

**American Society of Mechanical Engineers (ASME) Position Statement on the
National Institute of Standards and Technology (NIST) Fiscal Year 2018 Budget in the
“America First: A Budget Blueprint to Make America Great Again” Budget Document**

**Submitted by the ASME Manufacturing Public Policy Task Force
April 4, 2016**

The National Institute of Standards and Technology (NIST) has played a critical and continuing role in the sustainment and expansion of critical manufacturing capabilities in the United States. The Hollings Manufacturing Extension Partnerships (MEP) and Manufacturing USA programs are vital resources that allow American manufactures to compete globally and to ensure that manufacturing innovations benefit the U.S. and that new technologies are produced domestically. For the U.S. to remain a global leader in manufacturing, a vibrant and active research infrastructure is needed. For this reason, **ASME recommends fully funding the Hollings Manufacturing Extension Partnerships and the Manufacturing USA programs.**

Manufacturing is an integral part of the U.S. economy; it drives economic growth, ensures national security, and provides high-wage jobs that serve as the entry point for many Americans to the middle class. However, there is growing concern that the U.S. will be outpaced by competitor countries such as China, Germany, and England who have already successfully instituted and fully funded (in excess of American program spending) innovative, 21st century advanced manufacturing policies. For the U.S. to keep pace with international trade partners, the Federal government must invest in and expand manufacturing infrastructure programs such as the Manufacturing USA network of Institutes and MEP Centers across all 50 states.

Manufacturing Extension Partnerships

The Manufacturing Extension Partnerships (MEP) program is a public-private partnership dedicated to serving small and medium-sized manufacturers. Last year, MEP Centers interacted with 25,445 manufacturers, leading to \$9.3 billion in new manufacturing sales annually, \$1.4 billion in cost savings, \$3.5 billion in new client investments, and helped create and retain more than 86,602 jobs. For every \$1,900 of Federal investment, MEP creates or retains one U.S. manufacturing job.¹

America is not competing on an even playing field with its competitor nations. While other countries are investing heavily in their advanced manufacturing infrastructure, the U.S. is neglecting its own manufacturing infrastructure, a trend that would intensify under the President’s “America First: A Budget Blueprint to Make America Great Again” plan. Under the Administration’s proposed plan, “MEP centers would transition solely to non-Federal revenue sources, as was originally intended when the program was established.” However, MEP has filled a far greater role in contributing to the nation’s welfare than predicted at its inception. In fact, a new study released on March 16, 2017 states that MEP “generates a substantial economic and financial return of nearly 9:1 for the \$130 million annually invested by the federal government.” Even when considering other market factors, the study found that “MEP activities are associated with an additional 16,532 jobs and nearly a \$1.8 billion increase in GDP.”²

The “America First” proposal does not consider that resource-limited small businesses are not able to make the investments necessary to sustain these successful programs, or that large companies are unable to assume the great risk that comes with funding these activities alone. MEP Centers leverage their competencies across many industries, eliminating redundancy and allowing large

¹ <https://www.nist.gov/mep>

² https://www.nist.gov/sites/default/files/documents/2017/03/17/2017_10_march_mep_briefing_report-draft.pdf

and small companies to benefit while mitigating risks. For these reasons, the U.S. cannot depend on limited state funding and the private sector to invest in the future of the U.S. manufacturing sector on their own; the Federal government must play its role in catalyzing investments from industry as it has done successfully through MEP and Manufacturing USA.

Manufacturing USA

Manufacturing USA brings together industry, academia, and government to increase U.S. competitiveness, strengthen national security, and build a domestic, 21st century advanced manufacturing workforce through facilitating technology transition. Such programs have existed in competing nations for decades. For instance, China has pledged ten times the American investment in manufacturing public-private partnership infrastructure programs. Other countries recognize that investing in these types of manufacturing programs not only ensure economic stability, but also national security. A vibrant manufacturing sector is a prerequisite for a robust military as it enables domestic production of new and advanced technologies and innovations. The Department of Defense (DoD) recognizes this, which is why the DoD has sponsored 8 of the 14 established institutes through its Manufacturing Technology Program (DoD ManTech).

Manufacturing USA connects people, ideas, and technology; the first 8 Institutes convened nearly 1,200 organizations in an inter-industry network comprising 9,000+ substantive relationships.¹ The network is now comprised of 14 Institutes² (the latest are too new to develop performance metrics) and public-private partnerships and associated manufacturing innovations will continue to flourish as the Institutes and their network develop further.

Government funding provided to each institute is matched by private funding that greatly exceeds – in some cases tripling – the government’s investment. For example, AFFOA, the Advanced Functional Fabrics of America institute, received \$75M in federal funding, matched by \$242M in cost-sharing. The Federal funds encourage small businesses to invest in the program to gain access to equipment that might otherwise be too expensive for them to obtain on their own, as well as catalyze larger companies to take on technological challenges that would be too risky for one individual company to pursue. By gathering the entire supply chain, the early technology adopters, developers and users are exposed to less risk, thereby increasing the likelihood that manufacturing innovations will be realized and commercialized here in the U.S.

The ASME Manufacturing Public Policy Task Force strongly supports sustained funding for the MEP and Manufacturing USA programs so they can continue to be successful in addressing our long-term fiscal and workforce challenges. The Task Force remains strongly supportive of these initiatives as well as the underlying goals of NIST as they relate to advanced manufacturing and technological innovation.

Statement approved by the ASME Manufacturing Public Policy Task Force (MPPTF).

ASME is a non-profit technical and educational organization with more than 140,000 members globally. The Society's members work in all sectors of the economy, including industry, academia, and government. This position statement represents the views of the Manufacturing Public Policy Task of the ASME Public Affairs and Outreach Council and is not necessarily a position of ASME as a whole.

¹ Manufacturing USA Program Design and Impact Analysis: A Third-Party Assessment:
<https://www2.deloitte.com/us/en/pages/manufacturing/articles/manufacturing-usa-program-assessment.html>
² <https://www.manufacturingusa.com/institutes>