THE NEW ENGLAND COUNCIL

Committee Update

December 23, 2014

Obama Administration Announces New NNMI Grant Opportunities

Dear Advanced Manufacturing Working Group member –

On December 11th, the Obama Administration released information on two new manufacturing hubs it expects to fund next year through its Nationwide Network for Manufacturing Innovation (NNMI) initiatives. Specifically, the Fact Sheet notes that "President Obama will launch two new competitions for manufacturing innovation institutes today—one in smart manufacturing at the Department of Energy and one in flexible hybrid electronics at the Department of Defense. Each institute will receive $70 million or more of federal investment to be matched by at least $70 million from the private sector for a total of more than $290 million in new investment."

If your organization or institution has any interest in either of these hubs, please let me know and I can work to identify additional information.

You can find the full White House Fact Sheet, with additional details on the hubs, below. There is also additional information at www.manufacturing.gov.

The White House

Office of the Press Secretary

For Immediate Release
December 11, 2014

FACT SHEET: President Obama Launches Competitions for New Manufacturing Innovation Hubs and American Apprenticeship Grants

Today, at a meeting of the President's Export Council (PEC), President Obama will announce nearly

$400 million to help improve the competitiveness of American businesses and workers by spurring new manufacturing innovations and giving America workers additional opportunities to improve and expand their skill sets for middleclass jobs.

To help support new advancements in manufacturing, the President will announce more than $290 million in public-private investment for two new Manufacturing Innovation Hub Competitions. Today's announcement fulfills the President's 2014 State of the Union pledge to launch four new institutes this year, for a total of eight institutes launched so far, and puts the Administration past the halfway mark on the President's original goal of creating 15 manufacturing innovation institutes supported through executive action.

In addition, the President will announce $100 million to expand apprenticeships for American workers - a proven training strategy for workers to learn the skills that employers need for American businesses to grow and thrive in a competitive global environment. Apprenticeships are also a path to the middle class – 87 percent of apprentices are employed after completing their programs and the average starting wage for apprenticeship graduates is over $50,000.

During today's meeting, President Obama will also highlight the continued need to reform and simplify our tax code and the importance of opening up new markets abroad for American-made goods and services through tough, fair new trade agreements.

The PEC, chaired by Jim McNerney, President and CEO of Boeing and vice-chaired by Ursula Burns, Chairman and CEO of the Xerox Corporation, is the principal national advisory committee for exporting. The Council advises the President on government policies and programs that affect U.S. trade performance; promotes export expansion; and provides a forum for discussing and resolving trade-related problems among the business, industrial, agricultural, labor, and government sectors.

New Actions to Grow America's Competitiveness for Jobs, Exports, and Investment

- **Announcing More Than $290 Million in Public-Private Investment Through Two New Manufacturing Innovation Hub Competitions:** President Obama will launch two new competitions for manufacturing innovation institutes today—one in smart manufacturing at the Department of Energy and one in flexible hybrid electronics at the Department of Defense. Each institute will receive $70 million or more of federal investment to be matched by at least $70 million from the private sector for a total of more than $290 million in new investment.

- **Launching the $100 Million American Apprenticeship Grants Competition**: The President will also announce that the Department of Labor is opening a competition to spur partnerships between employers, labor, training providers, and local governments to expand apprenticeships into high-growth fields like advanced manufacturing and healthcare and scale models that work. Apprenticeships are a proven path to the middle-class, as 87 percent of apprentices are employed after completing their programs with an average starting wage of over $50,000.

Exports Power American Jobs and Growth

Our long-term competitiveness for jobs, exports, and investment depends on America's ability to lead on the cutting-edge of technology and on the skills and talent of America's workers. Last year, the United States exported $2.3 trillion dollars of goods and services, an all-time high, and today, exports support more than 11 million American jobs across 300,000 businesses. Manufacturing, in particular, is the

engine behind our exports and innovation – contributing the majority of the nation's exports and nearly three-quarters of its private-sector R&D. And American manufacturing is more competitive than it has been in decades, growing nearly twice as fast as the economy overall and adding 764,000 jobs since February 2010. At the same time, businesses looking to move production to the United States consistently cite the skills of America's workers, the most productive workforce in the world, as the reason for rooting jobs and investment here. Today's announcements build on that competitive strength by investing in manufacturing innovation and upgrading the skills of American workers through the proven model of apprenticeships.

Two New Manufacturing Innovation Institute Competitions:

Manufacturing institutes serve as a regional hub, bridging the gap between applied research and product development by bringing together companies, universities and other academic and training institutions, and Federal agencies to co-invest in key technology areas that encourage investment and production in the U.S. This type of "teaching factory" provides a unique opportunity for education and training of students and workers at all levels, while providing the shared assets to help small manufacturers and other companies access the cutting-edge capabilities and equipment to design, test, and pilot new products and manufacturing processes.

Department of Defense-led Flexible Hybrid Electronics Manufacturing Innovation Institute

The Department of Defense will lead a competition for a new public-private manufacturing innovation institute in flexible hybrid electronics, combining $75 million of federal investment with $75 million or more of private investment. The modern world is filled with electronics: computers, cell phones, sensors, and literally trillions of small devices that make American lives better, if somewhat busier. The vast majority of these electronic devices are made up of boxy, rigid circuit boards. But in the world around us, most things are not flat or boxy; our bodies, the environment, the vehicles that transport us all tend to reflect an organically derived shape with plenty of curves and flexibility. Flexible hybrid electronics combine advanced materials that flex with thinned silicon chips to produce the next generation of electronic products seamlessly integrated into the things around us. These include items as diverse as comfortable, wireless medical monitors, stretchable electronics for robotics and vehicles, and smart bridges capable of alerting engineers at the first signs of trouble. For the nation's warfighters, these new technologies will make lifesaving advances and improve mission effectiveness. For example, intelligent bandages and smart clothing will alert soldiers to first signs of injury or exhaustion; structural integrity sensors will offer real-time damage assessment for helicopters or aircraft after engagement; and small, unattended sensors will give soldiers greater situational awareness.

Department of Energy-led Smart Manufacturing Innovation Institute

A third of the nation's energy consumption goes into manufacturing. New smart manufacturing technologies – including advanced sensors and sophisticated process controls – can dramatically improve energy efficiency in manufacturing, saving manufacturers costs and conserving the nation's energy. The Department of Energy will lead a competition for a new public-private manufacturing innovation institute focused on smart manufacturing, including advanced sensors, control, platforms, and models for manufacturing. By combining manufacturing, digital, and energy efficiency expertise, technologies developed by the institute will give American manufacturers unprecedented, real-time control of energy use across factories and companies to increase productivity and save on energy costs. For energy intensive industries – like chemical production, solar cell manufacturing, and steelmaking – these technologies can shave 10-20% off the cost of production. The new institute will receive a federal investment of $70 million that will be matched by at least $70 million in private investments and represents a critical step in the Administration's effort to double U.S. energy efficiency by 2030.

Interested applicants can find more information on the manufacturing innovation institute competitions at Manufacturing.gov

$100 Million American Apprenticeship Grants Competition:

Today, in conjunction with the launch of the American Apprenticeships Grants competition, Secretary of Labor Tom Perez will preside over a graduation at the Urban Technology Project, an apprenticeship program in Philadelphia, PA, whose graduates learn IT skills for careers as computer support specialists. The Department of Labor competition will use $100 million or more of H-1B funds to award approximately 25 grants to partnerships between employers, labor organizations, training providers, community colleges, local and state governments, the workforce system, non-profits and faith-based organizations that:

Launch apprenticeship models in new, high-growth fields: Many fast-growing occupations and industries with open positions such as in information technology, high-tech services, healthcare, and advanced manufacturing need the high-quality, on-the-job training provided in an apprenticeship to meet their workforce needs.

Align apprenticeships to pathways for further learning and career advancement: Apprenticeships that embed industry-recognized skills certifications or reward workplace learning with college credit provide an affordable educational pathway for those who need to earn while they learn, and apprenticeships linked to pre-apprenticeship programs can help more Americans access this training and get on an early pathway to a good career.

Scale apprenticeship models that work: Across the country, there are pockets of excellence in apprenticeship, but all too often these successful models are unknown in other regions or to other employers. These grants will build from strength and invest in innovations and strategies to scale apprenticeships – including to market the value of apprenticeships, make them more attractive to women and other Americans who have been underrepresented, increase the return on investment for workers and, or build national and regional partnerships to expand apprenticeships.

Interested applicants can find more information on the American Apprenticeship Grants Competition, resources for launching new registered apprenticeships, and a toolkit on federal funds for apprenticeship at http://www.dol.gov/apprenticeship. To access more information about the competition – please see the Grants.gov application page.

In addition, Skills for America's Future is launching an online collaboration space for apprenticeship providers and foundation funders to connect. And the Advanced Manufacturing Partnership Steering Committee, building on new apprenticeship programs launched by Dow, Siemens, and Alcoa, is launching a 'How-to' toolkit to help other employers launch apprenticeships.