Statement
On Behalf Of
AeA, Advancing the Business of Technology
Before The
U.S. House of Representatives Committee on Education and Labor
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Good morning. My name is William T. Archey, and I am the President and CEO of the AeA, the nation's largest high-tech trade association. On behalf of AeA's 2,500 members that span the spectrum of electronics and information technology companies, from semiconductors and software to mainframe computers and communications systems, I would like to thank you for this opportunity to testify before your Committee on the current and future educational needs of America's high-technology industry.

Mr. Chairman, I would like to begin my testimony with a quote from the CEO of an AeA member company located in Dallas, Texas:

> "We need to be eliminating barriers to finding and developing talented employees – if you do this one thing we can figure out how to work around all the other system failures that stifle growth and the improvement of the human condition across our nation."

AeA is unique as a high-tech trade association because we have a grassroots organization of 19 offices spread across the country. In preparation for my testimony today, I asked the directors of these offices to speak with executives of small- to medium-sized companies about the challenges they face in recruiting a skilled workforce. Many of the responses I received echoed the one I just read.

I should also point out, Mr. Chairman, that the CEO who made this statement runs a company with just $4 million dollars in annual revenue and 55 employees.

The debate on the need to improve the skills of the American workforce is often dominated by the big companies. But today I'm not here to talk about Intel or Microsoft. I'm here to talk about a small company struggling to become a large company. As you well know, small companies account for the majority of job creation in this country. If public policy does not work to help these businesses thrive, our economy suffers. If companies like these cannot access skilled workers, they cannot grow their operations or create high paying jobs.

As we are here today to discuss strengthening America's middle class, I would argue that the key to achieving that is developing a highly skilled and educated workforce. Education is the most reliable path to a high paying middle class job. I believe no other

industry represents that middle class dream than high tech, which requires highly skilled and educated people and pays them well for it. The average high-tech worker earns 85 percent more than the average private sector worker, $72,400 annually compared to $39,100. In many sectors, the wages are even higher. The average worker in the software services sector makes $80,600. The average worker in the semiconductor manufacturing sector makes $89,400. These are the types of middle class jobs we want to create. If public policy does not support their creation, we are basically inviting companies to send jobs overseas.

The high-tech industry is facing a number of challenges that will cast some doubt about our ability to create and sustain these high paying U.S. jobs. These challenges are:

- Not enough American kids pursue careers in science, math, and engineering.
- America used to be the place where the best and brightest came – and particularly they came for high tech.
- This is no longer true because our visa system is broken. It is difficult to obtain an H-1B visa for a foreign national, and once you have them, it is even more difficult to get a green card to keep them.
- Between 40 and 60 percent of all degrees in STEM fields go to foreign nationals. We educate them and then we tell them to go home. That is absurd.
- What seems to be constantly missed is that for the last 60 years these best and brightest came to the United States, founded new companies, and created literally tens of thousands of high paying, high value-added jobs, mostly in high tech.
- We live in a culture where our kids have many more options than science and engineering careers. But it is the ones with that background that create the innovations that allow our kids to have those other options.

With many of these issues, our companies are trying to deal with them and trying to solve them. But some of these issues – if not most of them – result from misguided public policy.

In fact, the challenge of recruiting highly skilled workers is the most critical for small companies. The larger companies are much more likely to have operations abroad. If they need workers with specialized skill sets and cannot find them in the United States – or if they cannot bring them to the United States – they can staff that job overseas. The small guys can't easily do that. If they cannot find the workers they need, they have few if any options. But I would note that even our larger companies are frustrated by the problems listed above and their inability to hire the talent they need here in the United States.

The fact is, difficulties in recruiting highly skilled and educated workers is a problem that is pervasive throughout the technology industry, across all sectors and in companies of all sizes. For example, the U.S. unemployment rate for electrical engineers is at an unprecedented low, 1.5 percent according to the most recent data from the Bureau of

Labor Statistics. There are thousands of job openings in the tech industry in the United States.

Last April, our *Cyberstates 2006* report showed that U.S. tech employment was up in 2005 by 61,000 net jobs, the first increase since 2000, for a total of 5.6 million. Even the high-tech manufacturing sector added jobs. In September, we released our midyear tech employment update, which showed that the U.S. tech industry added some 140,000 net jobs in the first half of 2006, according to preliminary data. Next month, AeA will publish *Cyberstates 2007*, at which time we will report finalized numbers for job growth in the tech industry for 2006.

Whatever this growth ends up being, we believe it could be much higher. The key to this growth is the skills of the workforce. These jobs are only available to those with the proper education and up-to-date training. In talking with the CEOs of our member companies, I hear story upon story of how they want to expand U.S.-based operations and hire new people, but they can't find workers with the right skills. Many of our larger companies have literally thousands of job openings in the United States that remain unfilled.

We as a nation need to address this critical shortage of homegrown high-skilled talent. We need to face up to the long-term challenge of our education pipeline, which is failing to prepare tomorrow's workforce for an economy that is knowledge based and driven by technology. We've got to renew the invitation to the best and brightest to come to the United States and develop the high paying jobs here rather than in some country overseas.

Mr. Chairman and Members of the Committee, it's not like we don't know what we need to do. In the 109th Congress we had the President's American Competitiveness Initiative, the House Republicans National Summit on Competitiveness, numerous bills in the Senate, and last but by no means least, the House Democrats' Innovation Agenda. I would note that all of these proposals address the problem, though none more comprehensively than the Democratic Innovation Agenda.

What each of these proposals offers are:

- A major new program to attract our young people to take more math and science;
- Programs to increase the number of teachers with the skills and background in these areas;
- Increases in the federal basic research budgets to once again put us in the forefront of innovation, which happened from 1958 until recently;
- Various recommendations for how to address the problems in the visa system for high-skilled workers. Here there was no consensus on exactly what to do, but there was on the need to do so.

There were also other proposals to deal with unnecessary regulations, in particular the problems that small businesses are having with Sarbanes-Oxley Section 404.

The problem is that all of these proposals surfaced during the very partisan election year of 2006. So nothing happened. Yet there is virtually no disagreement about what should be done.

Government intervention on these issues is not unprecedented. Eleven months after Sputnik went up, President Eisenhower convinced Congress to pass the National Defense Education Act. That act indeed spurred a whole generation of kids to take math and science and reinvigorated the emphasis on the importance of basic research to innovation. Mr. Chairman, for the next 40 years, the United States dominated the economic and technological spheres on the world stage.

Mr. Chairman, and Members of the Committee, we can do that again.

I thank you for your time.