



## **Opening Statement of Ranking Member Frank Lucas**

Research and Technology Subcommittee Hearing – “Strengthening the U.S.  
Microelectronics Workforce”

*February 15, 2022*

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Thank you, Chairwoman Stevens, for holding this morning’s hearing.

I’m thrilled to welcome Representative Feenstra to his first hearing as Ranking Member of the Research and Technology Committee. In his time on the Science Committee, Rep. Feenstra has already shown leadership on crucial issues and authored legislation to help protect our research from foreign theft, expand research and development of biofuels, and improve bioengineering. He understands that innovative science and technology are key to growing the American economy.

I would also like to thank Representative Waltz for his service. He did a tremendous job developing a bipartisan legislative package to double down on our investments in basic research, improve U.S. research security, and set a strategic course for American scientific and technological development. I wish him well in his leadership role on the Armed Services Committee.

Thank you, Chairwoman Stevens, for letting me start with that sidebar. And now, turning to today’s hearing, I’m looking forward to examining our current semiconductor education and training pipelines and how we can meet the critical workforce needs of the U.S. microelectronics industry.

Microelectronics are critical to how we live and work. They power our phones, make our cars safer, our homes smarter, and help us store and protect vital information.

At a hearing our Committee held in December, we heard testimony about the factors contributing to a global chip supply chain shortage that is disrupting many industries and affecting consumers. We also heard testimony on the potential threat of countries like China controlling the chip market.

Congress is now looking to make investments to increase the domestic production of chips to protect our economic and national security. It took the first steps to address this issue last year by passing the CHIPS for America Act, which authorized programs to advance U.S. research and development, promote industry and government partnerships, and incentivize domestic fabrication of chips.

The next step is to provide the necessary funding. While I don't agree with the Speaker's strategy to move Chips funding through the House as part of a massive partisan package, I think it's time to come together to address our future domestic chip needs as soon as possible.

But our investments in microelectronics research and development and construction of new fabrication facilities will be wasted if we don't have the domestic workforce to support the industry. We must ensure we have a strong STEM workforce in the United States to meet the oncoming demand. If the CHIPS Act is fully funded at the current proposed level, it is estimated to create 42,000 new semiconductor jobs.

We need to fill them. That demand is even higher when we consider the full spectrum of workers needed to support this industry – from skilled technicians and operators with associate degrees to those with advanced degrees. For example:

We will need scientists to achieve fundamental breakthroughs in microelectronics technology for us to harness the technologies of the future, such as artificial intelligence, 5G, and quantum sciences.

We will need engineers and software developers to package the microelectronics.

We will need technicians to operate the cleanrooms at the fabs.

Today's hearing should provide examples of innovative training models that not only train new employees, but also retrain and upskill existing members of the workforce, including departing members of the military.

I also look forward to hearing how Congress can capitalize on existing federal investments through public-private partnerships and how we can provide our youngest students with the skills to become STEM-literate.

I strongly believe that to remain competitive, attract job creators, and meet our own needs for an evolving workforce, we need to take full advantage of America's full talent pool, no matter their zip code. I hope our witnesses will be able to provide insights on how we can ensure broad access to semiconductor education and employment and solid retention of STEM employees in the semiconductor industry.

I want to again thank our witnesses for taking the time to join us today and share their expertise. I yield back the balance of my time.