEOs and senior executives that promotes the growth of the innovation economy by advocating a targeted policy agenda at the federal and 50-state level. Our membership includes dynamic American businesses ranging from startups to the most iconic companies on the planet and represents over five million employees and countless customers in the fields of information technology, e-commerce, the sharing and gig economies, advanced energy, cybersecurity, venture capital, and finance.

To win the next era of innovation, we must strengthen our workforce, especially in STEM-related fields, including those critical to national security, such as cybersecurity and manufacturing of advanced technologies like semiconductors. The U.S. is currently facing a STEM workforce crisis that, if left unaddressed, will negatively impact our economy for generations and impede our ability to counter the efforts being made by our competitors, especially China, to produce, attract, and retain top global talent. Specifically, America will need at least 50,000 new semiconductor engineers over the next five years and 90,000 skilled technicians by 2030 to staff all of the new factories and research labs that will be built with *CHIPS and Science Act* subsidies, far exceeding current U.S. STEM graduation rates. Meanwhile, China's substantial investments in its STEM workforce, in addition to investments made in its research and development capabilities, pose a real threat to U.S. technological leadership. A 2021 report by the Center for Security and Emerging Technology projected, based on current enrollment patterns, that by 2025, Chinese universities will produce more than 77,000 STEM PhD graduates per year compared to approximately 40,000 in the U.S. The proof of their success could not be clearer. On March 2, the Australian Strategic Policy Institute published a report that shows China has taken the lead over the U.S. in 37 of 44 technologies, across the sectors of defense, robotics, energy, environment,

biotechnology, space, artificial intelligence, advanced materials, and quantum computing technology. Simply put, China has set itself up to excel not just in current tech development in most sectors, but in future technologies that don't exist yet.

Fortunately, the 117th Congress laid the foundation for enabling the U.S. to win the next era of innovation by passing the *CHIPS and Science Act*, which invests in our leadership in science, research, and manufacturing and builds U.S. global centers of excellence for emerging technologies to compete with China. This legislation's STEM and workforce training programs will educate students to fill the technology-enabled jobs of the future while training adults to fill vacancies we face today, and we urge Congress to fully fund these provisions as soon as possible.

Additionally, the *CHIPS and Science Act* authorized the Regional Technology and Innovation Hubs Program, which is designed to martial talent from across the entire country to strengthen our global economic competitiveness. By catalyzing startup ecosystems, inspiring a new generation of innovators, creating jobs, and reigniting local economies in communities across America, the Tech Hubs will help drive economic growth and strengthen our global competitiveness. While the Department of Commerce has started the process of implementing the program, it has not been fully funded. To meet the full, transformational promise of the Tech Hubs, Congress should appropriate the program's full authorization of $10 billion.

Finally, we must work to retain and attract the world's best and brightest minds in addition to investing in America's skilled workforce. America's competitors are working to make it easier to attract and retain talent by updating their legal immigration systems, including simplifying processes that allow high-skilled immigrants, such as graduates trained in STEM fields, to stay and work. It is important that Congress work to find common ground on policies that improve our immigration system, particularly those that would strengthen our competitiveness and national security, such as recapturing unused visas, creating a startup visa for entrepreneurs, exempting advanced graduates in STEM fields from green card caps, and eliminating outdated and arbitrary per-country caps on green cards that no longer track to economic need. The U.S. must win the global race for talent if we hope to maintain our competitive and innovative edge against China.

We appreciate the recent efforts and investments made by Congress to ensure the U.S. wins the next era of innovation. It is both an economic and national security imperative. Please do not hesitate to reach out if we can be a resource on this issue or if you have any questions.

Sincerely,

Carl Holshouser

Carl Holshouser
Senior Vice President