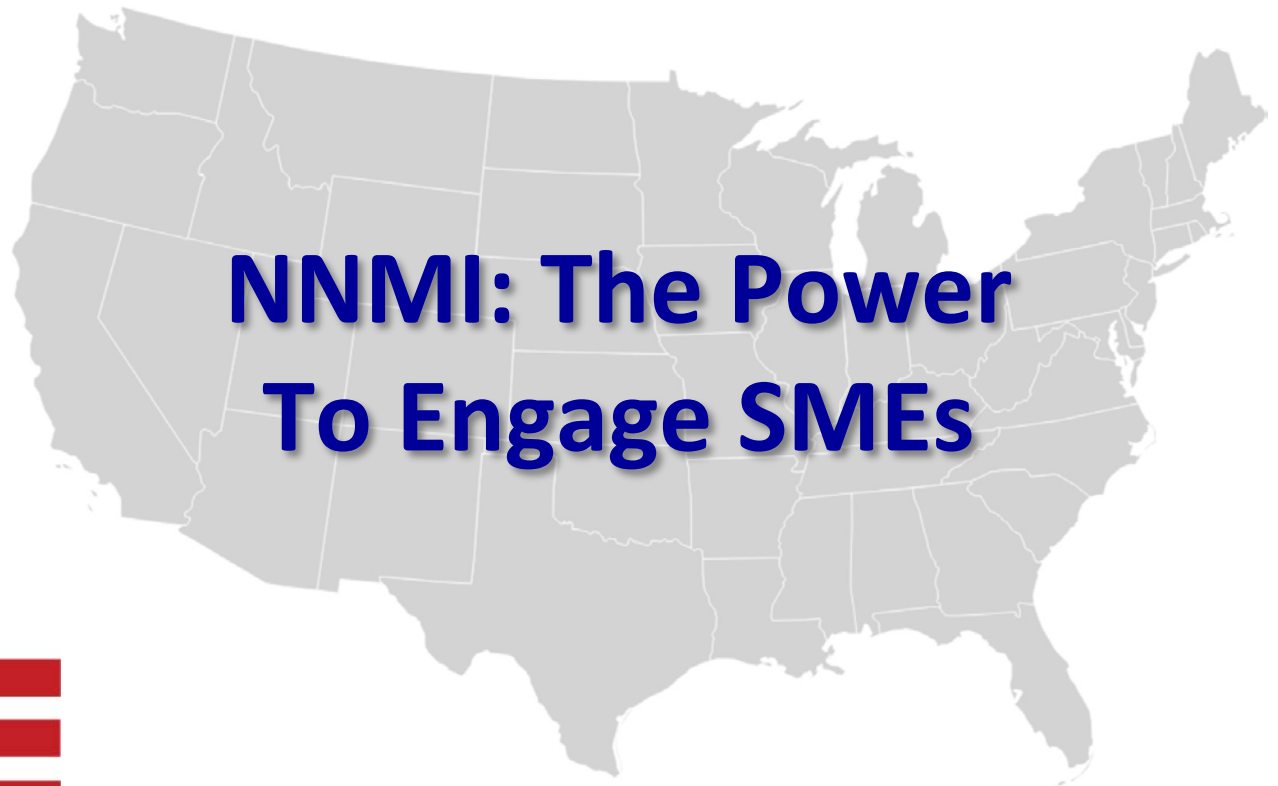


2016 NIST NNMI Institute Competition

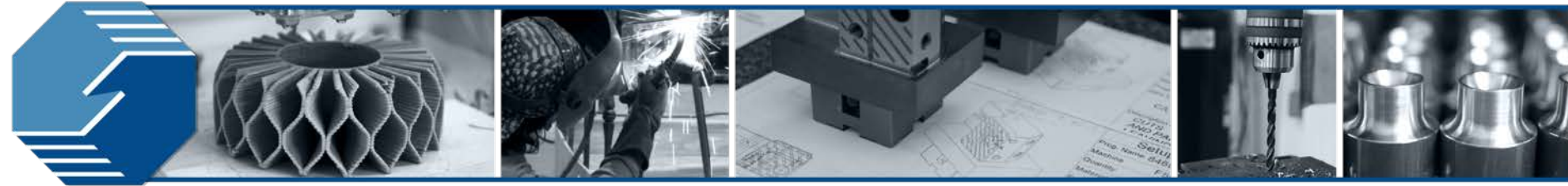


Leveraging the Network of NIST MEP Centers

David C. Stieren

Technical Manager, Program Development

Hollings Manufacturing Extension Partnership (MEP)



MAKING AN IMPACT ON U.S. MANUFACTURING

Hollings Manufacturing Extension Partnership (MEP) Program

Accelerating Technology to Small U.S. Manufacturers

NNMI Institute Proposers' Day

NIST, Gaithersburg, MD

March 8, 2016

David Stieren
Technical Manager, Program Development
NIST MEP

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301-975-3197

www.nist.gov/mep

MEP: A National Resource to Help Connect NNMI Institutes with Small Manufacturers



- **RAMI Legislation**

“The Secretary shall ensure that the National Program Office incorporates the [Hollings Manufacturing Extension Partnership](#) into Program planning to ensure that the results of the Program reach small and medium-sized entities.”

- **FFO pg 43, “National Impacts and Broad-based Benefits” section:**

“When preparing its Full Application, the applicant may want to consider addressing the following topics, as examples, to further illustrate its approach to this sub-criterion:

- Engaging U.S. small- and medium-sized manufacturing enterprises (SMEs) and global supply-chains, including but not limited to the [NIST Hollings Manufacturing Extension Partnership](#) program and regional centers, to meet their needs and to ensure results reach small and medium-sized entities.”



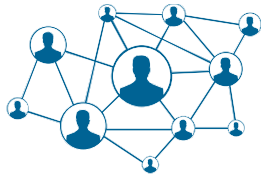
MEP: How We Can Help



NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

- NIST MEP manages an existing network of manufacturing assistance centers in all 50 U.S. states and Puerto Rico
 - MEP provides hands-on technical, business assistance to small U.S. manufacturers – annually serving >29,000 companies
- For proposals being prepared in response to this FFO, MEP Centers are available to help Proposal Teams connect small U.S. manufacturers with the proposed Institutes
- MEP Role in NNMI Institutes (framework from NIST MEP – DOD MOU):
 - ✓ *Increase small manufacturer awareness of Institute focus areas, resources*
 - ✓ *Facilitate small manufacturer informing Institute research*
 - ✓ *Facilitate small manufacturer participation in Institute research*
 - ✓ *Help deploy results of Institute research to small manufacturers*

MEP Summary



National Network

MEP Center in all 50 U.S. states plus Puerto Rico. System-wide non-Federal staff of over 1,200 individuals in >400 service locations assisting U.S. manufacturers. Contracting with >2,500 3rd party service providers



Partnership Model

Federal, State and Industry



MEP Budget & Business Model

\$130M FY16 Federal Budget with Cost Share Requirements for Centers



Local → National Connection

System of Centers providing localized service to manufacturers in each State – with National reach and resources



MEP Strategy: Global Competitiveness and Growth

Mission to provide direct, hands-on tech & business assistance to domestic manufacturers to help them compete and grow



Technology Acceleration

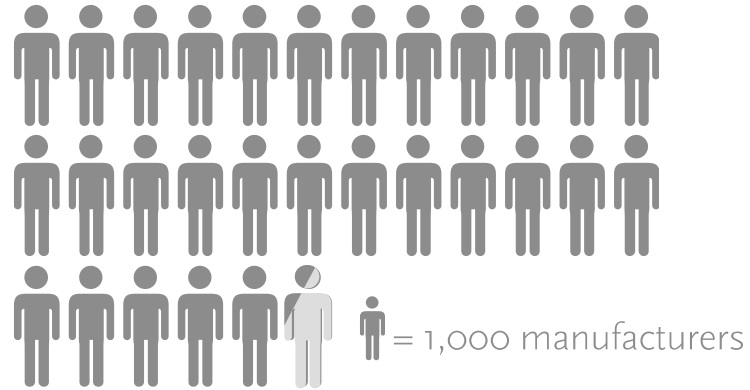
MEP connects U.S. mfrs with technology opportunities, solutions they require to grow and compete in the global marketplace.

MEP is connecting small U.S. manufacturers w/NNMI Institutes.



MEP Client Impacts

29,101
Manufacturers
served in FY15



JOBS RETAINED

49,011



JOBS CREATED

19,466



NEW CLIENT INVESTMENTS

\$3.2 Billion



COST SAVINGS

\$1.2 Billion



RETAINED SALES

\$5.7 Billion

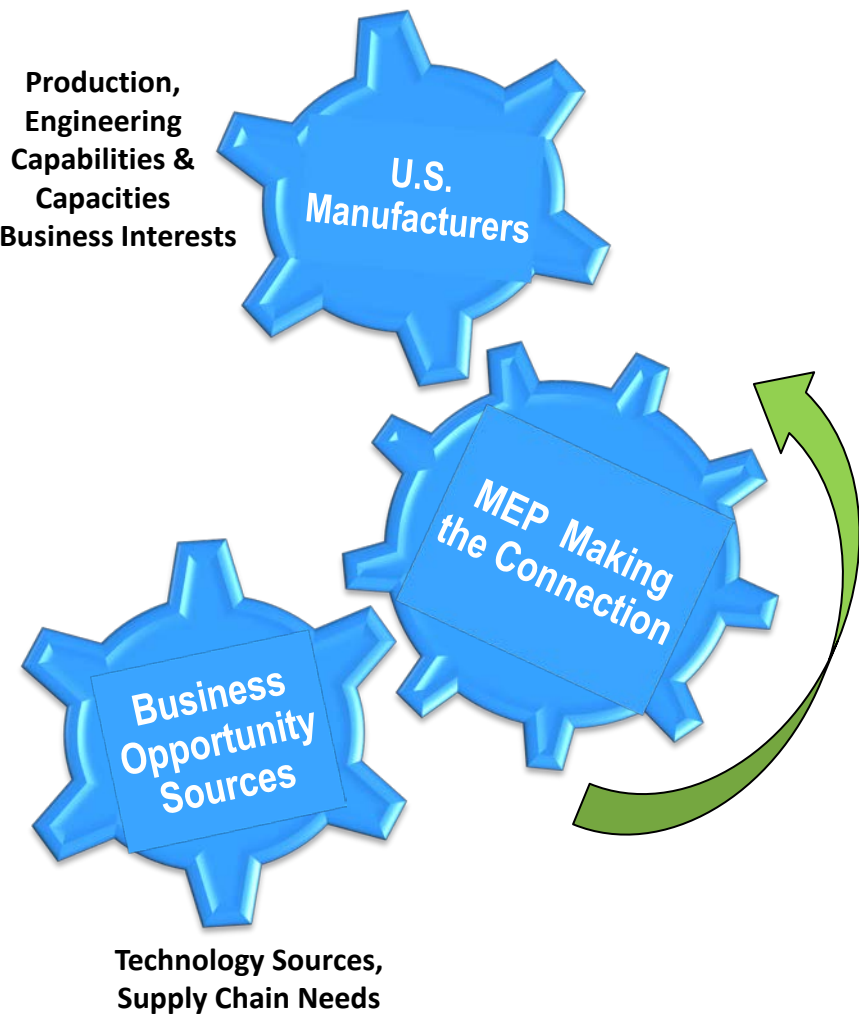


NEW SALES

\$2.3 Billion



MEP: Connecting and Assisting U.S. Manufacturers



- Enhance business opportunities for U.S. manufacturers
- *Connect* products, capabilities, capacities of U.S. (small) manufacturers with:
 - ✓ Resources available from Nation's technology sources, including NIST Labs, other Federal Labs, NNMI Institutes
 - ✓ New market opportunities
 - ✓ Supply chain needs of OEMs, Tier 1s, gov agencies
- Provide *assistance* to manufacturers, including:
 - ✓ Technical manufacturing services for products, processes
 - Manufacturing Strategy, Scale-up
 - Production Optimization, (Re)tooling (Lean/Quality/Automation)
 - Engineering Practices
 - ✓ Innovation and Product/Process Development
 - ✓ Supply Chain Development
 - ✓ Market Diversification, Marketing
 - ✓ IP Management and Financing/Access to Capital
 - ✓ Workforce Development
 - ✓ Environmental Sustainability
 - ✓ Exporting



MEP and Established NNMI Institutes



- NNMI Institutes, MEP have mission-centric focus on U.S. manufacturers – especially small manufacturers
 - ✓ *Institutes need to connect with small manufacturers on large scale to maximize impact*
 - ✓ *MEP is an existing, nationwide network of hands-on assistance Centers managed by NIST that serves tens of thousands of small U.S. manufacturers annually*
- MEP is currently actively working w/several NNMI Institutes in different manners, and plans to expand its engagement with Institutes in the near future



MEP and DOD-Sponsored NNMI Institutes



MEMORANDUM of UNDERSTANDING
 BETWEEN THE
 U.S. DEPARTMENT OF DEFENSE
 OFFICE OF THE SECRETARY OF DEFENSE
 DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR
 MANUFACTURING AND INDUSTRIAL BASE POLICY
 AND THE
 U.S. DEPARTMENT OF COMMERCE
 NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY
 HOLLINGS MANUFACTURING EXTENSION PARTNERSHIP
 May 2015

- DOD-NIST MEP MOU executed summer 2015
 - ✓ PURPOSE: Provide overarching framework to identify opportunities for synergy and collaboration among programmatic efforts of DOD, DOD-led NNMI Institutes, NIST MEP
 - ✓ Defines collaboration framework – 4 areas identified on slide 3

● EXAMPLE Collaborations

- ✓ LIFT
 - Michigan MEP Center (MMTC) operating Call Center at LIFT to address needs of small manufacturers in region surrounding LIFT operations in Detroit
- ✓ DMDII
 - 9 MEP Centers working joint Digital Manufacturing Pilot with DMDII to create training, tools, mechanisms / assessments to enable MEP Center practitioners to engage small manufacturers about digital manufacturing



MEP and DOE - Sponsored NNMI Institutes



POWERAMERICA



- **MOU in process between NIST and DOE**
 - ✓ Incorporate tenets of NIST MEP – DOD MOU
 - ✓ Likely to include other NIST NNMI functions, including network building and coordination in conjunction with AMNPO
- **EXAMPLE Collaborations**
 - ✓ Power America
 - NC MEP contracting with Power America to conduct specific outreach to small manufacturers about technologies and manufacturing opportunities occurring at / in conjunction with wide bandgap semiconductors



MEP and NNMI Institutes

SUMMARY



- MEP operates existing network of assistance centers in all 50 U.S. states and Puerto Rico.
 - MEP provides hands-on technical, business assistance to small U.S. manufacturers – annually serving >29,000 companies.
- MEP is currently working with established NNMI Institutes to help them scale impacts for the benefit of small U.S. manufacturers, and has plans to expand these relationships.
- MEP Centers are available to help connect proposal teams with small U.S. manufacturers for this NNMI Institute FFO.



Thank You

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