



U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON
SCIENCE, SPACE, & TECHNOLOGY

Opening Statement

Chairwoman Haley Stevens (D-MI)
Subcommittee on Research and Technology

Joint Subcommittee Hearing:
Revitalizing American Leadership in Advanced Manufacturing
March 26, 2019

Good morning and welcome to this joint hearing with the Research & Technology Subcommittee and the Energy Subcommittee. A warm welcome as well to our distinguished group of witnesses. Today is dedicated to every student, researcher, engineer, line worker, product manager, and American family wondering about the future of the United States industrial base, our limitless potential for innovation and the strength of our workforce.

This hearing is inspired by the motivation and desire for American excellence, where the software engineers meet the assembly workers to deliver unprecedented quality.

It is particularly significant to welcome my former colleague – Mike Molnar, with whom I worked closely on Manufacturing USA initiatives and Mr. Ryan Myers from Hexagon Manufacturing Intelligence, located in right in the heart of Michigan's 11th district.

Manufacturing USA is a network of institutes that bring together multiple federal agencies, large and small manufacturers, universities, community colleges, and nonprofits to catalyze new technologies, meet research needs and train the workforce of the future. This initiative bore out of policy prescription to answer the question we as a nation faced in the post-recession era: How can we foster a competitive innovation agenda and ensure that the research and technology happens in our communities, in partnership with a wide range of stakeholders?

It is a tremendous honor to recognize the achievement of our revitalized approach to advanced manufacturing innovation and what so many have dedicated the last decade towards achieving. Beginning with a pilot institute in Youngstown, led by the National Center for Defense Manufacturing and Machining, America Makes has invested in the development of 3D printing technologies and supply chain adoption. They have developed a workforce training roadmap for the nation, including veterans training programs.

Manufacturing USA now supports the co-investment of 14 Institutes supporting various research concentration from digital manufacturing to flexible electronics to remanufacturing to battery lifespan.

The Manufacturing USA Institutes are a critical part of U.S. global leadership in advanced manufacturing. The Institutes provide a unique collaborative platform for U.S. industry and academia to exchange best-in-class expertise to solve challenges and push the bounds of innovation.

They also create a valuable opportunity for industry partners of all sizes to network, share data, exchange technology and generate new business. Small and medium companies make up 98% of all manufacturing firms in the United States, and the Institutes can provide unique access to research and innovation critical to keeping their businesses competitive but work they could not do alone.

As we'll hear today, the private sector has been overwhelmingly supportive of the Institutes. Commitments of support over the program's life have grown to more than \$3 billion: \$1 billion of federal funds matched by over \$2 billion of nonfederal investment.

The role of the federal government to catalyze new approaches to research and development remains imperative and defines the value of the Manufacturing USA Institutes. It requires federal leadership to bring all stakeholders to the table to tackle large problems, develop new innovation and address large and acute workforce training needs. This has proven successful and it has been encouraged by dozens of manufacturing executives, university presidents and experts such as the Advanced Manufacturing Partnership Steering Committee and the President's Council of Advisors on Science and Technology.

Heated global competition and the race to win the future is always at our heels. We acknowledge, governments in free-market economies around the world have stepped up their investments in converting basic research into new manufacturing goods and processes. Today, Japan spends about 7% of its government R&D budget on this translational research. Germany spends about 12%. South Korea spends about 30%. The U.S., in contrast, spends just 0.5%.

We also recognize the need to develop and elevate the priority of a skilled advanced manufacturing workforce by empowering Manufacturing USA to work with its partners. The demand for manufacturing jobs is met with a gulf of readily available workers -- Currently, the skills gap for advanced technology jobs is projected to leave nearly 2.4 million positions unfilled between today and 2028, with a potential economic impact of \$2.5 trillion.

In this hearing, we will learn how the Manufacturing USA Institutes have been successful and consider opportunities to improve the work they do either through the transfer of new technologies throughout the supply chain, or in workforce development, or by way of other regional economic development goals that have been articulated by the communities where the institutes exist.

I welcome your expert and exciting testimony, and I greatly look forward to working together with my great and passionate colleagues on both sides of the aisle to make sure the state of advanced manufacturing in the United States of America remains strong and is supported by the full faculties of the federal government.

And with that, I yield back.