



# 2014 NIST MEP ANNUAL REPORT

*Making an Impact on U. S. Manufacturing*



**MEP** • MANUFACTURING  
EXTENSION PARTNERSHIP

# TABLE of contents



03	Message from MEP
05	MEP at a Glance
06	Funding History
08	Program Highlights
14	Partnership Highlights
22	Economic Impact
24	MEP Advisory Board
26	National Network

# MESSAGE from MEP

## Looking Back on 2014 and What's Ahead

During the past year, the NIST MEP program and the MEP Network has been hard at work supporting U.S. manufacturers and doing our part to strengthen U.S. manufacturing. As MEP's former Acting Director, I have a full appreciation of the tremendous work of this system. Outlined in this report are some of the program's notable achievements. In addition, below are a few critical areas we focused on and will continue to build upon in 2015.

### **Strategic Planning**

NIST MEP undertook a strategic planning effort to outline strategic goals and mission requirements needed to support and strengthen U.S. manufacturers. Four key strategic goals were identified through this process:

1. Enhance competitiveness of U.S. manufacturers
2. Serve as a voice to and voice for manufacturers
3. Support national, state, and regional manufacturing eco-systems
4. Develop MEP's capabilities as a high performance system

### **Optimizing the MEP System to Better Support Manufacturers**

In 2014, NIST MEP began a multi-year open competition of the national system of state based MEP Centers, with the primary objective of optimizing the impact of the Federal investment on U.S. manufacturers. The original awards to these states were made more than 10 years ago, and the MEP investment in terms of dollars per manufacturing establishment was below the national average. For the first round, NIST announced a competition in August 2014 for the centers in 10 states: Colorado, Connecticut, Indiana, Michigan, New Hampshire, North Carolina, Oregon, Tennessee, Texas and Virginia. Subsequent rounds for the remaining states are currently underway and the full system competition will be completed by December 2016.

### **Leadership Changes**

We have been hard at work in filling key leadership positions, including the recent hiring of the MEP Director. Carroll A. Thomas was selected after a full, open competition, and rigorous review process. Carroll was the Associate Administrator of the Office of Small Business Development Centers, Small Business Administration. Prior to assuming her position at the SBA, Ms. Thomas worked at NIST MEP in a variety of the areas leading programs.

In the past year NIST MEP has strengthened the foundation for the program and our nationwide network. I look forward to sustained success in continuing to serve the country's manufacturers.

*Phillip Singerman*

Associate Director, NIST Innovation and Industry Services



# ABOUT THE MEP PROGRAM

## Who we are

The Hollings Manufacturing Extension Partnership (MEP) is committed to strengthening U.S. manufacturing, and the program continually evolves to meet manufacturers changing needs. Through its services and partnerships, MEP has had a profound impact on the growth of well-paying jobs, the development of dynamic manufacturing communities, and the enhancement of American innovation and global competitiveness.

MEP's strength is in its partnerships. Through its collaborations at the federal, state and local level, MEP positions manufacturers to develop new products and customers, expand

into global markets, adopt new technology, reshore production, and more. And due to this direct contact with manufacturers, MEP serves as a valuable bridge to other organizations that share a passion for enhancing the manufacturing community.

MEP is a part of the National Institute of Standards and Technology (NIST), under the U.S. Department of Commerce.

### Our Mission

To enhance the productivity and technological performance of U.S. Manufacturing.

### Our Role

To facilitate and accelerate the transfer of manufacturing technology in partnership with industry, universities and educational institutions, state governments, NIST and other federal research laboratories and agencies.

Since 1988, MEP has worked with nearly 80,000 manufacturers, leading to \$88 billion in sales and \$14.5 billion in cost savings, and it has helped create more than 729,000 jobs.

# MEP AT A GLANCE

## MEP NETWORK

### National System of Centers

The MEP program is built around fostering the national network of centers locally positioned throughout the U.S. and Puerto Rico. With more than 550 field offices across the nation, including 1,200 MEP experts and over 3,200 third party service providers, the national network works together to help make U.S. manufacturers and the U.S. economy stronger.

30,056

### Manufacturers Served in 2014

Our national network of MEP Centers interacted with over 30,000 manufacturers last year to raise awareness and improve their performance.

\$128 MILLION

### MEP Federal Budget

The total budget of the national network of MEP Centers is about \$300 million. One-third of this is provided by the federal government with the remainder coming from state and industry sources. The federal contribution in FY2014 was \$128 million, with more than three-quarters going directly to the centers.

1:19 RATIO

### High Return on Investment

For every one dollar of federal investment, the MEP generates nearly \$19 in new sales growth and \$21 in new client investment. This translates into \$2.5 billion in new manufacturing sales annually. For every \$2,001 of federal investment, MEP creates or retains one manufacturing job.

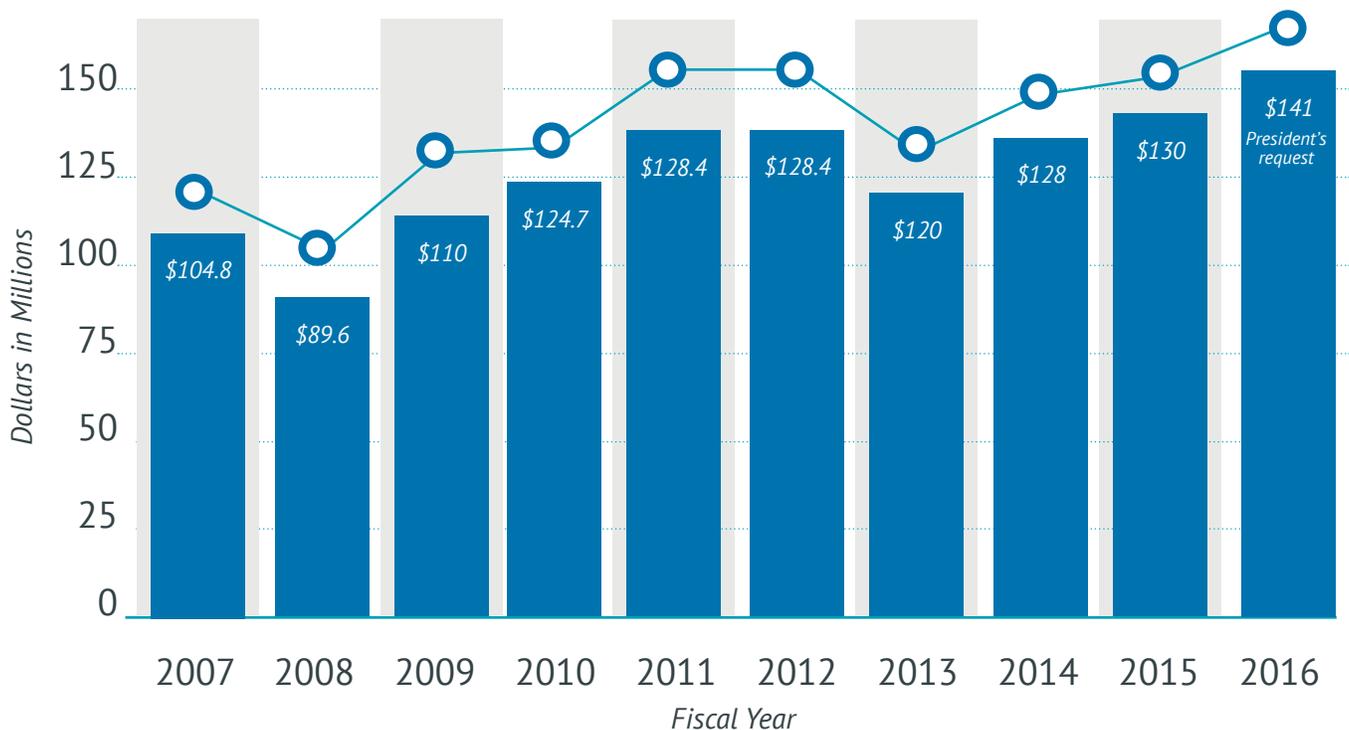
PARTNERSHIP

### MEP Partnership Model

The MEP program works with partners to leverage resources and bring those resources to manufacturing clients. MEP partnerships are found in three primary areas: Federal, State, and Industry.

# FUNDING History

MEP is one of the only federal programs providing tangible assistance to the manufacturing sector, helping companies stay in business and retain jobs. The program receives wide bipartisan support. In 2014, Congress approved FY2013 appropriations for the federal government, including \$128 million for the MEP program, a 6.6% increase over FY2013 funding. Funding for the MEP program increased to \$130 million in FY2015 and \$141 million is requested for FY2016. The increased funding will give Centers the opportunity to serve more manufacturers and reach out to those they might not have served in the past, including manufacturers in emerging industries, in rural areas or those that are very small. The funding will also help Centers develop new tools to support innovative supply chains, technology acceleration and workforce development.





“

*I encourage all of you to take advantage of our Manufacturing Extension Partnership services and to find out how our experts who can work as consultants with your manufacturers can make your businesses more successful and grow your local economy.”*

*U.S. Commerce Secretary Penny Pritzker*





# 2014 PROGRAM Highlights

Working with small and mid-sized manufacturers to help them grow is the core mission of an MEP Center, and a wide range of services and initiatives are available to do so. In particular, we want to highlight the ways that MEP Centers provide support to manufacturers in the areas of supply chain, export, and technology acceleration.

## 1 Supply Chain

MEP serves a vital and diverse role in providing hands-on technical and business assistance to support the development and competitiveness of manufacturing supply chains. MEP offers a variety of services to U.S. manufacturers to cover the different aspects of supply chain management and development.

## 2 Export

MEP is focused on helping manufacturers generate revenue growth, and international sales represent a vital opportunity. Together with the U.S. Export Assistance Centers, MEP developed ExporTech™, a national export assistance program that helps companies enter or expand in global markets.

## 3 Technology Acceleration

MEP was created, in part, to help transfer technology from federal labs to smaller manufacturers and continues to serve as the link between manufacturers and the technology opportunities and solutions they require to be globally competitive.

Through technology acceleration, MEP fosters innovation and growth, and enhances the productivity and performance of U.S. manufacturing companies.

*"We can help these smaller manufacturers be more competitive in international supply chains by making sure they have the tools they need to take advantage of innovation."*

*U.S. Secretary of Commerce Penny Pritzker*

# SUPPLY CHAIN

Strengthening America's supply chains and the small and medium-sized manufacturers that comprise all levels or tiers of a supply chain is the core of MEP's mission and essential to U.S. Manufacturers' long-term competitiveness. With today's global economy, the competitiveness of U.S. manufacturing depends on far more than the activities that occur within factory walls; it depends on the performance of the full supply chain. Helping manufacturers stay competitive and meet their growing challenges requires MEP to focus not only on expanding services to manufacturers themselves, but also in relation to sectors that affect the cost of manufacturing and impact the ability of manufacturers to bring their products to global markets. In 2014, MEP continued to work with manufacturing companies to improve the operational efficiencies of supply chains. Below are two highlighted examples of the services MEP provides in Supply Chain:

## **SUPPLY CHAIN OPTIMIZATION**

**(SCO)** approaches supply chains from a system perspective, helping manufacturers build dynamic supply chains through the use of strategy, risk management, total cost of ownership, supplier communication, and supplier assessments. Last year, 24 MEP Centers actively engaged in the

SCO program at various stages:

- 16 Centers hosted public events - one event resulting in 80 companies being exposed to SCO
- 9 Executive Engagement Strategy sessions were conducted; and
- 39 leads were identified from companies visiting the SCO website.

## **Total Sales**



**\$106 Million**

The total new and retained sales for clients receiving supply chain optimization services.

**SUPPLIER SCOUTING** identifies domestic manufacturers that meet the Buy America/Buy American specifications and connects them with the supply chains of large companies, innovative start-ups, and government agencies. To date, MEP has scouted items for 16 companies and government agencies. In 2014, Alstom Transport contacted MEP for help in identifying domestic manufacturers who produce various metal fabrications for components used in Alstom

passenger trains, and that are certified as: manufacturers with certification as a Disadvantaged Business Enterprise, Small Business Enterprise, and Veteran, Woman, or Minority Owned Small Business. Supplier Scouting was conducted by the MEP national network, and as a result, 24 U.S. manufacturers in 11 states and Puerto Rico were identified as potential matches.

## **Business Opportunities**



**\$40 Million**

Supplier Scouting has identified over \$40 Million in new business opportunities for U.S. manufacturers.

# TECHNOLOGY Acceleration

Technology in manufacturing enables product innovations and efficient processes.

Expanding the adoption of innovative technology, in the words of President Obama, “[will ensure] the United States remains a nation that invents it here and manufactures it here.” MEP was originally created to help transfer technology from federal labs to smaller manufacturers and continues to serve as the link between manufacturers and the technology opportunities and solutions they require to be globally competitive. MEP fosters innovation and growth to: develop new and improve existing products; expand and diversify

markets; advance production and engineering processes; increase value within supply chains; and bolster U.S. manufacturing ecosystems. In 2014, MEP helped accelerate opportunities to leverage and adopt technology in the following ways:

**Connecting manufacturers with developed technologies** and

- 1 technical capabilities through Technology Driven Market Intelligence (TDMI) / Technology Scouting.

2 **Supporting product development or commercialization efforts**

which are often empowered by technology adoption through Small Business Innovation Research (SBIR).

3 **Supporting federal advanced manufacturing initiatives**

at the national level and through local collaborations. MEP’s participation in the National Network for Manufacturing Innovation ensures that small and medium sized manufacturers will have access to innovative technologies and a role in advanced manufacturing ecosystems.

## Success Story Spotlight.

Working with ATAS International, MRC (a Pennsylvania based MEP center) helped the Allentown, PA manufacturer accelerate commercialization of a new product (InSpire™ Solar AC Unit). Center staff utilized TDMI to determine the market viability, map compatible technologies to use, and find a technology partner.

TOTAL IMPACTS

**\$28.7 M**

For 28 companies that received Technology Scouting / TDMI from 2006-2014

## 01.

### Technology Scouting, Technology Driven Market Intelligence

#### Average \$1 million new and retained sales per company

Technology Scouting and Technology Driven Market Intelligence use a systematic and comprehensive approach to technology. The methods focus on market intelligence, and helping manufacturers find technology solutions to their most pressing problems. Last year, NIST MEP and its partners conducted in-person training classes and a new web-based version for center staff and practitioners. The sessions focused on searching, finding early stage technologies, mind mapping, managing client expectations, and sharing lessons learned and opportunities for improvement.

## 02.

### Small Business Innovation Research

#### Average \$850K new and retained sales per company

SBIR is a highly competitive federal grant program encouraging U.S. owned and controlled small and mid-sized businesses to engage in R&D with commercialization potential. MEP plays a pivotal role in helping SBIR research move from concept to market through services in areas such as product design, manufacture engineering, product concept testing, quality control/management, supplier scouting, and certification.

## 03.

### National Network for Manufacturing Innovation

#### Partnerships with the Department of Defense's Digital Manufacturing and Design Innovation Institute.

Last year, MEP formed a partnership with the U.S. Department of Defense to help support and increase awareness of the Digital Manufacturing and Design Innovation Institute (DMDII). MEP has also collaborated with NIST Labs, Department of Energy Labs, universities, and other Manufacturing Institutes to help manufacturers identify, adapt, and deploy relevant technologies to improve processes or support new products.





# EXPORT

Exports are critical to the American economy; they stimulate economic growth, help balance the trade deficit, and create jobs. For manufacturers, it opens up new markets- 95 percent of the world’s consumers live outside of the United States. ExportTech is a collaboration between NIST MEP, the U.S. Commercial Service International Trade Association, and other regional partners such as state trade organizations, District Export Councils, Ex-Im Bank, Small Business Development Centers, banks, lawyers, logistic companies and others. The program objective is to assist manufacturing companies to enter or expand into global markets by providing a systematic process for the development of a vetted, strategic export growth plan. ExportTech efficiently connects companies with a wide range of world-class experts that help them navigate the export sales process. As a result in participation, companies rapidly expand global sales and save countless hours of effort.

## Benefits for U.S. manufacturers:

**\$770K**

On average, participating companies generate \$770,000 in new export sales.

**\$50K**

The average participant reported cost and investment savings of \$50,000.

**5 Jobs**

The average company created 5 new jobs.

## Total Sales

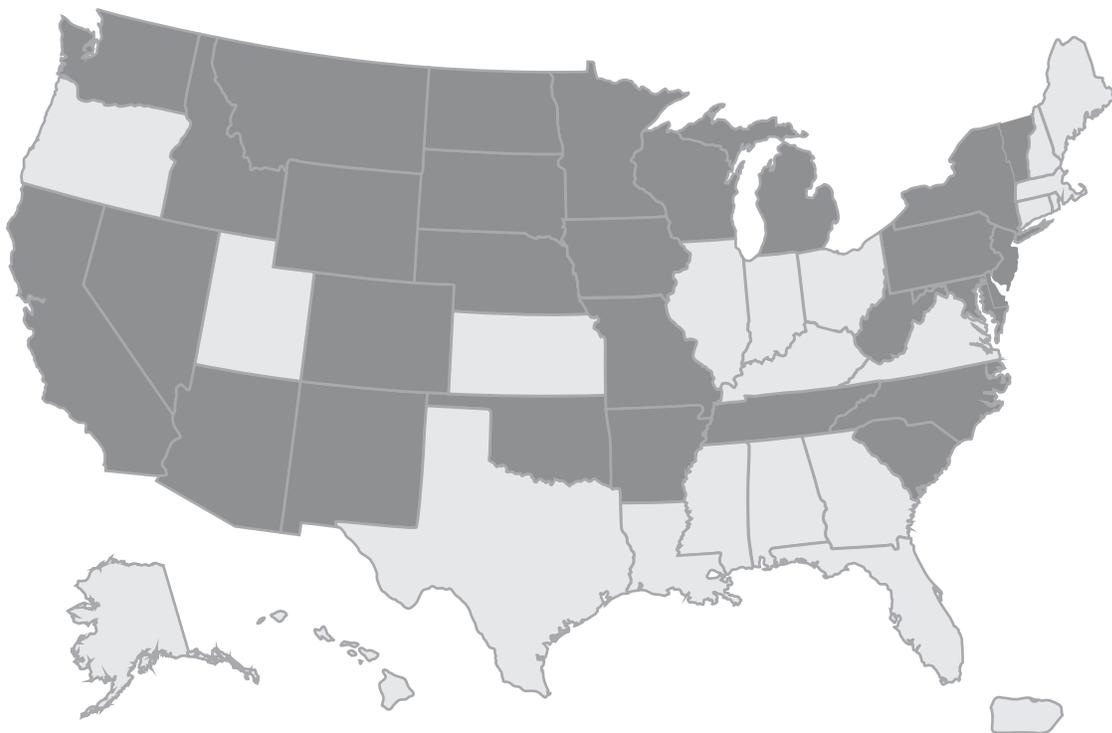


**\$400 Million**

Since 2007, total program impact has been nearly \$400 million in increased or retained sales.

# Participating States

Twenty-nine MEP Centers have actively engaged with the ExporTech™ program. In 2014, twenty-one ExporTech programs with 103 companies were conducted across the United States.



■ Participating States in ExporTech™

## Success Story Spotlight.



Louroe Electronics has maintained the highest quality standards in audio monitoring systems, microphones and base stations for more than 30 years. ExporTech helped Louroe to refine targeting on specific markets for growth. By the end of the program, Louroe had an accelerated export plan complete with easy-to-use tools for entering new markets. With its new strategic focus, Louroe far exceeded its goal of increasing exporting sales by 20 percent. The company went on to receive an Export Achievement Award from the Los Angeles Chamber of Commerce.



46% increase in exporting sales



25% total gross revenue from international business



1200% increase in sales growth to Mexico



# 2014 PARTNERSHIP Highlights

MEP's partners with organizations that share a commitment to fostering the competitiveness of U.S. manufacturing. From the federal and national to state and local levels, MEP values the expertise and support that our partners share to help grow the manufacturing community.

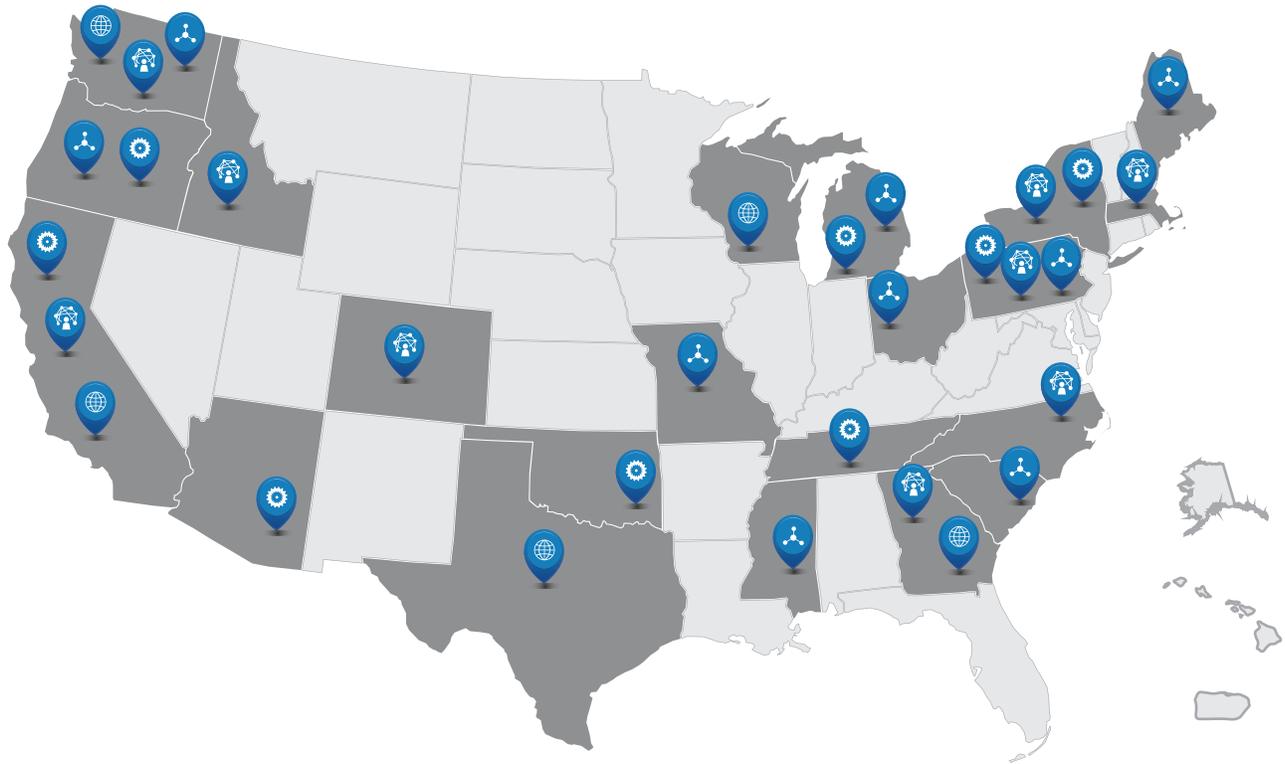
**1 Advanced Manufacturing Jobs and Innovation Accelerator Challenge**  
MEP serves a vital and diverse role in providing hands-on technical and business assistance to support the development and competitiveness of manufacturing supply chains.

**2 Manufacturing Technology Acceleration Centers (M-TACs)**  
The M-TAC pilot projects help U.S. small and medium sized manufacturers grow and compete within supply chains by focusing on the technological needs and trends of specific supply chain areas.

**3 Make it in America Challenge**  
The projects support communities in creating and implementing economic development strategies accelerating job creation through encouraging foreign direct investment in the U.S. and supporting re-shoring.

**4 Business to Business Network**  
The online regional business-to-business network project will help match buyers and sellers of technologies or products and services in support of small and medium sized manufacturers.

**5 Manufacturing Day**  
An annual event that occurs on the first Friday of October, MFG DAY manufacturers open their doors to showcase the potential of modern manufacturing and foster interest in manufacturing careers (p. 20).



**Business to Business Network Pilots**

2 YEARS  
 \$2.5 MILLION  
 10 PROJECTS  
 10 MEP CENTERS



**Make it in America Challenge**

3 YEARS  
 \$3.75 MILLION  
 10 PROJECTS  
 9 MEP CENTERS



**Advanced Manufacturing Jobs and Innovation Accelerator Challenge**

3 YEARS  
 \$20 MILLION  
 6 AGENCIES  
 10 PROJECTS  
 9 MEP CENTERS



**Manufacturing Technology Acceleration Centers**

2 YEARS  
 \$2.5 MILLION  
 5 PROJECTS  
 14 MEP CENTERS

# JOBS AND INNOVATION

## Accelerator Challenge

Ten public-private partnerships across America received funding in order to help revitalize U.S. manufacturing around the country.

The Advanced Manufacturing Jobs and Innovation Accelerator Challenge (AMJIAC) regions are now in their final year of the three year grants. In 2012, ten awards in nine states - all of which involve their state's MEP Center- were granted \$2 Million. The underlying objective for the AMJIAC awards is to grow and strengthen a region's capacity by creating high quality sustainable jobs, developing a skilled and diverse advanced manufacturing workforce, and accelerating technology innovation. The awards also provide regional partnerships that support advanced manufacturing activities and drive high potential industry clusters.

### Highlighted Success:

In Rochester, the AMJIAC initiative *Rochester Regional Optics, Photonics, and Imaging Accelerator Program* helps speed the growth of 50 small and medium-sized optics, photonics and imaging companies in the Rochester region. The state contributed \$200,000 to the effort,

along with \$700,000 from private organizations.

The AMJIAC accelerator program activities consist of networking events, workshops and seminars, an increased presence at trade shows, market research, and collaborative research. The accelerator program also developed programs to help companies improve manufacturing processes, strengthen sales efforts, and train their workforce.

In 2014, the Rochester region received grants from the Advanced Manufacturing Technology Consortia Program, and Investing in Manufacturing Communities Partnership designation. They have become finalists in the Department of Defense federal competition for a Integrated Photonics Institute for Manufacturing Institute (IMI). And as a result the state of New York continues to support the AMJIAC accelerator program by committing \$250 million to help secure the federal manufacturing institute.

Support for the AMJIAC awards came from the Economic Development Administration, Departments of Energy and Labor, Small Business Administration and NIST MEP. The ten regional clusters are:

- Washington & Oregon: Advanced Material and Metal
- California: Medical Device Bioscience
- Arizona: Aerospace Defense
- Tennessee: Advanced Prototyping
- Michigan: Advanced Contract Manufacturing
- Pennsylvania (2 awards): Transportation Metal and Electrical Equipment
- New York: Optical, Photonics, and Imaging
- New York: Thermal and Environmental Systems

# M-TAC

## Pilot Projects

Manufacturing Technology Acceleration Center Pilot Projects help manufacturers grow and compete within supply chains by focusing on the technological needs and trends of specific supply chain areas.

In March 2014, MEP awarded nearly \$2.5 million in funding for five M-TAC pilot projects to improve U.S. manufacturers' supply chain competitiveness through new technology adoption. The projects test and demonstrate business models to help small and medium sized manufacturers access technology transition and commercialization services they need. Last year, the five M-TAC Pilots collaborated with different supply chains to plan and conduct specific technology transition and commercialization projects. Below are a few highlights:

The following M-TAC pilots will receive \$2.5 million to focus on technology acceleration and supply chain development. The Pilots are all led by MEP Centers with 5 lead Centers and 9 participating Centers.

- California: Transportation
- Georgia: Southeast Automotive
- Oregon: Food and Beverage Processors
- Texas: Defense Aerospace
- Wisconsin: Great Lakes

- 1 The Transportation M-TAC**, led by the California Manufacturing Technology Consulting (CMTc), is working with Top/Mid-Tier manufacturers to identify their needs and the needs of small manufacturers within their supply chains. The Transportation M-TAC also works directly with the supply chains' small manufacturers to provide awareness about the needs of Top/Mid Tiers, as well as assistance in implementing specific technologies.

**Activities:** This M-TAC is working with a major aerospace company for the use of a new model-based definition approach to design and produce supply chain products in order to improve the data that directly affects the manufacturing cost, schedule, quality and risk throughout the entire lifecycle of a product. In addition CMTc is assisting the company in assembling the current state of known standards in the digital manufacturing area. The M-TAC pilot project is also collaborating with the National Institute Standards of Technology Engineering Labs, and other industry contributors.

- 2 The Food and Beverage Processors M-TAC**, led by Oregon MEP, is working with the Northwest Food and Beverage Processors Association to identify technical and business challenges faced by small manufacturers in the food processing supply chains of the northwest United States. Through the M-TACs online Emerging Technology Showcases, small manufacturer food processing suppliers have been introduced to emerging technology products or services. Four virtual technology showcases were scheduled last year varying in Robotics and Vision Forest Products, Collaborative Robots in Manufacturing, Waste Heat Recovery Solutions, and Robotics for Food Processors.

# MAKE IT IN AMERICA

## Challenge

In December 2013, NIST MEP awarded Make it in America cooperative agreements to ten MEP centers in nine states for technical assistance in areas of reshoring, supply chain optimization, and workforce development. The Make it in America programs are designed to encourage U.S. companies to keep, expand or re-shore their manufacturing operations in America, and to entice foreign companies to build facilities and make their products in America. During the first year of the award, MEP Centers worked with partners in their respective states in a number of ways:

### 1 Building Capacity and Capability in the Bio-Based Manufacturing Sector in Michigan - Michigan Manufacturing Technology Center (MMTC):

This project works to bridge the gap between current manufacturing capabilities and necessary materials, workforce skills, and resources to expand the bio-based materials sector.

**Activities:** In November 2014 MMTC hosted a Lightweighting Summit where twenty-nine SME C-level individuals, three materials suppliers, and key representatives attended. MMTC also created a research survey and sent it to over 3,700 Michigan manufacturers. Over 260 companies responded to the survey, 40 of which were plastic molders and 220 metal converters. The industry drive to lightweight and new materials was identified as a strong concern.

### 2 Reshoring and Advanced Manufacturing Jobs in Mississippi -

**InnovateMEP Mississippi:** The goal of “Make it in Mississippi” is to become one of the leading answers to the economic development challenge. This effort will focus strongly on both returning jobs to the U.S. and keeping advanced manufacturing jobs in the state.

**Activities:** InnovateMEP Mississippi has recorded projects and interactions with twenty-eight companies to help them strengthen their supply chains. The MEP Center also hosted a series of “listening sessions” with Original Equipment Manufacturers and manufacturers around the state to identify reshoring opportunities. The sessions informed companies on reshoring and how they could get involved with (or benefit from) reshoring.

**Success Story:** The Project has helped many companies reshore their products back to the U.S., including Battle Bells. After early productions from China left the final product lacking, the company shifted back home. InnovateMEP Mississippi connected Battle Bells with a nearby steel fabricator Long Branch, and provided them with assistance in development and commercialization.

The following MEP Centers will receive \$125,000 per year for three years to support their regional Make it in America Teams:

- Maine MEP
- Michigan Manufacturing Technology Center
- InnovateMEP Mississippi
- Missouri Enterprise
- Ohio Development Services Agency: 2 awards
- Oregon Manufacturing Extension Partnership
- Northeastern Pennsylvania Industrial Resource Center
- South Carolina MEP
- Impact Washington

# BUSINESS TO BUSINESS

## Network Pilots

In December 2014, NIST MEP awarded \$2.5 million in grants to ten MEP centers in ten states to pilot online regional business-to-business network projects. The networks will help match buyers and sellers of technologies or products and services in support of small and midsize manufacturers. Each awardee will receive a total of \$250,000 for a two-year project.

**California: The Northern California Business-to-Business Matchmaking** will spur regional product design and innovation, and provide a platform to facilitate the re-shoring of existing manufacturing demand to California.

**California: The California Business-to-Business Network** will unite core partners in an e-commerce partnership designed to comprehensively match domestic and international business opportunities and technologies with manufacturers in California.

**Colorado: The Pilot B2B Network** will expand an existing network to the state's two areas with the greatest concentration of manufacturers.

**Georgia: The Business-to-Business Network Pilot** will leverage existing networks across five states in the Southeast. The project will focus on the Southeastern automobile supplier and technology network within the states of Mississippi, Tennessee, Alabama, South Carolina and Georgia.

**Idaho: The Business-to-Business Network Pilot for Northern Idaho Manufacturers** will address the specific growth needs of the aerospace and metal fabrication manufacturer clusters of rural Idaho.

**Oregon: The Northwest Connectory Business-to-Business Network** will help manufacturers scout for local customers and suppliers, solicit bids, promote and seek emerging technologies.

**Massachusetts: The Enterprise Massachusetts Network** aims to leverage business expertise of regional networks, and create a dynamic, expert-driven matchmaking system.

**North Carolina: The Open Nomenclature Process for Organizing Interpersonal Networks and Technology** will provide an infrastructure necessary for manufacturers to conduct scouting for real-time business opportunities, technology opportunities, supplier identification, and market analysis.

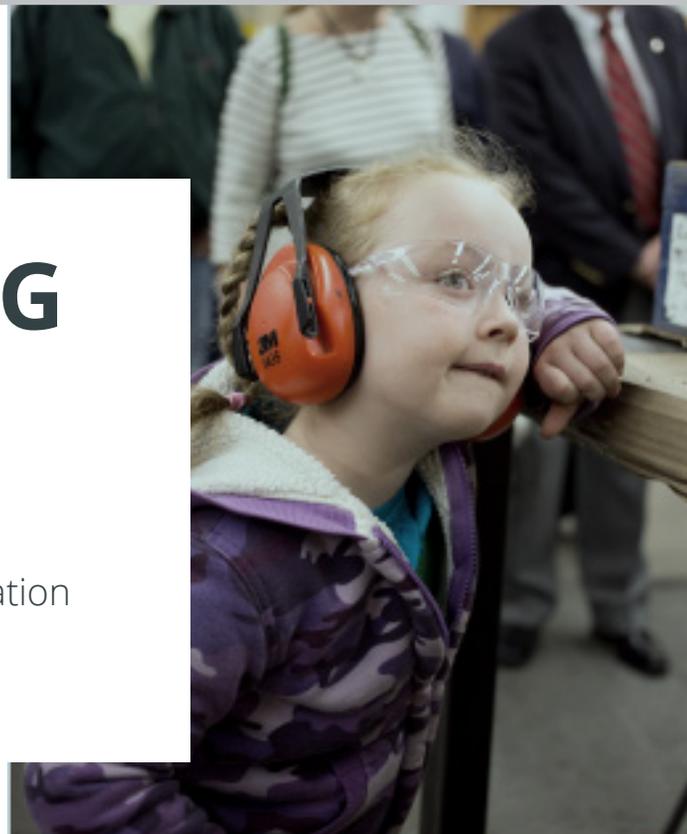
**New York: The NYMEP-FuzeHub B2B Network** will further develop and maintain the FuzeHub B2B Network so it can expand and become a model for use by other MEP centers, and to further increase partnerships with organizations, including IBM and Etsy.

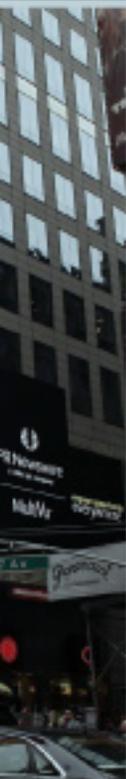
**Pennsylvania: The Pennsylvania Network for Open Innovation** will help instill a culture of innovation in manufacturing enterprises to increase their speed to market with more innovations and business growth.

# MANUFACTURING MFG Day

Manufacturing Day<sup>SM</sup> is a celebration of modern manufacturing meant to inspire the next generation of manufacturers.

Last year's annual Manufacturing Day (MFG DAY) exceeded the national participation goals. Many MEP Centers partnered with manufacturers, Chambers of Commerce, Workforce Investment Boards, schools, colleges, associations, government entities and community groups to make MFG DAY a success at the state and local levels across the country. This effort yielded unprecedented cumulative results. A total of 1,679 events were held across North America in all 50 U.S. states, including three Canadian provinces and Puerto Rico. In addition, more than a dozen virtual events were held. The largest participation reported for a single event was for the virtual event for students hosted by Discovery Education and Alcoa – more than 100,000 students participated virtually. Based on data collected from host company evaluations, more than 260,000 people attended live events. This brings the total number of participants affected by Manufacturing Day activities to nearly 400,000. The President of the United States participated in Manufacturing Day for the first time and attended an open house at Millennium Steel Service in Princeton, Indiana. Members of The Cabinet and senior officials in the Administration also participated in events across the country. Official proclamations were issued across the country celebrating Manufacturing Day, Manufacturing Week and Manufacturing Month. Heading the list is the proclamation issued by President Barack Obama declaring October 3, 2014 as Manufacturing Day in the US. We look forward to working together on this year's MFG DAY on October 2, 2015.





Total Events Across the U.S.



**1,679**

1,679 events took place across the country, including Canada - doubling from last year and surpassed the 1,500 goal set by MFG Day's co-producers.

Total Attendance at  
Manufacturing Day Activities



**400,000**

Nearly 400,000 students and adults participated in Manufacturing Day Activities. This included open houses and virtual events.

President attends Open House  
for the 1st Time



President Barack Obama attended an open house at Millenium Steel Service in Indiana. In addition, the President issued the first ever Presidential Proclamation recognizing National Manufacturing Day.



# DELIVERING Measurable Results

The numbers tell the story. In 2014 MEP clients reported that the assistance they received led in generating close to \$6.7 billion in new and retained sales and help create and sustain more than 63,000 American jobs. Our impacts illustrate our commitment to America and to the economic vitality of the states and communities in which we operate.

## Sales

**\$6.7 Billion New and Retained Sales**

\$2.5 Billion in New Sales  
\$4.2 Billion in Retained Sales

## Jobs

**63,952 New and Retained Jobs**

17,883 New Jobs Created  
46,069 Jobs Retained

## Investments

**\$2.7 Billion New Client Investments**

Clients invested in new plant and equipment, new products, processes, workforce and technology



## Cost Savings

**\$1.1 Billion:** Cost savings reported by MEP clients were in areas such as labor, materials, inventory, and energy.

## Our commitment to Sustainability, Growth, and Continuous Improvement.



### Sustainability: E3 - Economy, Energy, and Environment

**\$48 Million Environmental Savings:** MEP is partnering on federal initiatives to help companies gain a competitive edge by reducing environmental costs and impact; and enter new markets by developing environmentally focused materials, products, and processes.



### Commercialization

**\$106 Million total Increased and Retained Sales:** Commercializing an idea – transforming it into a desirable product that can be efficiently and profitably manufactured – can be difficult for smaller companies who often lack the experiences and resources to address these stages. MEP offers services that help companies through the different stages of commercialization.



### Lean

**\$767 Million Increased Sales:** Through a wide range of continuous improvement services, MEP helps smaller manufacturers cut costs, improve existing processes, become more innovative and responsive to new opportunities, planning for the future, and attracting - supply chain partners.

**The MEP Survey:** Since 1996, NIST MEP has sponsored a national survey of center clients for two primary purposes: collect aggregate information on program performance indicators to report to various stakeholders on program performance; and provide center-specific program performance and impact information for center use. Fors Marsh Group, LLC, an independent survey expert, conducts the NIST MEP client survey. The survey asks clients to consider the entire set of projects or services provided by a center and to report on how their company's performance and processes have been affected in the last 12 months. The survey asks clients to report on the impact of MEP services on bottom-line client outcomes and bottom-line impacts such as sales, jobs created/retained, capital investment and cost savings. In FY2014, of the 8,353 clients selected to be surveyed and 6,088 completed the survey.

**61%**  
Expertise of Staff

**22.3%**  
Reputation for Results

**21%**  
Knowledge of Industry

### Why MEP?

The Manufacturing Extension Program delivers measurable results to its clients. The services provided lead to improvements in client sales, investment, and cost savings, as well as increased and retained employment. Clients chose to work with MEP because of the program's expertise. A majority of clients chose to work with MEP because of the knowledge and expertise of the center staff. In addition the program's reputation for results and fair and knowledge of industry has proven MEP to be a solid resource for U.S. manufacturers.

# THE Advisory Board

A special thanks to our 2014 Advisory Board members for their service and commitment to U.S. manufacturing and providing advice and guidance to the MEP program.



**Vickie Wessel, Chair**

President  
Spirit Electronics, Inc  
Phoenix, Arizona



**Jeffrey Wilcox, Vice Chair**

VP for Engineering  
Lockheed Martin Corporation,  
Bethesda, Maryland



**Dr. Carolyn Cason,**  
Associate Dean for Research,  
College of Nursing  
University of Texas Arlington,  
Arlington, Texas



**Dr. Roy, A. Church,**  
President  
Lorain County Community College  
Elyria, Ohio



**Dennis Dotson,**  
President  
Dotson Iron Castings  
Mankato, Minnesota



**Eileen Guarino,**  
President & CEO  
Greno Industries  
Scotia, New York



**Bernadine Hawes,**  
Research Analyst  
Community Marketing Concepts  
Philadelphia, Pennsylvania



**Thomas M. Lee,**  
President  
Vulcan, Inc  
Foley Alabama



**William Shorma,**  
President  
Rush-Co.  
Springfield, South Dakota



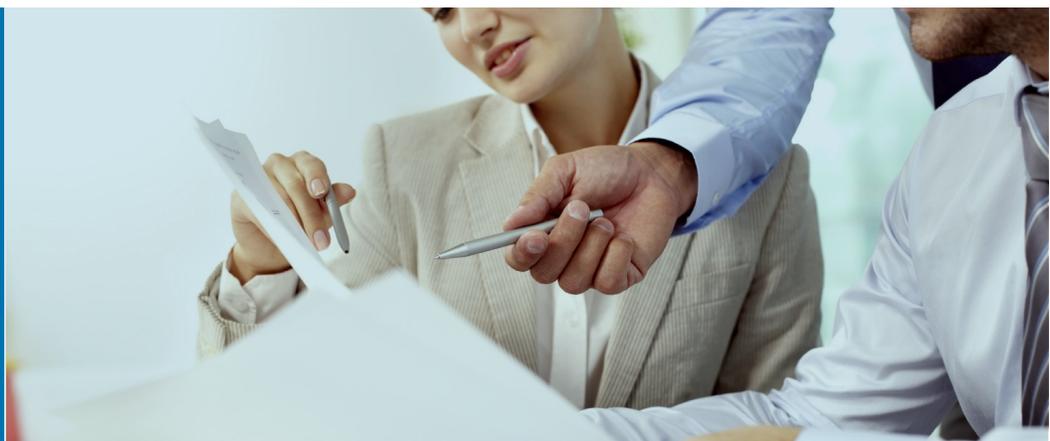
**Ed Wolbert,**  
President  
Transco Products, Inc.  
Chicago Illinois

“

This past year, we worked closely with the MEP Program on its strategy assessment and evaluation. In addition, we have formed subcommittees focused on topics of importance including Technology Acceleration and Board Governance. In the coming year, we look forward to helping MEP to continue improving the opportunities to better connect research and technologies at NIST and other federal labs with U.S. small and mid-sized manufacturers. In addition, the Board looks forward to providing advice and guidance on best practices in board governance and better connecting with the local MEP Center boards. These are exciting times for MEP with many positive developments happening in the program and in the industry.”

Vickie Wessel

NIST MEP Advisory Board Chair





**Alabama**

Alabama Technology Network  
135 S. Union Street Suite 441  
Montgomery, AL 36104  
Ph: (334) 293-4671  
<http://www.atn.org/>

**Alaska**

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Gaithersburg, MD 20899  
Ph: (301) 975-5020  
[www.nist.gov/mep](http://www.nist.gov/mep)

**Arizona**

Arizona Commerce Authority  
333 North Central Avenue, Ste 1900,  
Phoenix, AZ, 85004  
Ph: (602) 845-1200  
<http://www.azcommerce.com/revaz>

**Arkansas**

Arkansas Manufacturing Solutions  
900 West Capitol Avenue, Ste 320,  
Little Rock, AR, 72201  
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**California**

California Manufacturing Technology Consulting  
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Torrance, CA, 90502  
Ph: (310) 263-3060  
<http://www.cmtc.com/>

Corporation for Manufacturing Excellence (Manex)  
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San Ramon, CA, 94583  
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<http://www.manexconsulting.com>

**Colorado**

Manufacturers Edge  
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Boulder, Colorado 80301  
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<http://www.camt.com>

**Connecticut**

Connecticut State Technology Extension Program  
1090 Elm Street, Ste 202,  
Rocky Hill, CT, 06067  
Ph: (800) 266-6672  
<http://www.connstep.org/>

**Delaware**

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400 Stanton-Christiana Road, Ste. A-158,  
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<http://gamep.org/>

**Hawaii**

Innovate Hawaii  
2800 Woodlawn Drive, Ste 100,  
Honolulu, HI, 96822  
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### **Idaho**

Idaho TechHelp  
1910 University Drive,  
Boise, ID, 83725  
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### **Illinois**

Illinois Manufacturing Excellence Center  
1501 W. Bradley Avenue  
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### **Indiana**

Indiana MEP Purdue Technical Assistance Program  
6640 Intech Boulevard, Ste 120,  
Indianapolis, IN, 46278  
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<http://www.mep.purdue.edu>

### **Iowa**

Iowa Center for Industrial Research and Service  
Iowa State University, Extension 4-H Building,  
Ames, IA, 50011  
Ph: (515) 294-3420  
<http://www.ciras.iastate.edu>

### **Kansas**

Mid-America Manufacturing Technology Center  
10550 Barkley, Suite 116  
Overland Park, KS, 66212  
Ph: (913) 649-4333  
<http://www.mamtc.com>

### **Kentucky**

Advantage Kentucky Alliance  
2413 Nashville Road, B8, Ste 310,  
Bowling Green, KY, 42101  
Ph: (270) 282-7103  
<http://www.advantageky.org>

### **Louisiana**

Manufacturing Extension Partnership of Louisiana  
P.O. Box 44172,  
Lafayette, LA, 70504  
Ph: (337) 482-6767  
<http://www.mepol.org>

### **Maine**

Maine Manufacturing Extension Partnership  
87 Winthrop Street, Augusta, ME, 04330  
Ph: (207) 623-0680  
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### **Maryland**

Maryland Manufacturing Extension Partnership  
8894 Stanford Boulevard, Ste 304,  
Columbia, MD, 21045  
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### **Massachusetts**

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### **Michigan**

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### **Minnesota**

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134 Marketridge Drive,  
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**Missouri**

Missouri Enterprise  
900 Innovation Drive, Ste 300,  
Rolla, MO, 65401  
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**Montana**

Montana Manufacturing Extension Center  
2310 University Way Bldg 2, Ste 1,  
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**Nevada**

Nevada Industry Excellence  
UNR Mail Stop 406, Ste 212,  
Reno, NV, 89557  
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<http://www.nevadaie.com/nvie/>

**New Hampshire**

New Hampshire Manufacturing Extension Partnership  
172 Pembroke Road,  
Concord, NH, 03301  
Ph: (603) 226-3200  
<http://www.nhmep.org/>

**New Jersey**

New Jersey Manufacturing Extension Program  
2 Ridgedale Avenue, Ste 305,  
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**New Mexico**

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New York Manufacturing Extension Partnership  
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<http://www.esd.ny.gov/>

**North Carolina**

North Carolina Manufacturing Extension Partnership  
909 Capability Drive, Research IV BLDG, Ste 1600,  
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<http://www.ies.ncsu.edu>

**Impact Dakota**

North Dakota Manufacturing Extension Partnership  
1929 North Washington Street, Ste M,  
Bismarck, ND, 58501  
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<http://www.impactdakota.com>

**Ohio**

Ohio Manufacturing Extension Partnership  
77 South High Street,  
Columbus, OH, 43215  
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<http://www.development.ohio.gov>

### **Oklahoma**

Oklahoma Manufacturing Alliance  
525 South Main Street, Ste 210,  
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<http://www.okalliance.com/>

### **Oregon**

Oregon Manufacturing Extension Partnership  
12909 SW 68th Parkway, Ste 140,  
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Ph: (503) 406-3770  
<http://www.omep.org>

### **Pennsylvania**

Catalyst Connection  
2000 Technology Drive,  
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Ph: (412) 918-4300  
<http://www.catalystconnection.org>

Delaware Valley Industrial Resource Center  
2905 Southampton Road,  
Philadelphia, PA, 19154  
Ph: (215) 464-8550  
<http://www.dvirc.org>

IMC-PA  
One College Avenue, DIF 32,  
Williamsport, PA, 17701  
Ph: (570) 329-3200  
<http://www.imcpa.com>

MANTEC  
600 North Hartley Street, Ste 100,  
York, PA, 17404  
Ph: (717) 843-5054  
<http://www.mantec.org/>

Manufacturers Resource Center  
961 Marcon Boulevard, Ste 200,  
Allentown, PA, 18109  
Ph: (610) 628-4640  
<http://www.mrcpa.org>

Northeastern Pennsylvania Industrial Resource Center  
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Hanover Township, PA, 18706  
Ph: (570) 819-8966  
<http://www.nepirc.com>

Northwestern Pennsylvania Industrial  
Resource Center  
5340 Fryling Road, Ste 202,  
Erie, PA, 16510  
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<http://www.nwirc.org>

### **Puerto Rico**

Puerto Rico Manufacturing Extension Inc.  
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<http://www.primexpr.org>

### **Rhode Island**

Polaris Manufacturing Extension Partnership  
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<http://www.polarismep.org>

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<http://www.scmep.org>

### **South Dakota**

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2329 North Career Avenue, Ste 106,  
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<http://www.sdmanufacturing.com>

### **Tennessee**

Tennessee Manufacturing Extension Partnership  
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Nashville, TN, 37210  
Ph: (615) 532-8657  
<http://www.cis.tennessee.edu/>

### **Texas**

TMAC  
9390 Research Boulevard, Ste II-300,  
Austin, TX, 78759  
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<http://www.tmac.org/>

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Utah Manufacturing Extension Partnership  
815 West 150 South MS 212  
Orem, UT, 84058  
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<http://www.mep.org/>

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1540 VT RT 66, Suite 103 VT Tech Enterprise Center  
Randolph Center, VT, 05060  
Ph: (802) 728-1432  
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<http://www.genedge.org/>

### **Washington**

Impact Washington  
8227 44th Avenue West, Ste D,  
Mukilteo, WA, 98275  
Ph: (425) 438-1146  
<http://www.impactwashington.org>

### **West Virginia**

West Virginia Manufacturing Extension Partnership  
886 Chestnut Ridge Road, Second Floor  
Morgantown, WV 26506  
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<http://www.wvmep.com>

### **Wisconsin**

UW Stout Manufacturing Outreach Center  
278 Jarvis Hall, 410 10th Avenue East,  
Menomonie, WI, 54751  
Ph: (866) 880-2262  
<http://www.uwstout.edu/moc>

### **Wisconsin Manufacturing Extension Partnership**

2601 Crossroads Drive, Ste 145,  
Madison, WI, 53718  
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