May 9, 2022

The Honorable Chuck Schumer Majority Leader U.S. Senate Washington, DC 20510

The Honorable Nancy Pelosi Speaker U.S. House of Representatives Washington, DC 20515 The Honorable Mitch McConnell Minority Leader U.S. Senate Washington, DC 20510

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

Cc: Members of the Bipartisan Innovation Act Conference Committee

Dear Leader Schumer, Leader McConnell, Speaker Pelosi, Leader McCarthy, and Members of the Bipartisan Innovation Act Conference Committee,

American leadership in technology, a cornerstone of competitiveness, rests in large part on our ability to leverage domestic and international talent. We are writing because you are in a position to protect or forfeit this national asset in the face of unprecedented competition from China.

Global STEM talent drives American leadership in critical sectors that underpin the defense industrial base, from computing to aerospace. Nearly two-thirds of U.S. graduate students in artificial intelligence (AI) and semiconductor-related programs were born abroad. The U.S. remains the most desirable destination for the world's best international scientists and engineers — a feat that China, despite extensive investments, has not come close to replicating. In today's technology competition, the most powerful and enduring asymmetric advantage America has is its ability to attract and retain the world's best and brightest. The Chinese Communist Party recognizes this; Chinese sources say that U.S. expansion of its international talent pipelines "would pose a huge challenge to China."

Bottlenecks in the U.S. immigration system risk squandering this advantage. Today, top Indian STEM graduates are projected to face decades of wait time before being issued a green card. Such delays are driving talent away — more than half of AI PhDs who leave the country after graduating say they did so because of immigration issues. Even for those who manage to stay, citizenship, a requirement for many jobs in the defense-industrial base, can be elusive. The risks for American leadership are clear. Earlier this year, the chip giant TSMC announced it would delay construction of a major new semiconductor plant in Arizona due to a shortage of skilled professionals. In 2021, a plurality of National Defense Industrial Association members reported that the U.S. human capital gap is the single most vulnerable part of their supply chain, and

recent studies show half of advanced STEM workers in the defense industrial base were born abroad. America's efforts to onshore critical supply chains will not succeed unless it also onshores the talent necessary to compete.

China is racing ahead in growing its domestic STEM talent pipelines. It has doubled its higher education budget in less than a decade. Chinese universities are rapidly climbing in the global rankings. While the United States began this century with a comfortable lead, China now has double the annual U.S. STEM master's output and will hit double the number of U.S. STEM PhDs within the next three years — and its growth, in both quantity and quality, shows no signs of slowing down.

This conference committee, as it reconciles differences between America COMPETES (H.R. 4521) and USICA (S. 1260), has a critical opportunity to tackle the self-inflicted drag that immigration bottlenecks impose on American competitiveness. The House version passed with a provision (80303) exempting from green card caps those with advanced STEM degrees, the tech talent that America needs to compete with China. We urge the committee to retain this provision or some appropriately modified version in the final bill, so as to help address the national security and global competition issues addressed in this letter. As the National Security Commission on Artificial Intelligence put it, such targeted STEM talent reforms are "a national security imperative."

Targeted STEM talent reforms carry deep bipartisan support. The House G.O.P. China Task Force Report noted the U.S. "needs to continue to attract the best and brightest STEM talent from around the world, or risk falling behind in the global race for talent and losing its competitive advantage in innovation." The Biden administration has argued "one of America's greatest strengths is our ability to attract global talent to strengthen our economy and technological competitiveness." The Future of Defense Task Force, a recent bipartisan initiative of the House Armed Services Committee, identified STEM immigrants' contributions to U.S. leadership as "staggering" but concluded that "immigration policy hinders the U.S.'s ability to attract and retain foreign STEM talent that instead flows to other countries, including competitors." It called for "aggressively expanding visas for STEM talent." Such measures fit squarely within the spirit of the conference committee's bipartisan innovation mandate.

China is the most significant technological and geopolitical competitor our country has faced in recent times. With the world's best STEM talent on its side, it will be very hard for America to lose. Without it, it will be very hard for America to win.

Sincerely,

## Jayson Ahern

Former Acting Commissioner, US Customs and Border Protection, Department of Homeland Security

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Former Chairman, Defense Science Board

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