



**MEP** • MANUFACTURING  
EXTENSION PARTNERSHIP®



**MEP ADVISORY BOARD  
ANNUAL REPORT**

**2020**





# 2020 MEP Advisory Board Report

2020 was a momentous year of challenge, growth and resiliency for the MEP National Network™. With \$50 million in funds authorized by the Coronavirus Aid, Relief, and Economic Security (CARES) Act, NIST issued emergency funding awards to MEP Centers in all 50 states and Puerto Rico for the first time in the history of the MEP program. NIST made all the awards in record time. The funds are helping manufacturers increase production of personal protective equipment (PPE), reach new suppliers and markets, recover from workforce and supply chain interruptions, and achieve greater resilience.

The MEP Advisory Board met in person in March 2020, and virtually in June and September 2020. At each meeting, the Board received detailed updates on performance toward the goals of the MEP National Network 2017-2022 Strategic Plan. The September 2020 Board meeting included the introduction of a new working group focused on developing the next strategic plan, for 2023-2028. Each meeting also included high-level discussions of various topics integral to the program and report outs from the Board's working groups. These meetings gave Board members opportunities to learn about the latest trends in manufacturing, advise and support the MEP program and actively engage with the MEP National Network. Many Board members participated in the virtual MEP National Network Update Meeting in September which drew 400 registrants from around the country. Presentations were interspersed with brief videos of MEP Center staff describing how they met the many challenges of their manufacturing clients, including helping them pivot to produce PPE.

More opportunities to hear directly from manufacturers occurred between July and October, when NIST MEP hosted a series of 11 virtual roundtables, the National Conversations with Manufacturers. Nearly 50 manufacturing leaders representing 27 U.S. states and diverse industries participated. The roundtable format generated important conversations and insight into current challenges and opportunities for manufacturers. NIST MEP is analyzing these sessions for a final report with actionable findings.

The MEP National Network was prepared to meet the challenge of the pandemic in 2020. MEP relaunched the MEP Supplier Scouting service, originally developed in 2009. When U.S. manufacturers needed to rapidly increase production of PPE, ventilators, N95 masks, hand sanitizer and other supplies, the Network quickly mobilized, creating supply chain portals, sharing best practices, and connecting with local organizations. The Network continues to build capabilities and resilience through the nearly \$17 million in additional awards to MEP Centers made this year through the Competitive Awards Program, Advanced Manufacturing Technology Services and Manufacturing Disaster Assessment Program Notice of Funding Opportunities.

In crisis, there is opportunity. The Board is fully engaged and advising the MEP program through these demanding and rewarding times. The MEP National Network is playing a vital role in the recovery and growth of U.S. manufacturing and we look forward to helping the Network continue to be the "Go-To Experts for Advancing U.S. Manufacturing."

---

Matthew B. Newman, Chair  
Director, Business Development - Renewables  
ONEOK, Inc.  
Tulsa, Oklahoma

---

Mary Isbister, Vice Chair  
President  
GenMet Corporation  
Mequon, Wisconsin



---

Ray Aguerrevere  
General Manager  
Custom Metal Designs  
Oakland, Florida

---

Jose Anaya  
Dean, Community Advancement  
El Camino Community College  
Hawthorne, California

---

Donald Bockoven  
Chief Executive Officer  
Fiber Industries LLC  
Darlington, South Carolina

---

E. LaDon Byars  
President and Chief Executive Officer  
Colonial Diversified Polymer Products, LLC  
Dyersburg, Tennessee

---

Bernadine Hawes  
Senior Research Analyst  
Community Marketing Concepts  
Philadelphia, Pennsylvania

---

Kevin Heller  
Chief Operations Officer/Chief Financial Officer  
The Ziegenfelder Company  
Wheeling, West Virginia

---

Mitch Magee  
Director, Global Advanced Manufacturing Team  
PPG Aerospace  
Sylmar, California

---

Willie May, Ph.D.  
Vice President for Research and Economic Development  
Morgan State University  
Baltimore, Maryland



---

Patricia Moulton  
President  
Vermont Technical College  
Randolph Center, Vermont

---

Kathay Rennels  
Special Advisor to the Chancellor for  
Rural-Urban Initiatives  
Colorado State University System  
Fort Collins, Colorado

---

George Spottswood  
Owner and Chief Executive Officer  
Quality Filters, Inc.  
Robertsdale, Alabama

---

Leslie Taito  
Chief of Staff  
Neighborhood Health Plan of Rhode Island  
Smithfield, Rhode Island

---

Chris Weiser  
Owner and President  
J.V. Manufacturing, Inc.  
Springdale, Arkansas

---

Jim Wright  
Vice President of Operations  
Proof Research  
Columbia Falls, Montana



# Table of Contents

<b>About the Manufacturing Extension Partnership.....</b>	<b>5</b>
<b>About the MEP Advisory Board .....</b>	<b>6</b>
<b>2020 MEP Advisory Board Members .....</b>	<b>7</b>
<b>2020 MEP Advisory Board Activities.....</b>	<b>16</b>
Advisory Board Meetings .....	16
Working Group Updates.....	18
Supply Chain Development Working Group.....	18
Advisory Board Executive Committee Working Group.....	19
MEP National Network Strategic Plan 2023-2028 Working Group .....	19
<b>MEP National Network Update: Meeting the Challenge .....</b>	<b>20</b>
CARES Act Funding.....	21
Efforts Across the Network .....	22
MEP National Network Supplier Scouting.....	23
<b>Center Leadership Team.....</b>	<b>24</b>
<b>National Conversations with Manufacturers Series .....</b>	<b>25</b>
<b>MEP National Network 2017-2022 Strategic Plan .....</b>	<b>26</b>
Accomplishments .....	28
<b>NIST MEP Special Awards Programs .....</b>	<b>29</b>
NIST MEP Competitive Awards Program.....	29
Advanced Manufacturing Technology Services Awards.....	30
NIST Manufacturing Disaster Assessment Program .....	31
<b>Summit Consulting and W.E. Upjohn Institute Report.....</b>	<b>32</b>
<b>NIST MEP Budget.....</b>	<b>33</b>
<b>Mission and Vision.....</b>	<b>34</b>



# About the Manufacturing Extension Partnership



The Omnibus Trade and Competitiveness Act of 1988 created the National Institute of Standards and Technology (NIST) Hollings Manufacturing Extension Partnership (MEP) program to improve the competitiveness of U.S.-based manufacturing by making manufacturing technologies, processes and services more accessible to small and medium-sized manufacturers (SMMs). For over thirty years, the MEP program has focused on bridging the manufacturing productivity gap, identifying opportunities for growth and encouraging technology deployment.

Growing from a pilot project of just three Centers to a system of organizations in every state and Puerto Rico, the 51 MEP Centers are now an integral part of the MEP National Network, providing its manufacturing customers with a wide array of fundamental services in manufacturing, business and process improvements. Today, the MEP National Network has more than 1,400 trusted advisors and experts at more than 385 MEP service locations across the nation. The MEP Centers and their partners, including state governments, universities, community colleges, nonprofit entities, associations and private consultants provide manufacturers with the services needed to reduce bottom-line expenses and grow top-line profits, both of which are necessary to thrive in the global marketplace.

According to a third-party survey, in fiscal year (FY) 2020, the MEP National Network interacted with more than 27,574 manufacturers. MEP Center clients from across the country reported that the assistance they received helped to create or retain 105,748 manufacturing jobs in FY 2020. MEP Center clients had \$13 billion in new and retained sales and realized \$2.7 billion in cost savings as manufacturers navigated numerous challenges due to the COVID-19 pandemic. For every dollar of federal investment in FY 2020, the MEP National Network generated \$19.60 in new sales growth and \$33.70 in new client investment. During this same time, for every \$1,381 of federal investment, the Network created or retained one manufacturing job. Since 1988, MEP has worked with 138,917 manufacturers, leading to \$145 billion in new sales and \$24.7 billion in cost savings, and it has helped create and retain more than 1,327,744 jobs.



## About the MEP Advisory Board



The statutory purpose of the Board is to provide advice and recommendations to the NIST Director on the following items:

- The activities, plans and policies of MEP
- The soundness of MEP's plans and strategies
- Current performance in relation to MEP program plans

The MEP Advisory Board consists of members broadly representing the interests and needs of the manufacturing sector appointed by the NIST Director. By statute, at least two members must be on an advisory board for an MEP Center and at least five other members must be from small U.S. businesses representing the manufacturing sector. The statute also requires that at least one Board member represent a community college. Board members are limited to two consecutive full three-year terms and Board members are ineligible for reappointment during the year following the expiration of the second term. In addition, the law requires the Board to meet at least twice per year. In FY 2020, the Board met three times to perform its chartered functions.

A number of changes were made to Board membership in 2020. Board chair Bernadine Hawes finished her second term in May 2020 and a new chair and vice chair were designated. Former vice chair Matthew Newman stepped into the role as chair and Mary Isbister accepted the nomination for vice chair.

In addition to Bernadine Hawes, Chris Weiser left the Board this year. Their leadership and advice over their years of service, and their time and commitment to the MEP Advisory Board are appreciated. One new member joined the Board in 2020, Ray Aguerrevere, bringing the roster to 14 members going into FY 2021.

The current Board members represent the diversity of the U.S. manufacturing industry, from CEOs and executives at various-sized manufacturing companies to academic leaders at both state and community colleges. The important and varied perspectives of these volunteers will positively impact the MEP program into the future.





## 2020 Advisory Board Members



### MATTHEW NEWMAN, CHAIR

Second Term Expires: March 2023

Matthew Newman is the Director of Business Development – Renewables for ONEOK, Inc. He joined ONEOK in 2019 and has more than 30 years of experience in the energy industry, which includes sustainability initiatives, business development, asset optimization, logistics optimization, electricity generation, renewable energy, fossil fuels, government, media and community relations, financial derivatives, and hedging. Integrating environmental, social and governance best practices throughout operations has long been a critical strategy for ONEOK. ONEOK is a leading midstream service provider and owner of one of the nation's premier natural gas liquids (NGL) systems, connecting NGL supply in the Rocky Mountain, Mid-Continent and Permian regions with key market centers and an extensive network of natural gas gathering, processing, storage and transportation assets. ONEOK is a Fortune 500 company headquartered in Tulsa, Oklahoma, and is included in the S&P 500.



### MARY ISBISTER, VICE CHAIR

Second Term Expires: March 2023

Mary Isbister is President of GenMet Corporation, a custom metal fabricating company located in Mequon, Wisconsin. After graduating with a Bachelor of Science in chemistry, she worked at Pfizer in Groton, Connecticut for 11 years. During her tenure at Pfizer she held positions in medicinal chemistry, clinical research and senior organizational development. In 1997, she moved to Wisconsin and founded Synergy Solutions, an organizational development and strategic planning consulting business, which she ran until 2001. In 1999 Ms. Isbister and her husband purchased GenMet Corporation, a custom manufacturer specializing in high value-added metal fabrications and enclosures. From 2010-2014 Ms. Isbister also served on the U.S. Manufacturing Council, reporting to the Secretary of Commerce.



## RAY AGUERREVERE

First Term Expires: October 2023

Ray Aguerrevere is the General Manager for Custom Metal Designs, located in Oakland, Florida. Custom Metal Designs is an industry leader that designs and manufactures turnkey industrial automation solutions that include collaborative and industrial robotics, autonomous vehicles and complex conveyor systems for clients worldwide. Mr. Aguerrevere has led the company through a technological transformation resulting in a tripling of revenues since 2005. Mr. Aguerrevere has a Bachelor of Business Administration in finance from the University of Central Florida and a Master of Business Administration from the University of Florida. He serves as president on the board of the Manufacturers Association of Central Florida and is board chair of the FloridaMakes board of directors.



## JOSE ANAYA

Second Term Expires: July 2022

Jose Anaya oversees the El Camino Community College District's Community Advancement Division and Business Training Center as the Dean. Prior to joining the staff at El Camino College, he directed economic development programs at Cerritos College. Under Mr. Anaya's guidance, Cerritos College received numerous honors and recognition related to workforce development. These included a best practices award for its partnership with Lockheed Martin and selection by the Corporation for a Skilled Workforce and its partners as one of five national exemplary models for expanding postsecondary education and training opportunities for Hispanic workers. Mr. Anaya's earlier experiences include work in the private sector with corporations such as Honeywell, ITT Industries and DataCard. He has broad experience and expertise in the areas of product design, manufacturing and management, as well as economic and workforce development. Mr. Anaya has a Bachelor of Science in mechanical engineering from California State Polytechnic University, Pomona and a Master of Business Administration with an emphasis in entrepreneurship from the University of Southern California.



## DONALD BOCKOVEN

First Term Expires: October 2022

---

Donald Bockoven is the CEO for Fiber Industries LLC, a textile production operation based in Darlington, South Carolina. He has extensive experience over a nearly forty year career as a senior leader within both large and small companies across many industries. He specializes in transformational company growth through performance improvement. He has extensive knowledge in organizational redesign through Lean Six Sigma manufacturing practices, adaptive and advanced work systems and quality management. Mr. Bockoven has extensive board experience. He currently sits on the South Carolina Manufacturing Extension Partnership Board and recently left the South Carolina Manufacturers Association Board. At the national level, he was the vice chairman of the National Council of Textile Organization's board until April 2019 and in 2018 was appointed to the President's Advisory Committee for Trade Policy and Negotiations for a four-year term. He has also served on technical advisory boards at the community college level as well as startup companies.



## LADON BYARS

Second Term Expires: February 2023

---

LaDon Byars is the President and CEO of Colonial Diversified Polymer Products, LLC of Dyersburg, Tennessee. Colonial Diversified produces high-quality rubber products for a wide variety of industries including automotive, defense, commercial building, construction, farm equipment, aerospace, computers, medical, telecommunications, recreation, health, entertainment, plumbing, refrigeration and many more. She started out as a financial analyst and rose to become president of the company. Ms. Byars is very active in the manufacturing community, has received many awards and is on the advisory board of the University of Tennessee Center for Industrial Services which houses Tennessee MEP, the MEP Center in Tennessee.



## BERNADINE HAWES, IMMEDIATE PAST CHAIR

Second Term Expired: May 2020

---

Bernadine Hawes is an executive-level nonprofit professional and economic development specialist working in the areas of project management, strategy development, compliance and evaluation. Her most recent achievement has been the authorship of a best practices manual for small business and economic development, which was funded in part through a grant from the U.S. Small Business Administration to American Cities Foundation. Ms. Hawes began her career at the University City Science Center in Philadelphia, starting as a senior-level project administrator and later becoming Vice President. Currently, she is a Senior Research Analyst for Community Marketing Concepts. Ms. Hawes is chairwoman of the Delaware Valley Industrial Resource Center, which is part of Pennsylvania MEP. She also serves on the board of the PEC Community Development Corporation, which focuses on community development initiatives in Philadelphia, is chair of the PEC Foundation and serves on the advisory board of the Philadelphia Urban League Entrepreneurship Center. Born and raised in Washington, D.C., Ms. Hawes has a Master of Science from the University of Pennsylvania. She is a summa cum laude graduate of Lincoln University in Pennsylvania. She has been the national co-chair of Penn's Black Alumni Society and is a former member of the University of Pennsylvania's James Brister Society for Diversity Inclusion.



## KEVIN HELLER

First Term Expires: October 2022

---

Kevin Heller is the Chief Operations Officer/Chief Financial Officer of Ziegenfelder Company, located in Wheeling, West Virginia. The Ziegenfelder Company is over one hundred years old and Mr. Heller joined the company in 2004. He is responsible for all accounting, finance, business and operating activities of the company, and oversight of the business policies and practices. He has been integral in scaling and facilitating the business growth from \$16 million to \$75 million and has successfully managed more than \$25 million in expansion projects over the past four years. Mr. Heller graduated from Bethany College and is a certified public accountant in Ohio and West Virginia.



## MITCH MAGEE

Second Term Expires: March 2023

Mitch Magee is Director of the Global Advanced Manufacturing Team for PPG's aerospace business unit. He has over 30 years of manufacturing experience, having served in capacities from front-line plant operations to global quality and environment, health and safety roles in PPG's automotive, industrial, and food and beverage package coatings business units. Mr. Magee is also actively engaged in workforce development as the past chair of the Delaware Manufacturing Association and led the development of Delaware's first Pathways to Prosperity high school manufacturing technology program. This program was developed in conjunction with Gov. Jack Markell's administration, Delaware Technical and Community College and local high schools. Mr. Magee has also served on the Delaware Workforce Development Board, boards of Western Pennsylvania Air and Waste Management Association, Delaware Technical Community College-Terry Campus, Central Delaware Chamber of Commerce and as a Pickaway County, Ohio trustee. He has a Bachelor of Science in liberal arts from Allegheny College, a Master of Science in chemical engineering from the University of Pittsburgh and is a licensed professional engineer.



## WILLIE E. MAY

First Term Expires: October 2022

Dr. Willie E. May is Vice President for Research and Economic Development at Morgan State University. He previously served as Under Secretary of Commerce for Standards and Technology and Director of NIST. As NIST Director, Dr. May provided high-level oversight and direction for NIST, the agency that promotes U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology. Dr. May began as a bench chemist and went on to work at every management level within the organization. In addition to the MEP Advisory Board, Dr. May serves on science and technology advisory boards for the United Kingdom's National Physical Laboratory and China's National Institute of Metrology, and on the board of directors for Consumer Reports. He earned his Bachelor of Science in chemistry from Knoxville College and his doctorate in analytical chemistry from the University of Maryland, College Park.



## PAT MOULTON

First Term Expires: June 2021

---

Patricia Moulton was appointed President of Vermont Technical College by the Vermont State Colleges Board of Trustees in March 2017. Pat served as Interim President from September 2016-March 2017. Vermont Technical College is part of the Vermont State College System and the only technical college in the state. Prior to joining the college, Ms. Moulton served as secretary of the Vermont Agency of Commerce and Community Development. Ms. Moulton has served in a variety of appointed positions in Vermont state government, having been appointed by four different governors. She has served as commissioner of labor in addition to several economic development-related appointments. She has also served as appointed chair of an environmental regulatory board for the state of Vermont. Ms. Moulton spent 35 years in the practice of economic development on the local, regional and state levels. She has worked as executive director of four different regional economic development corporations in Vermont. She also ran her own economic development consulting company for several years. Ms. Moulton is a graduate of the University of Vermont with a degree in political science.



## KATHAY RENNELS

Second Term Expires: March 2022

---

Kathay Rennels is the Special Advisor to the Chancellor for Rural-Urban Initiatives at Colorado State University (CSU) and works to advance collaborative networks across the state and create economic development opportunities. She has significant experience fostering public and private partnerships in regional and rural workforce development, with particular attention to Larimer and Weld Counties. Ms. Rennels previously served three terms as a Larimer County commissioner and is now leading the Food and Agriculture Key Industry Network for the state of Colorado. Ms. Rennels helped initiate the “Value Chain of Colorado Agriculture” study released in February 2013 and coauthored the November 2014 follow-up study, “The Emergence of an Innovation Cluster in the Agricultural Value Chain along Colorado’s Front Range.” She also initiated the Advancing the Agricultural Economy through Innovation summit, held at CSU in March 2015. Ms. Rennels was the president of Colorado Counties Inc. and named commissioner of the year. She currently serves on the Community Foundation of Northern Colorado, El Pomar Foundation and Manufacturer’s Edge, the Colorado MEP Center, as a board member.



## GEORGE SPOTTSWOOD

Second Term Expires: May 2023

---

George Spottswood is Owner and CEO of Quality Filters, Inc. (QFI) in Robertsdale, Alabama. QFI was incorporated in 1981 in Gulf Shores, Alabama. Mr. Spottswood and his father, Horace Spottswood, purchased the business in 1983. At the time of purchase, QFI employed eight associates and operated out of a 10,000-square foot rented facility, manufacturing a single HVAC air filter product. Today, QFI employs 150 associates and operates out of a 70,000-square foot corporate-owned facility. He has served two terms as associate council president of the National Air Filtration Association (NAFA) as well as served on several NAFA committees in varying roles. Mr. Spottswood has been involved with the Alabama Technology Network (ATN, Alabama's MEP Center) since 2005. He was named 2005 ATN Business Innovator of the Year for the state of Alabama. Other corporate awards include the 2011 Innovator of the Year Award for Alabama by the Southern Growth Policy Board.



## LESLIE TAITO

Second Term Expires: July 2023

---

Leslie Taito is currently the Chief of Staff for Neighborhood Health Plan of Rhode Island. Neighborhood Health Plan of Rhode Island is a mission-driven organization that partners with the community health centers and others to secure access to high quality, cost-effective health care for individuals, families and small businesses. Using her over 27 years of management and manufacturing experience she is able to address the crucial need for health care insurance for smaller organizations including manufacturers with less than 50 employees. Prior to her current employment, Ms. Taito served as the CEO of Hope Global, a manufacturer of products and engineering of textile solutions and director of regulatory reform for the Rhode Island Office of Management and Budget. She has also held leadership positions as the CEO for the Rhode Island Manufacturing Extension Services, Inc., executive director of the Rhode Island Manufacturers Association and acting executive director and chief operating officer of the Rhode Island Regional Employment and Training Board. In addition to serving on the MEP Advisory Board, Ms. Taito is a member of the Polaris MEP Advisory Board. She also has served by appointment of the governor on the Rhode Island Manufacturing Advisory Council and the Lean Government Initiative. Actively involved in her community, Ms. Taito has served in executive board leadership positions and as chair of the Northern Rhode Island and North Kingstown Chambers of Commerce.



## CHRIS WEISER

Second Term: Resigned from the Board, November 2020

---

Chris Weiser is the Owner and President of J.V. Manufacturing, Inc. Since 1978, J.V. Manufacturing has provided the best equipment solutions for America's waste and recycling needs. J.V. Manufacturing provides safe, quality products made in the USA. Known for their excellent customer service which has made Cram-A-Lot one of the most respected brands in the industry, J.V. Manufacturing has over 200 employees, two manufacturing locations and three remote service locations. Upon graduating from the University of Arkansas, Mr. Weiser moved to Louisiana and worked for Freeport-McMoRan, a minerals and oil and gas producing company. In 1985, he moved back to Arkansas to help his family run J.V. Manufacturing. Since 1996, he has been President, CEO and Owner of the company. Mr. Weiser is passionate about the waste and recycling industry and about service to his community.



## JIM WRIGHT

Second Term Expires: March 2023

---

Jim Wright is the Vice President of Operations for Proof Research, located in Columbia Falls, Montana. Proof Research is an industry leader that designs and manufactures state-of-the-art carbon fiber composite firearms for both military and commercial applications. Mr. Wright has over 25 years of experience in manufacturing engineering and production management across the aerospace, automotive, semiconductor and firearms industries. Throughout his professional career, he has spent a significant amount of time abroad working with European and Asian companies and brings a passion to apply best-in-class concepts and lean manufacturing principles to help improve manufacturing within the U.S. He holds a Bachelor of Science and Master of Business Administration from Southern Illinois University and was a member of the Montana Manufacturing Extension Center advisory board for six years, serving in both the vice president and president roles. He is active in the local community and serves on the board of directors for the Kalispell City Chamber of Commerce.







# 2020 MEP Advisory Board Activities

## Advisory Board Meetings

The MEP Advisory Board held three meetings in 2020. Board members along with NIST, NIST MEP staff and representatives of the MEP National Network met in Gaithersburg, Maryland on March 3. Due to the pandemic, that was the only in-person meeting — the June 3 and Sept. 22 meetings were held virtually. At each meeting, the Board received detailed updates from NIST MEP leadership on programmatic operations and performance on the MEP National Network 2017-2022 Strategic Plan including progress toward meeting new 18-month goals. Each meeting also included high-level discussions of various topics integral to the program and report outs from the Board’s working groups. These meetings provided opportunities for Board members to increase their knowledge of the latest trends in manufacturing, advise and support the MEP program and actively engage with the MEP National Network. Detailed MEP Advisory Board [meeting minutes](#) are available on the NIST MEP website.



### March 3, 2020: Gaithersburg, Maryland

The first 2020 MEP Advisory Board meeting was held on the NIST Gaithersburg campus on March 3. Before the meeting, Board members toured the NIST Additive Manufacturing Research Center, Cybersecurity for Smart Manufacturing Systems Testbed, Acoustic Anechoic Chamber, and the Inertial Calibration Laboratory. The March meeting featured NIST Engineering Laboratory (EL) Deputy Director Joannie Chin who presented an overview of EL, described EL’s mission, and emphasized collaborations with MEP. NIST MEP Marketing and Communications Manager Ben Vickery then provided a deep dive into MEP National Network branding



efforts and tools available from NIST MEP for MEP Centers. The Board talked about the power of amplifying messages from the entire Network through social media. The Supply Chain Development and Advisory Board Executive Committee Working Groups also reported out. The extensive presentation from the Supply Chain Development Working Group included NIST MEP Division Chief for Extension Services Dave Stieren describing cybersecurity training across the Network.

### June 3, 2020: Virtual Meeting

On June 3, the second MEP Advisory Board meeting in 2020, previously planned for Tulsa, Oklahoma, shifted successfully to a virtual format. The meeting featured remarks by NIST Director Walt Copan who focused on the power of the MEP National Network which went into action and is playing a key role in the pandemic response and recovery. Dr. Copan noted that the Network is supporting U.S.



manufacturing through facilitating the creation of alternative supply chains, helping manufacturers pivot to increase production of PPE, assisting manufacturers to find sources of financing, sharing best practices in employment safety guidelines, and providing services to facilitate manufacturing recovery efforts. The meeting featured a presentation by NIST MEP Deputy Director Rob Ivester on CARES Act funding. He explained how NIST and NIST MEP met the challenge of the CARES Act appropriations which allowed for distribution of \$50 million for MEP Centers to prepare for and respond to the COVID-19 pandemic.

### Sept. 22, 2020: Virtual Meeting

The third MEP Advisory Board meeting in 2020, previously planned for Phoenix, Arizona, was held virtually on Sept. 22 and had over 100 attendees. The meeting featured a report by SSTI Executive Director Dan Berglund on national and state economic challenges, opportunities and data trends. NIST MEP Competition Manager Michael Taylor led a discussion encouraging Board members to contribute proposed future themes for NIST MEP's Competitive Awards Program. The Board's Supply Chain Development and Executive Committee Working Groups reported out, and a new working group focused on the MEP National Network 2023-2028 Strategic Plan was introduced, with Rob Ivester giving an overview of the past strategic plan and steps for moving forward. Many MEP Advisory Board members participated in the first virtual MEP National Network Update Meeting on Sept. 23, the day after the MEP Advisory Board meeting.



The MEP Advisory Board Supply Chain Development Working Group offers guidance and perspectives on the MEP National Network support and development of manufacturing supply chains with an emphasis on defense suppliers. The working group focuses attention on defense industrial base gaps and expertise on who should be brought into the discussion to provide insight on defense supplier gaps. In 2020 the Supply Chain Development Working Group included the following MEP Advisory Board members: Matt Newman, lead, LaDon Byars, Bernadine Hawes, Mary Isbister and Chris Weiser, as well as NIST MEP staff support.

## Working Group Updates

### Supply Chain Development Working Group

The MEP National Network supports Department of Defense (DOD) supply chains in many areas. Highlights are cybersecurity awareness and assistance, and working with the DOD in technology transfer and transition involving defense manufacturing suppliers. The Network continues expanding cybersecurity assistance capabilities across the Network, with all 51 MEP Centers now having the capability to provide cybersecurity assistance to U.S. manufacturers, and over 3,400 small and medium-sized manufacturers served by MEP Centers nationwide. Spurred by strong partnerships with DOD, MEP has a continued role with Defense Federal Acquisition Regulation Supplement (DFARS) requirements for the defense sector, along with an emerging and important role with the new DOD Cybersecurity Maturity Model Certification (CMMC) program. The MEP National Network also provides technology transfer and transition support for DOD as MEP Centers work with NavalX Tech Bridges and are inserted in Navy shipbuilding activities in a number of states. In 2021, MEP anticipates expanded roles supporting defense manufacturing supply chains in conjunction with new DOD focus areas relating to the defense industrial base.





## Advisory Board Executive Committee Working Group

In 2020, the Center Board Outreach Program continued as a focus, as fostering strong connections between the MEP Advisory Board and the MEP Center boards remains a priority. The Board is making personal connections to better understand Network needs and considers this important to achieving its statutory requirements to advise on the MEP program as a whole.

This working group is also actively engaged in succession planning as many current Board members' terms expire in 2023. This is closely tied to Center outreach efforts — there are people across the Network who have expressed interest in MEP and are potential MEP Advisory Board members.

## MEP National Network Strategic Plan 2023-2028 Working Group

The newly formed MEP National Network Strategic Plan 2023-2028 Working Group will provide long-term program direction, guidance and perspectives for the MEP National Network Strategic Plan for 2023-2028. The working group will consider feedback from Centers, stakeholder partners, management and staff as the plan is developed. The MEP National Network Strategic Plan 2023-2028 Working Group currently includes the following MEP Advisory Board members: Kathay Rennels, lead, Don Bockoven, Kevin Heller, Mary Isbister, Willie May, Matt Newman, Chris Weiser, Jim Wright and ex officio support from Bernadine Hawes, as well as NIST MEP staff support.

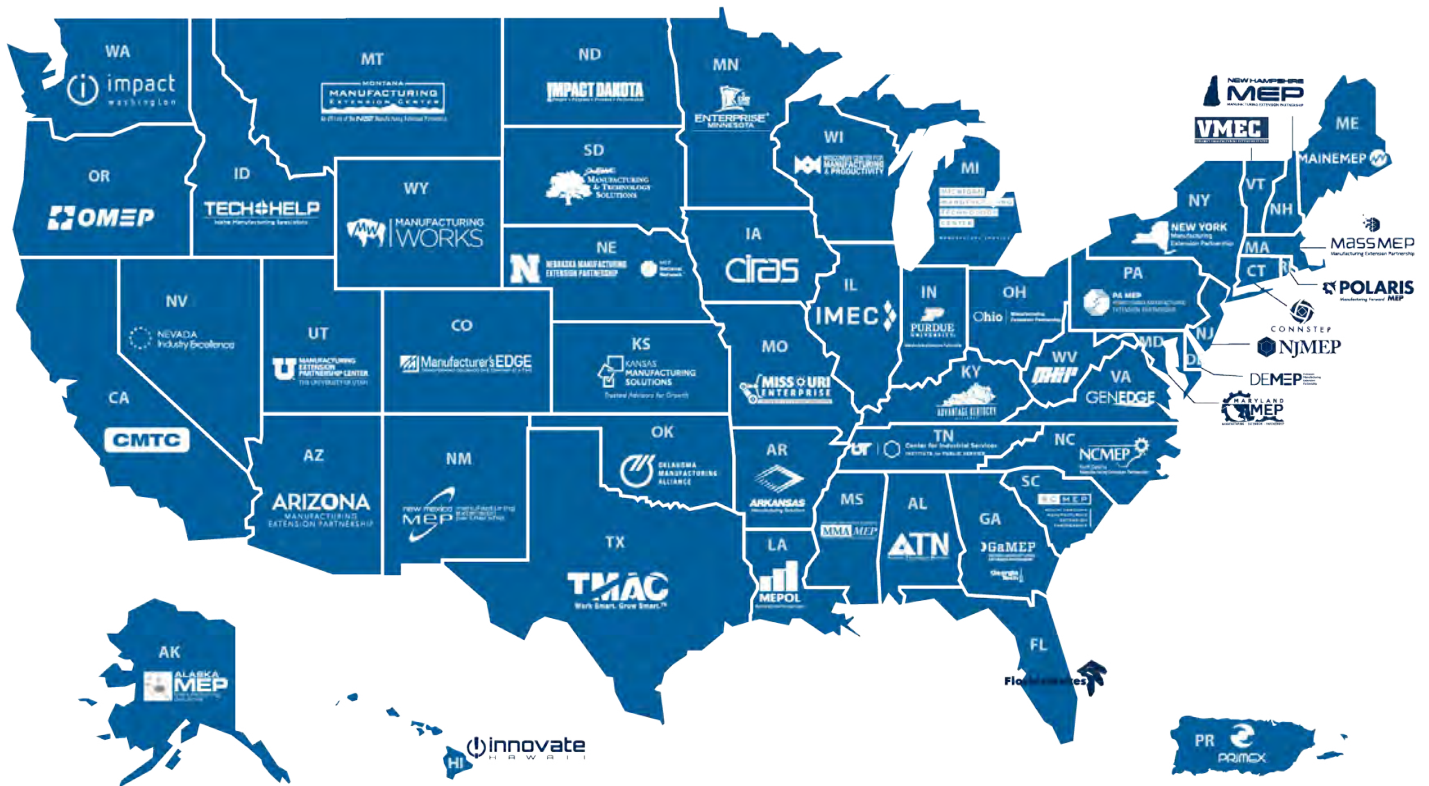
The Advisory Board Executive Committee Working Group offers guidance on future MEP Advisory Board leadership and membership recruitment, provides insights into cultivating strong Board governance as well as exploring ways to expand the MEP Advisory Board's role regarding the local MEP Center boards. In 2020 the Executive Committee Working Group included the following MEP Advisory Board members: Bernadine Hawes and Matt Newman, co-leads, Mitch Magee, Pat Moulton and George Spottswood, as well as NIST MEP staff support.





# MEP National Network Update: Meeting the Challenge

2020 was a year of unexpected challenges, but the MEP National Network was uniquely positioned to help manufacturers across the country survive and even thrive in the face of crisis. MEP Centers and their manufacturing clients demonstrated incredible resilience and innovation on a daily basis. All 51 MEP Centers in every state and Puerto Rico supported manufacturers in countless ways throughout this demanding and rewarding year.





## Vision of the MEP National Network

*We are the go-to resource for America's manufacturers, ensuring U.S. manufacturing is resilient and leads the world in manufacturing innovation.*

### CARES Act Funding

2020 was a momentous year of challenge, growth and resiliency for the MEP National Network. With \$50 million in funds authorized by the Coronavirus Aid, Relief, and Economic Security (CARES) Act, NIST issued emergency funding awards to MEP Centers in all 50 states and Puerto Rico for COVID-19-related projects for the first time in the history of the MEP program. Due to the critical need for this funding, NIST made all the awards to the MEP Centers in record time. NIST submitted an implementation plan to the Department of Commerce (DOC) ten days after the CARES Act was signed on April 6, setting a stretch goal of issuing all awards within 90 days. The last award was issued on June 29, 94 days after passage of the CARES Act and 84 days after setting the 90-day goal with DOC. With these funds, Centers are helping manufacturers increase production of PPE, reach new suppliers and markets, recover from workforce and supply chain interruptions, and achieve greater resilience. The awards to the 51 MEP Centers range from \$91,000 to \$6.1 million and are enabling the Centers to support a national manufacturing recovery from the crisis.





## Efforts Across the Network

The MEP National Network and its manufacturing clients are working with state and federal government to respond to the challenges and needs resulting from the pandemic. NIST MEP [created a document](#) that highlights what the 51 MEP Centers are doing to help U.S. manufacturers in key areas.



### Connecting resources to needs

The MEP National Network works with industry organizations, federal, state and local governments and manufacturers to share critical information and connect resources to address urgent needs. From the beginning of the pandemic, each MEP Center has been continuously problem-solving — leveraging partnerships and know-how to meet local needs. The Network is linking manufacturers to hospitals and others with critical needs for PPE and medical supplies. MEP Centers are helping manufacturers map new supply chains, identify alternative materials, and follow guidelines to maintain safe work environments. In addition, MEP Centers connect manufacturers to resources available through the Small Business Administration and at the state and local levels.

### Working directly with state governments

The Network helps link state government policies and programs to manufacturers by participating in emergency task forces to address challenges and issues. MEP Centers are the connection between the manufacturing industry and state procurement efforts. They are managing state-level supply chain portals, linking manufacturers to demand and organizing them to deploy as needs change, while also connecting them with state resources.

### Addressing specific issues with manufacturing PPE, medical supplies and medical devices

The MEP National Network is helping manufacturers meet the country's urgent needs for PPE and medical devices by guiding them to information and solutions about testing protocols, quality testing and required certifications. MEP Centers are helping address issues of potential legal liabilities arising from the production of PPE and medical supplies and devices.

### Maintaining base operations and serving all manufacturers

Through the pandemic and the resulting economic crisis, the MEP National Network continues to fulfill its mission to strengthen and empower U.S. manufacturers in order to maintain the health of the





U.S. manufacturing base as it faces an extraordinary emergency that will have long-lasting effects. MEP Centers are helping companies engage with customers in new and different ways. They are providing cybersecurity assistance — addressing new kinds of threats as employees work in new ways. The Network is helping manufacturers examine ways to use technologies to improve productivity, which will benefit them long into the future.

## MEP National Network Supplier Scouting

In March 2020, NIST MEP relaunched its supplier scouting service, which originated in 2009. Having already developed the scouting process, the MEP National Network was quick to mobilize. MEP Supplier Scouting is a formal process that provides business opportunities to U.S. manufacturers and connects those that have relevant production capabilities. When U.S. manufacturers needed to rapidly increase production of PPE, ventilators, N95 masks, hand sanitizer and other supplies, the Network quickly created supply chain portals, shared best practices, and connected with local organizations. All 51 MEP Centers are participating and MEP Supplier Scouting is leveraging existing online collaboration platforms for MEP Centers to communicate about and respond to national and state needs and cybersecurity.

The first virtual MEP National Network Update Meeting took place on Sept. 23, the day after the third MEP Advisory Board meeting. It was originally scheduled to follow the Board meeting in Phoenix. The virtual format was a success, with over 400 registrants from across the country. A major theme of the Update Meeting was how to continue positioning the Network to provide key services that strengthen and empower U.S. manufacturers during the economic downturn. A series of videos shown during the Update Meeting featured MEP Center staff discussing how they met the many challenges of their manufacturing clients, including helping them pivot to PPE production. The full [MEP National Network Update Meeting recording](#) is available for review.



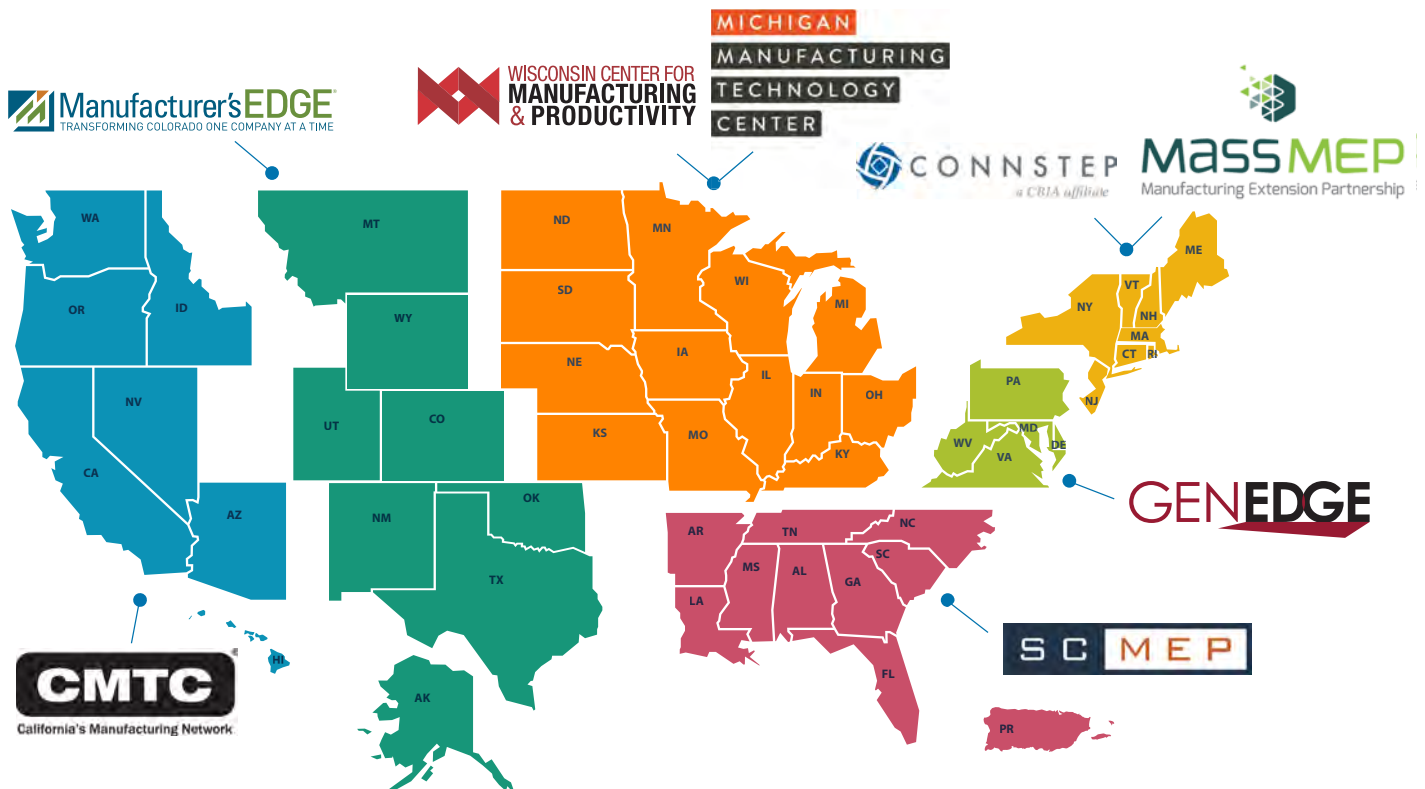


## Center Leadership Team

Established in 2017, the MEP National Network Center Leadership Team (CLT) includes leaders from MEP Centers who interact with the NIST MEP leadership team to provide MEP Center strategies, identify funding opportunities, support the MEP National Network brand, validate multistate project processes, provide Center guidance and promote efforts for the Network to successfully serve more manufacturers.

The CLT continued to convene virtually during 2020 to operationalize communication and collaboration norms. Their work on Network structure and governance continues. The CLT created regional communication nodes as more efficient and effective ways of connecting Centers around the country to build relationships, provide support, exchange ideas and information, catalyze learning, and improve communications. This structure improves access directly to CLT members and ensures that everyone in the Network has a voice. Better connections form the basis for a faster and more flexible National Network.

## Regional Communication Nodes





## National Conversations with Manufacturers Series

Between late July and early October, NIST MEP hosted a series of 11 virtual roundtables, the National Conversations with Manufacturers, highlighting the experiences of manufacturing leaders across the country. NIST MEP heard from nearly 50 manufacturers representing 27 U.S. states and diverse industries such as aerospace, food, electronics, sheet metal, apparel, and plastics. Discussions centered on what keeps them up at night, how they are operating during the pandemic, what they see in the future, and what the MEP National Network can do to help U.S. manufacturers. The roundtable format provided an excellent forum for generating these important conversations and resulted in a great deal of insight into the current challenges and opportunities for manufacturers. NIST MEP published a series of blogs about the conversations on the NIST MEP website. In addition, NIST MEP is analyzing these sessions for a final report including actionable findings.

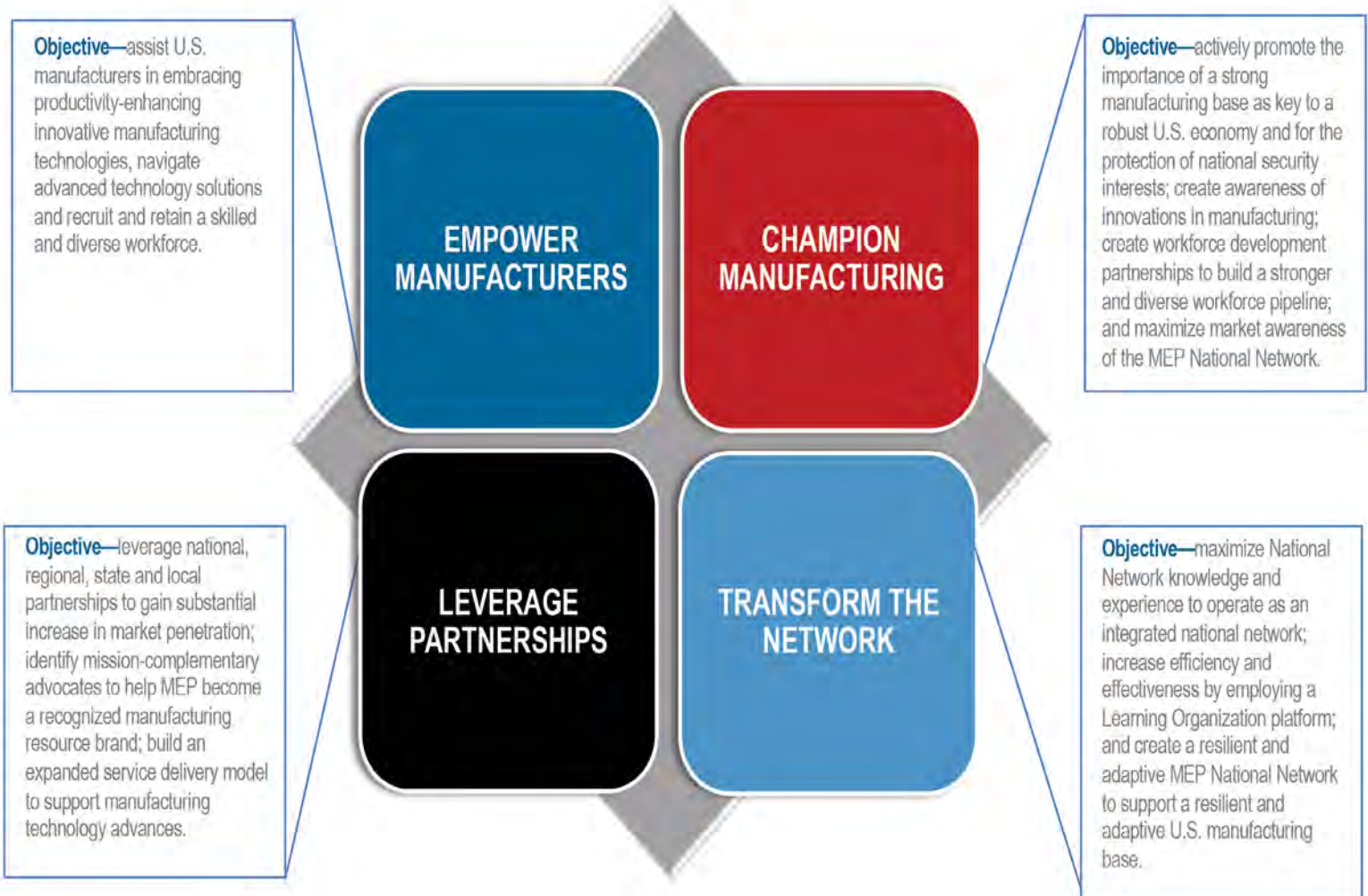




# MEP National Network 2017-2022 Strategic Plan

The Advisory Board continued to review and discuss the progress made on the MEP National Strategic Plan as it guides the Network forward from 2017-2022. Developed in conjunction with the Board, Center representatives, and NIST MEP staff, the plan creates a sharp focus for the Network with four expansive goals supporting the important mission and vision of the program. The [full plan can be downloaded](#) from the NIST MEP website. At each meeting, the Board was provided with updates, including detailed Network priorities along with measurable results outlining continuing progress. This information is available in the Board meeting minutes posted on the [NIST MEP website](#).

The strategic plan's four principal goals include:



# MEP NATIONAL NETWORK MEASURES OF SUCCESS

## 18-MONTH MEASURES OF SUCCESS (THROUGH MARCH 2021):

- Reach consensus across the MEP National Network on the definition of project and client manufacturing establishment interaction to ensure accurate and consistent measurement
- Achieve operational excellence by improving reporting via measurement of on-time and accurate reporting
- Increase reported projects by 10% and reported new clients by 5%
- Increase visibility by amplifying and measuring MEP National Network brand awareness by at least 10%

## FIVE-YEAR VIVID DESCRIPTION:

As the go-to resource for U.S. manufacturers...

- Recognized by SMMs as a valuable and essential resource for delivering advanced technology solutions and cited by key manufacturing stakeholders (local, state, federal) as integral to growing U.S. manufacturing ecosystems
- Increased our market penetration as an integrated National Network by 20%
- Delivered integrated digitalization and cybersecurity assistance to dispersed supply chains and embraced Industry 4.0 in our own operational excellence

## SIGNIFICANT LONG-TERM GOAL:

The MEP National Network is known and recognized by U.S. manufacturers and stakeholders as an indispensable resource whose trusted experts help them grow and embrace manufacturing technology advances. MEP's goals are a doubling of federal and state funding in the Network along with a strategic expansion of the current members of the MEP National Network:

- To be known and recognized by U.S. manufacturers as the go-to resource for manufacturing
- Triple the number of manufacturers served annually
- Increase the MEP National Network impact numbers four-fold



## Accomplishments

At each meeting, the Board received detailed updates from the MEP Director on progress toward updated goals for the MEP National Network 2017-2022 Strategic Plan's second 18-month period which runs from September 2019 through March 2021. The September Board meeting included an update from NIST MEP leadership on how the goals were adjusted and quantified due to the disruption caused by the pandemic. Even with the disruptions of 2020, steady progress was seen. In addition, the Board began pulling together a working group to chart the next strategic plan, for 2023-2028.





# NIST MEP Special Awards Programs

## NIST MEP Competitive Awards Program

As part of NIST MEP's ongoing efforts to build the MEP National Network and to make the program more effective and efficient, in 2017 NIST MEP launched the performance-based Competitive Awards Program (CAP). The format of using an open solicitation award throughout the fiscal year is based on an existing NIST Measurement Science and Engineering solicitation used by the Laboratory Organizational Units in their grants programs. The MEP CAP awards are performance-based and open to MEP Centers that meet an acceptable level in seven out of ten Improving Manufacturing Productivity and Competitiveness Tracker (IMPACT) metrics. This funding opportunity is available for MEP Centers to add capabilities to the MEP National Network including projects that solve new or emerging manufacturing problems that are not already provided for under a Center's base MEP award.

In 2020, 12 additional CAP awards were made totaling about \$11 million and issued to MEP Centers in California, Connecticut, Florida, Georgia, Michigan, Missouri, New York, Ohio, Oregon, Tennessee and Virginia (two awards). Project themes include new manufacturing technologies of relevance to small and medium-sized manufacturers, particularly those related to cybersecurity, Industry/Manufacturing 4.0, supply chain management technologies and practices, and workforce intermediary and business services. Each of these awards will increase the ability to effectively serve MEP clients across the whole Network. The following MEP Centers received CAP awards in 2020:

- **California Manufacturing Technology Consulting**, Torrance, California
- **CONNSTEP**, Hartford, Connecticut
- **FloridaMakes**, Orlando, Florida
- **GENEDGE Alliance**, Martinsville, Virginia (two 2020 CAP awards)
- **Georgia MEP**, Atlanta, Georgia
- **Michigan Manufacturing Technology Center**, Detroit, Michigan
- **Missouri Enterprise**, Rolla, Missouri
- **New York MEP**, Albany, New York
- **Ohio MEP**, Columbus, Ohio
- **Oregon MEP**, Portland, Oregon
- **University of Tennessee Center for Industrial Services**, Nashville, Tennessee

At the Sept. 22 Board meeting, Board members discussed and contributed ideas for possible future themes for NIST MEP's Competitive Awards Program.

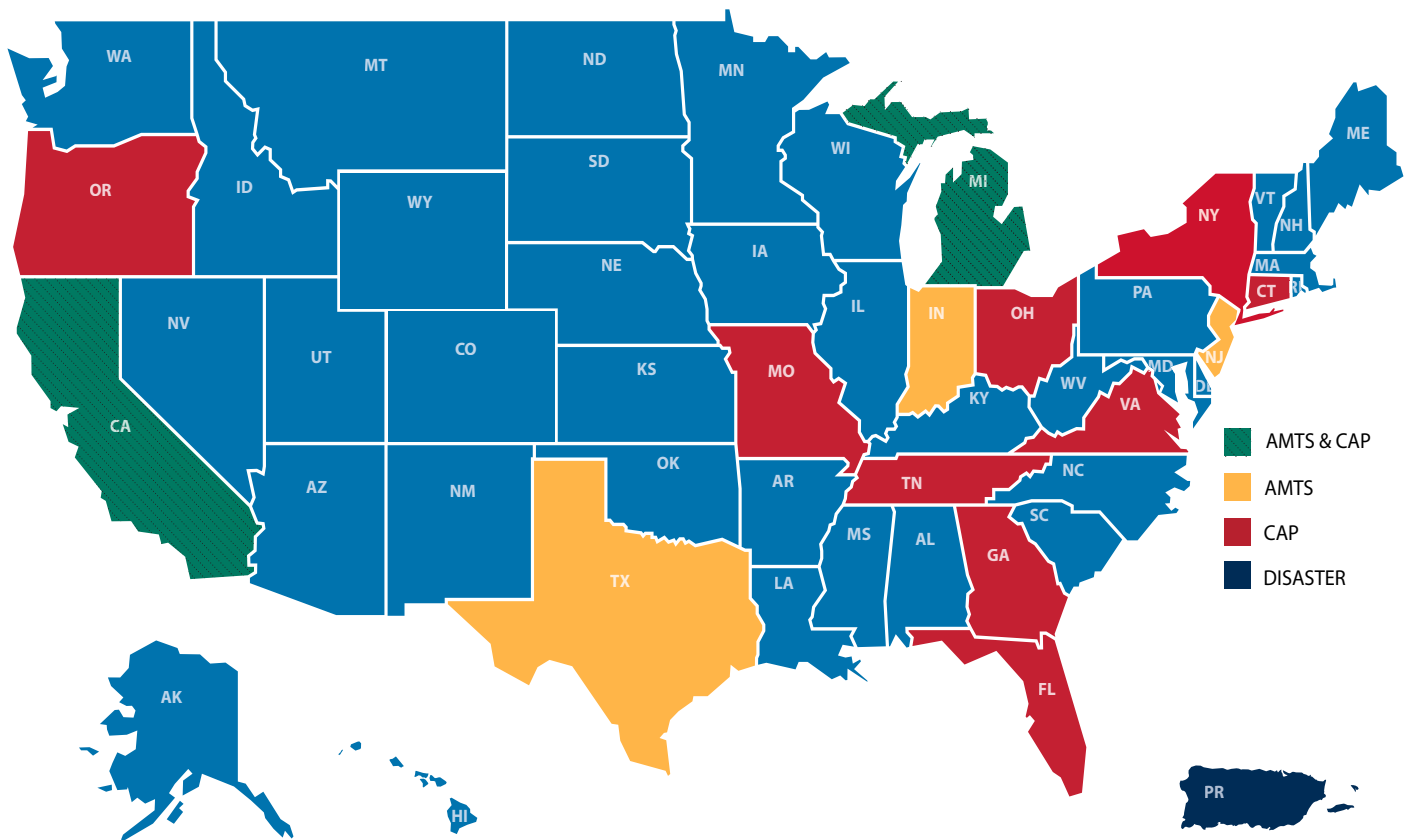


## Advanced Manufacturing Technology Services Awards

MEP made \$5 million in additional awards to five MEP Centers in California, Indiana, Michigan, New Jersey and Texas through the 2020 NIST MEP Advanced Manufacturing Technology Services Notice of Funding Opportunity. These awards are to deploy advanced manufacturing technology services to U.S. manufacturers in the broad area of Industry/Manufacturing 4.0, with an emphasis on serving the technology-based needs of small U.S. manufacturers. These projects should lead to improved product quality and innovation, improved manufacturing process efficiency, and increased supply chain connectivity. Ultimately, this should result in small U.S. manufacturers being more competitive in the marketplace and being afforded business growth opportunities. The following MEP Centers received Advanced Manufacturing Technology Services Awards in 2020:

- **California Manufacturing Technology Consulting**, Torrance, California
- **Michigan Manufacturing Technology Center**, Detroit, Michigan
- **New Jersey MEP**, Cedar Knolls, New Jersey
- **Purdue University, Indiana MEP**, West Lafayette, Indiana
- **University of Texas in Arlington, dba TMAC**, Arlington, Texas

## 2020 Special Awards







## NIST Manufacturing Disaster Assessment Program

The NIST Manufacturing Disaster Assessment Program invites applications from MEP Centers to perform assessments of small and medium-sized manufacturers in areas subject to a Federal Emergency Management Agency disaster declaration. In 2020, NIST MEP provided nearly \$1 million to Puerto Rico Manufacturing Extension Inc. (the Puerto Rico MEP Center) for their Disaster Recovery Program for the Southwest Region in response to two earthquakes that hit the island in January 2020.





# Summit Consulting and W.E. Upjohn Institute Report

In May 2020, Summit Consulting and the W.E. Upjohn Institute released an updated study which found the MEP program generated a substantial economic and financial return of nearly 13.4:1 for the \$140 million invested in the program in FY 2019 by the federal government.

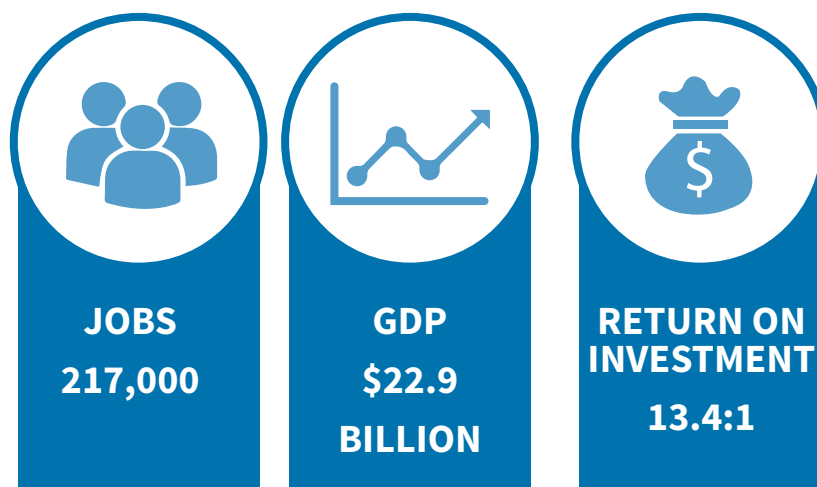
The study also found that total employment in the U.S. was over 217,000 higher because of MEP Center projects than without the program. The Upjohn study examined additional areas of economic impact not previously reported by the MEP program:

- Personal income is \$14 billion higher.
- Gross domestic product is \$22.9 billion larger, translating into an increase of \$1.87 billion in personal income tax revenue to the federal government than without the MEP program.

An [infographic](#) is available and the study is available [online](#).

## About the Team

Summit is a quantitative and management consulting firm that works with public and commercial clients to turn data into actionable intelligence. The W.E. Upjohn Institute is a private, nonprofit, nonpartisan, independent research organization devoted to investigating the causes and effects of unemployment, to identifying feasible methods of insuring against unemployment, and to devising ways and means of alleviating the distress and hardship caused by unemployment.





## NIST MEP Budget

The FY 2021 appropriation for the MEP program is \$150 million, which represents an increase of \$4 million over MEP's FY 2020 funding amount of \$146 million. Similar to MEP's FY 2020 appropriated funds, nonfederal cost share requirements are waived for FY 2021 federal funding for MEP Centers. Centers receiving state funding that is conditioned upon a federal cost sharing requirement are exempted from the cost share requirement waiver.

Approximately \$121 million of MEP's funding goes directly to the MEP Centers. Additional funds are awarded competitively to Centers for direct support of the MEP National Network's engagements with manufacturing firms and for enhancing the Network's ability to deliver a greater range of services and in more efficient ways.

MEP also received a \$50 million supplemental appropriation under the CARES Act specifically to fund pandemic response and recovery activities. Of that funding amount, \$49.1 million was provided directly to the Centers.





# Mission and Vision



## MISSION:

Strengthen and empower U.S. manufacturers.



## VISION:

We are the go-to resource for America's manufacturers ensuring U.S. manufacturing is resilient and leads the world in manufacturing innovation.



## DRIVING FORCE:

We are driven to attain and uphold U.S. manufacturing preeminence which is essential to our nation's long-term economic strength and to protect our national security interests.



## ROLE:

The MEP National Network focuses its expertise and knowledge as well as that of its partners (industry, educational institutions, state governments, NIST, and other federal research laboratories and agencies) on providing U.S. manufacturers with information and tools they need to improve productivity, assure consistent quality, accelerate the transfer of manufacturing technology, and infuse innovation into production processes and new products.









# The Go-To Experts for Advancing U.S. Manufacturing.