



MEP • MANUFACTURING
EXTENSION PARTNERSHIP®



MEP ADVISORY BOARD 2019 ANNUAL REPORT



2019 MEP Advisory Board Report

In 2019 the MEP National Network™ made great strides toward functioning as a truly integrated National Network, with the capabilities of one Center available to and benefiting all Centers across the country and potentially helping every U.S. manufacturer. Additionally, we embarked on connecting the MEP Advisory Board with each of the 51 MEP Center Boards. These accomplishments came about through a great deal of hard work involving all the Network representatives including the MEP Advisory Board, NIST MEP staff, leadership from the Foundation for Manufacturing Excellence and of course, the MEP Centers and their boards in every state and Puerto Rico.

The MEP Advisory Board met in March, June and September 2019. The Board received updates and continued to advise NIST MEP leadership on progress toward the goals of the MEP National Network 2017-2022 Strategic Plan. The September 2019 Board meeting included discussion of the Network's progress on the first 18-month measures of success and presented baselines for a new set of 18-month measures that will continue focusing the Network on strategic plan goals throughout 2020.

At each Board meeting, reports from the Supply Chain Development Working Group and the Advisory Board Executive Committee Working Group focused discussion as these groups explore and develop recommendations on essential programmatic goals. In addition to the working group topics, workforce challenges were an area of attention for the Board in 2019.

A high point for 2019 was the MEP National Network Summit which took place immediately after the September Board meeting in Atlanta. The Summit was an incredible display of the Network's expertise and passion for manufacturing as over 600 attendees shared challenges, ideas and resources. At the beginning of the Summit, the MEP Advisory Board was honored to host a manufacturing roundtable with Deputy Secretary of Commerce Karen Dunn Kelley and Under Secretary of Commerce for Standards and Technology and NIST Director Dr. Walter Copan who demonstrated great interest and understanding of the manufacturing challenges that the Network is addressing.

The Board is fully engaged as the Network begins working on the new 18-month measures of success toward strategic plan goals. The Center Board Outreach Program will establish stronger collaborative relationships between MEP Advisory Board members and the Center boards. Efforts to further integrate the Network and get the word out about Network capabilities will continue in 2020 as the MEP National Network brand becomes more widely known by small and medium-sized manufacturers as the "Go-To Experts for Advancing U.S. Manufacturing." It's an exciting time to be at the forefront of moving the dial forward for U.S. manufacturing.



Bernadine Hawes, Chair
Senior Research Analyst
Community Marketing Concepts
Philadelphia, Pennsylvania



Matthew B. Newman, Vice Chair
Director, Sustainability Advocacy and Development
ONEOK, Inc.
Tulsa, Oklahoma



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 & CEO
Colonial Diversified Polymer Products, LLC
Dyersburg, Tennessee

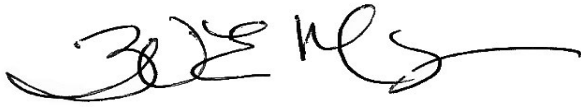
Carolyn Cason
Professor Emerita, College of Nursing and Health Innovation
University of Texas at Arlington
Arlington, Texas

Joe Eddy
CEO
Enhanced Technologies LLC
Wheeling, West Virginia

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

Mary Isbister
President
GenMet Corp
Mequon, Wisconsin

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
Laytonsville, Maryland



Patricia Moulton
President
Vermont Technical College
Randolph Center, Vermont



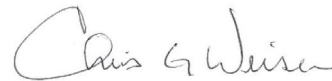
Kathay Rennels
Special Advisor to the Chancellor for Rural-Urban Initiatives
Colorado State University System
Fort Collins, Colorado



George Spottswood
CEO
Quality Filters, Inc.
Robertsdale, Alabama



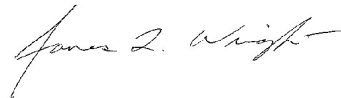
Leslie Taito
CEO
Hope Global
Cumberland, Rhode Island



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



Jeffrey Wilcox
Vice President, Digital Transformation
Lockheed Martin
Bethesda, Maryland



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

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About the Manufacturing Extension Partnership

The Omnibus Trade and Competitiveness Act of 1988 created the National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership program (MEP) 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 51 MEP Centers as part of the MEP National Network represented in every state and Puerto Rico have more than 1,400 trusted advisors and experts at approximately 375 MEP service locations. 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) 2019, the network of MEP Centers interacted with more than 28,200 manufacturers. MEP Center clients from across the country reported that the assistance they received helped to create or retain 114,650 manufacturing jobs in FY 2019. MEP Center clients had \$15.7 billion in new and retained sales in FY 2019 and realized \$1.5 billion in cost savings. For every dollar of federal investment in FY 2019, the MEP Centers as part of the MEP National Network generated \$33.80 in new sales growth and \$32.20 in new client investment. This translates into \$4.7 billion in new sales. During this same time, for every \$1,221 of federal investment, the MEP Centers' work with their clients created or retained one manufacturing job. Since 1988, MEP has worked with 111,343 manufacturers, leading to \$132 billion in new sales and \$22 billion in cost savings, and it has helped create and retain more than 1,221,996 jobs.

MEP NATIONAL NETWORK™ DELIVERS VALUE FOR MANUFACTURERS IN FY 2019

114,650 JOBS Created or Retained

**\$15.7
BILLION**
in New and
Retained Sales 

**\$4.5
BILLION** 
Total New Investment
in U.S. Manufacturing

**\$1.5
BILLION** 
in Savings



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 2019, the Board met three times to perform its chartered functions.

A number of changes were made to Board membership in 2019. Board chair Jeffrey Wilcox finished his second term in May 2019 and a new chair and vice chair were designated. Former vice chair Bernadine Hawes stepped into the role as chair and Matthew Newman accepted the nomination for vice chair.

The three members leaving the Board in 2019, including immediate past chair Jeffrey Wilcox, Carolyn Cason and Joe Eddy, offered leadership and advice over their years of service and their time and commitment to the MEP Advisory Board is appreciated. Three new members joined the Board in 2019, including Don Bockoven, Kevin Heller and Dr. Willie E. May, bringing the roster to 15 members going into FY 2020.

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 college institutions of higher education. The important perspectives of these volunteers will positively impact the MEP Program into the future.



MEP Director Carroll Thomas and the MEP Advisory Board organized a manufacturing roundtable with Deputy Secretary of Commerce Karen Dunn Kelley and Under Secretary of Commerce for Standards and Technology and NIST Director Dr. Walter Copan during the MEP National Network Summit in September 2019.

2019 Advisory Board Members



BERNADINE HAWES, CHAIR

Second Term Expires: 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.



MATTHEW NEWMAN, VICE CHAIR

First Term Expires: March 2020

Matthew Newman is the director of sustainability advocacy and development for ONEOK, Inc. He joined ONEOK in 2019 and has over 25 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. ONEOK, a Fortune 500 Company, is one of the nation's largest midstream energy companies focused on gathering, processing, storage and transportation of natural gas and natural gas liquids in the United States.



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.



E. LADON BYARS

First Term Expires: February 2020

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.



CAROLYN CASON

Second Term: Resigned from the Board, March 2019

Carolyn Cason, professor emerita at the University of Texas at Arlington, has had a distinguished career as a scientist, teacher, academic leader and innovator. She began her professional career as a critical care nurse and has held university teaching appointments for over 35 years. She joined the University of Texas at Arlington in 1997 as professor and associate dean for research in the College of Nursing and served as the university's vice president for research from 2010-2015. She envisioned and built the nation's first comprehensive healthcare simulation research and development center, the Smart Hospital, creating the prototype for the nation. She led the efforts that created Smart Care, a living laboratory dedicated to developing noninvasive, pervasive technology to monitor health changes and support independent living, and the Shimadzu Institute for Research Technologies, a \$25 million core facility supporting chemistry, biology, nanotechnology and material science research. In 2014, she was named a charter fellow, National Academy of Inventors and in October 2015, she was inducted as a fellow of the American Academy of Nursing. She serves on a number of boards, including the board of Tech Fort Worth, a seed incubator/accelerator supporting entrepreneurs commercializing innovative technologies.



JOE EDDY

First Term: Resigned from the Board, March 2019

Joe Eddy is executive vice president at Justrite Safety Group and president/CEO of Eagle Manufacturing. Both companies are leaders for over 100 years in the safe storage, transfer, use and disposal of flammable and hazardous liquids. As executive vice president of Justrite's North American Chemical Safety business unit, Mr. Eddy is responsible for both Eagle and Justrite's legacy operations groups. He is past chairman of the West Virginia Manufacturers Association (WVMA), president of the WVMA Educational Fund Board, vice president of the Foundation Board at West Virginia Northern Community College, on the advisory board at the McDonough Center for Leadership and Business at Marietta College, vice president of the Regional Economic Development Partnership Board, on the Federal Reserve Bank of Richmond's Charleston Industry Roundtable, on the board of the National Association of Manufacturers, on the West Virginia Economic Development Authority Board and founded the Joseph and Debra Eddy Foundation, as well as the Joseph Eddy Technology Fund at West Virginia Northern Community College.



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.



MARY ISBISTER

First Term Expires: March 2020

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.



MITCH MAGEE

First Term Expires: March 2020

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 Governor 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.



DR. 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.



PATRICIA 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

First Term Expires: May 2020

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

First Term Expires: July 2020

Leslie Taito is currently the CEO for Hope Global, a manufacturer of products and engineering of textile solutions. Using her 27 years of management and manufacturing experience she is responsible for developing and leading the short and long-term growth strategy for the company and managing the overall global operations and resources.

Prior to her employment at Hope, Ms. Taito served as the 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

First Term Expires: March 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.



JEFFREY WILCOX, IMMEDIATE PAST CHAIR

Second Term Expired: May 2019

Jeff Wilcox is vice president for digital transformation at Lockheed Martin. He oversees the Digital Transformation Office and is responsible for the design, development and implementation of Lockheed Martin's operations strategy. This office is charged with leveraging emerging digital technologies to transform systems design, production and sustainment, as well as ensuring the workforce and systems are in place to enable successful transformation.

Previously, Mr. Wilcox served as vice president for engineering and program operations at Lockheed Martin. In this capacity, he was responsible for the effectiveness and efficiency of the engineering, program management, production operations and sustainment functions across the enterprise. Prior to that role, Mr. Wilcox served as vice president for corporate engineering where he was responsible for the engineering enterprise, ensuring that the right people, processes, tools and technologies were in place to successfully deliver innovative engineering solutions to customers' most complex challenges. Prior to joining Lockheed Martin, Mr. Wilcox served for 17 years with Science Applications International Corporation.

Mr. Wilcox earned his Bachelor of Science in biomedical engineering from Case Western Reserve University and his Master of Science in electrical engineering from Drexel University. He holds an honorary Doctor of Engineering from Stevens Institute of Technology and serves on the Advanced Robotics for Manufacturing Institute Board as well as on multiple industry and university advisory boards. Mr. Wilcox is an adjunct professor at Miami University in Oxford, Ohio, an associate fellow of the American Institute of Aeronautics and Astronautics and a senior member of the Institute of Electrical and Electronics Engineers.



JIM WRIGHT

First Term Expires: March 2020

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. Through 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.



2019 Advisory Board Activities

Advisory Board Meetings

The MEP Advisory Board gathered for three face-to-face meetings in 2019. At each meeting, the Board received detailed updates from the MEP Director on the state of the MEP Program and progress made toward strategic plan 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 expand their knowledge of manufacturing technologies through academic and industry plant visits, advise and support the MEP Program and actively engage with the MEP National Network. All MEP Advisory Board [meeting minutes and presentations](#) are available on the NIST MEP website.



March 29, 2019: Washington, D.C.

The first 2019 MEP Advisory Board meeting in March featured guest speaker Rob Gold from the Department of Defense (DoD) Office of the Undersecretary of Defense for Research and Engineering. He addressed critical manufacturing supply chain needs for the defense industrial base and discussed an assessment of key areas of focus for building defense manufacturing supply chain resiliency that was conducted in response to the President's Executive Order 13806 issued in July 2017. He also identified possible opportunities for the MEP Centers' participation including helping move companies toward digital manufacturing, addressing workforce challenges and working with the space industrial community.




June 18, 2019: Torrance, California

Before the June meeting, members of the MEP Advisory Board toured Boeing Satellite Systems and El Camino College's Center for Applied Technology. Workforce challenges and solutions were the key focus areas at the June meeting where NIST MEP's Mary Ann Pacelli spoke about the importance of education and other efforts



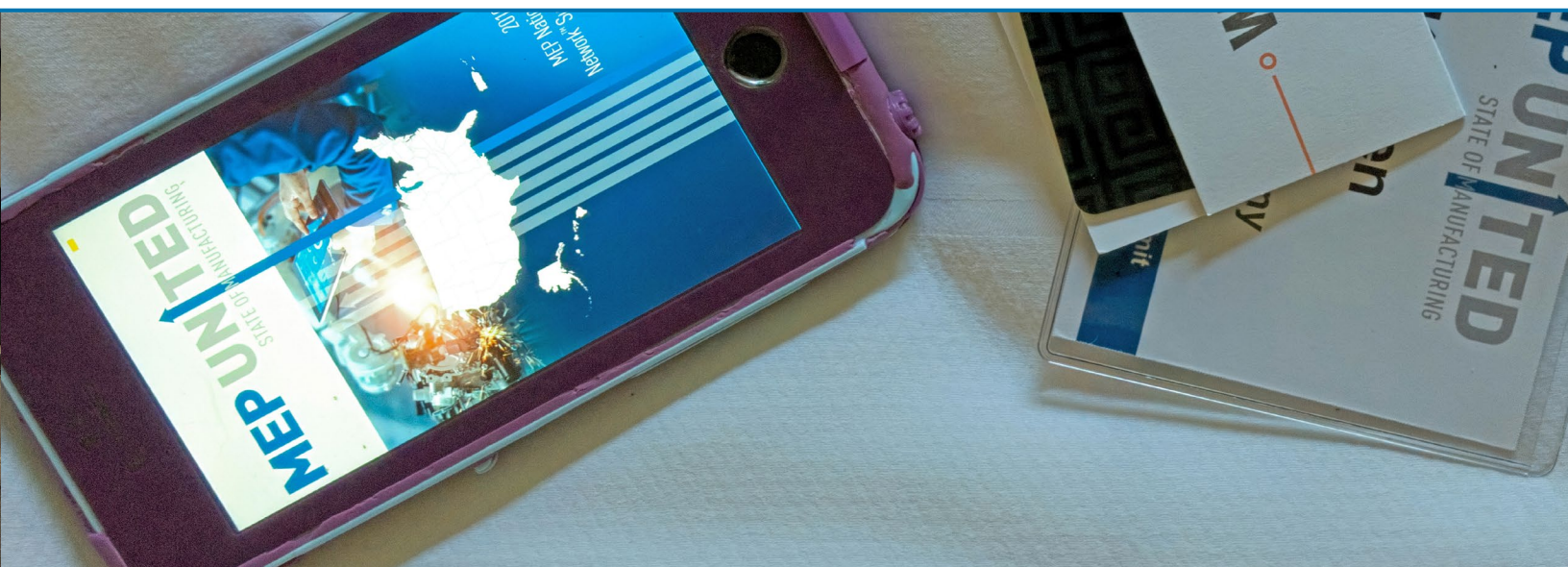
to develop the future manufacturing workforce. She presented ways MEP Centers can assist clients including layoff aversion, talent planning and training (i.e. "Smart Talent") and helping companies figure out what they can do differently to recruit and retain their workforce.

 **Sept. 15, 2019: Atlanta, Georgia**

The MEP Advisory Board met for a third time just before the MEP National Network Summit in Atlanta. This meeting included concurrent roundtable discussions with MEP Advisory Board members as well as Center board leaders and NIST MEP Resource Managers. These discussions focused on three topics: brainstorming ways that Center boards can help MEP Centers meet strategic plan goals to increase reported projects and engage new clients, identifying each state's biggest manufacturing challenges and the resources needed to deal with them, and discussing how to use the MEP National Network to full advantage for learning and sharing resources.

After the Advisory Board meeting, the MEP Director and the MEP Advisory Board organized a dynamic manufacturing roundtable giving Deputy Secretary of Commerce Karen Dunn Kelley and Under Secretary of Commerce for Standards and Technology and NIST Director Dr. Walter Copan the opportunity to discuss directly with SMMs both the challenges they face and the potential opportunities available to them in advanced technology trends. Participating manufacturers in the roundtable included members of the MEP Advisory Board and MEP Center board chairs.

Many MEP Advisory Board members remained in Atlanta for the MEP National Network Summit, attending sessions and networking. The Summit brought together over 600 attendees from around the country to share knowledge to advance and integrate MEP National Network capabilities, strengthen the Network, improve the ways SMMs are served, and strengthen and empower U.S. manufacturers while advancing U.S. manufacturing as a whole.





Working Group Updates

Supply Chain Development Working Group

Of particular interest since 2017 has been MEP National Network support of defense manufacturing supply chains relating to the DoD-sponsored Manufacturing USA Institutes, as well as cybersecurity for defense manufacturing. NIST MEP staff have worked with MEP Center staff embedded in Manufacturing USA Institutes since 2016 to help the MEP Centers engage SMMs in the technology focus areas and market opportunities of the Manufacturing USA Institutes. Programmatic results and learnings were documented in a March 2019 NIST MEP white paper. Highlights of findings include that SMMs tend to explore opportunities before making decisions to commit or implement and that they are interested in demonstration sites and interactive experiences that help them understand technologies. SMMs are also interested in state-of-the-art technologies that can be leveraged in the very near term and in local resources (within less than a two-hour drive) which are particularly helpful for engagement.

The MEP Advisory Board Supply Chain Development Working Group offers guidance and perspectives on MEP Program 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. The Supply Chain Development Working Group includes 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.



Development of MEP Center cybersecurity assistance capabilities is progressing and continues to be spurred by strong partnerships with DoD programs and mainly driven by the Defense Federal Acquisition Regulation Supplement (DFARS) requirements for defense contractors. Nondefense manufacturing sectors are not showing urgency to implement cybersecurity protections, although other supply chains such as those of the automotive and food industries are progressing and being closely monitored by the MEP National Network. The MEP Centers' service to small companies includes awareness and training. As of the September 2019 MEP Advisory Board meeting, 45 out of 51 MEP Centers offer a cybersecurity practice, more than 3,200 SMMs have been served and there have been over 496 cybersecurity projects conducted by the MEP Centers since 2014. MEP Cyber-in-a-Box is available and provides MEP Centers with tools, guidance and other information needed to create a cybersecurity assistance practice. In addition, NIST Handbook 162 has been downloaded approximately 60,000 times since it was published in November 2017.

Advisory Board Executive Committee Working Group

Throughout 2019 the group developed the new Center Board Outreach Program. The primary outcome of this effort will effectively connect all local MEP Center boards at the national level. The program enables MEP Advisory Board members to help Center boards better understand and engage with the MEP Centers. Current national Board members will be assigned to connect directly with individual Center board chairs to provide updates on Board activities, engage in strategic discussions that impact the MEP Program at the local and national level and gather feedback to better inform the Board about Center advocacy needs. This will be a more direct connection to the MEP Centers – providing a reciprocal relationship that gives Center boards direct access to the conversations at the national level while giving the MEP Advisory Board a way to better understand MEP Center needs and achieve its statute requirements to advise on the MEP Program as a whole.

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 explores ways to expand the MEP Advisory Board's role regarding the local MEP Center boards. The Executive Committee Working Group includes the following MEP Advisory Board members: Bernadine Hawes and Matt Newman, co-leads, Mitch Magee, Patricia Moulton and George Spottswood, as well as NIST MEP staff support.



MEP National Network Update

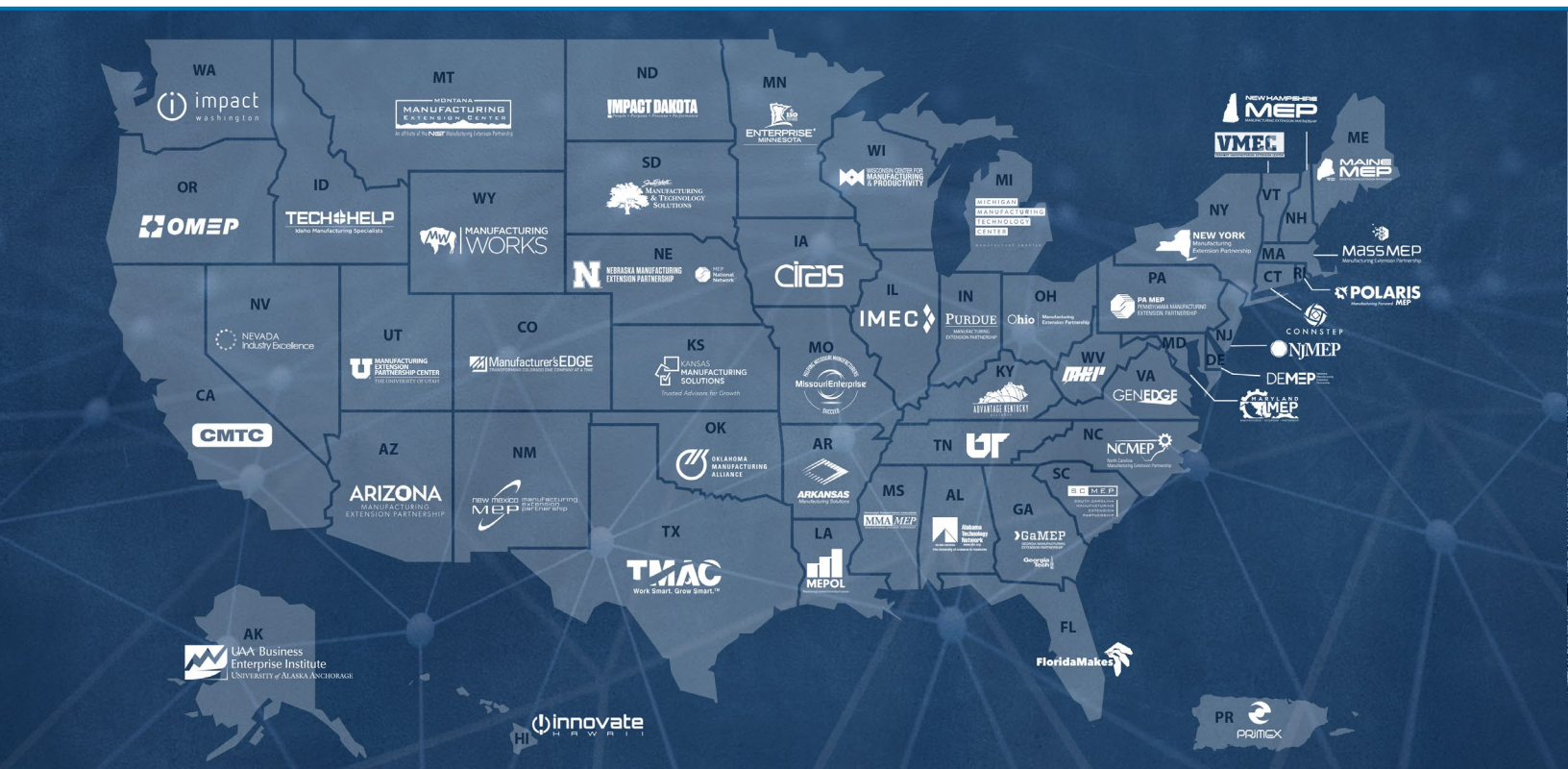
The MEP Program continued to make great strides in moving from the former model of a loose federation of independent Centers to a formalized integrated organization known as the MEP National Network, a common entity comprised of 51 MEP Centers in all 50 states and Puerto Rico, the MEP Advisory Board, the 51 Center boards and the Foundation for Manufacturing Excellence working side by side with NIST MEP.



MEP National Network Brand Awareness Campaign

Increased recognition of the existence and value of the integrated MEP National Network was a milestone in 2019. This year the MEP National Network Brand Awareness campaign made important strides in reaching a greater number of SMMs with messaging in trade media including IndustryWeek, Industry Today and Quality Digest with articles, blog posts, white papers and webinars to increase awareness of MEP Center activities. This effort will continue through sharing educational and informational content created by the MEP National Network to increase Network awareness, establish our Centers as thought leaders and help further the Network's mission to strengthen and empower U.S. manufacturers.

In 2019, the new Alaska MEP Center at the University of Alaska Anchorage joined the Network and is already doing important work to support the 550 manufacturers in Alaska that are vital to the local economy.



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.

Increasing Key Services Across the Network

2019 saw a great deal of progress in increasing services in key areas across the Network. One very vital area is development of MEP National Network cybersecurity assistance capabilities which continue to be spurred by strong partnerships with DoD programs and mainly driven by the DFARS requirements for defense contractors. As of the September 2019 MEP Advisory Board meeting, 45 out of 51 MEP Centers offer a cybersecurity practice and more than 3,200 SMMs have been served. These efforts are having impact, yet a great deal of work remains and NIST MEP is developing a Notice of Funding Opportunity for MEP Centers for release in FY 2020 which will focus on the broad area of Industry 4.0/Advanced Manufacturing and emphasize connectivity of physical and cyber systems in manufacturing factories and supply chains.

MEP Director Carroll Thomas made site visits to all but two of the the MEP Advisory Board members in 2019 that she had not previously visited, touring their operations and meeting with clients. This learning/listening tour strengthened bonds and provided firsthand understanding of the expertise, strengths, skills, challenges and passion for manufacturing that each individual brings to the Board and to the MEP National Network.



On a learning/listening tour, MEP Director Carroll Thomas visited MEP Advisory Board members including Jim Wright at Proof Research and Chris Weiser at J.V. Manufacturing, Inc. (pictured at far right).



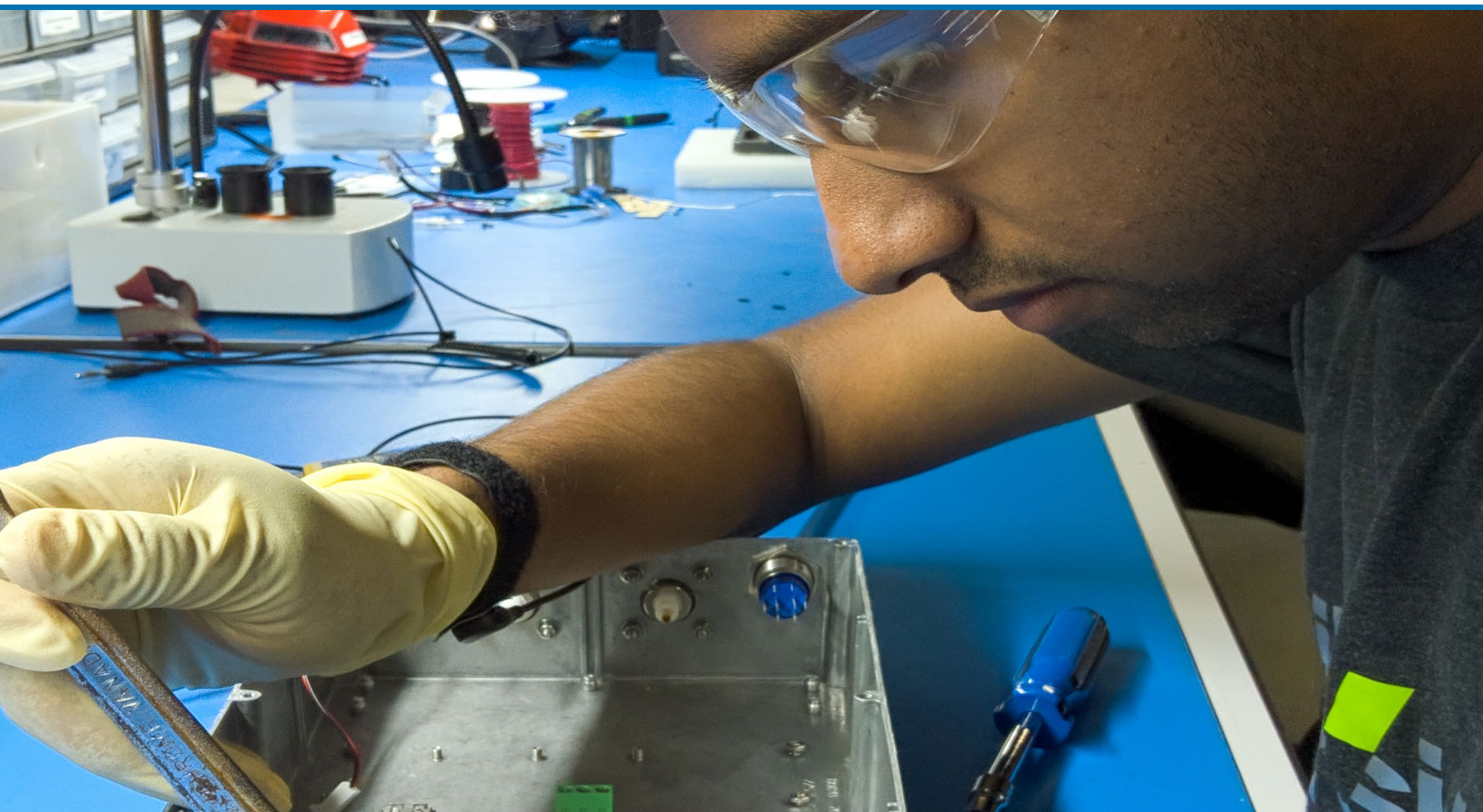
Center Leadership Team

Established in 2017, the MEP National Network Center Leadership Team (CLT) has gained momentum and is having a wide impact across the MEP Centers and the rest of the Network. The 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.

2019 MEP National Network Center Leadership Team Committees

The CLT provides input for initiatives that enhance MEP Center performance and also lays a foundation for the Network to address the current and future needs of SMMs by leading CLT Committees in key areas. The CLT itself is a diverse team representing large and small Centers and various types of host institutions. This diversity is enhanced by the inclusion of additional MEP Center directors from across the country on CLT Committees.

Each CLT Committee is led by a member of the CLT who serves as the Committee champion. Committee members include volunteers from MEP Center leadership and additional key stakeholders that add value to the Committee. CLT Committees met regularly throughout 2019 to plan and implement their work and these activities are a key part of CLT efforts.



2019 MEP National Network CLT Committees



Communications Committee – This Committee communicates clearly to all stakeholders the brand and important Network information including Center impacts. Using digital tools to expand the capability for the Network to communicate efficiently and effectively with partners, industry and stakeholders, this Committee coordinates with NIST MEP and the American Small Manufacturers Coalition to deliver Network performance to stakeholders.



Learning Committee – The Learning Committee evaluates the learning needs of the MEP Centers, identifies and improves current learning mechanisms and creates new mechanisms for Center learning as part of the Network. This Committee engages Center staff at all levels through learning organizations, summits, meetings and communities of interest.



Manufacturing and Technology Committee – This Committee coordinates the generation of new services and technologies for dissemination to Centers throughout the U.S. These customer-driven solutions will increase Center capabilities and allow them to think more broadly about their ability to serve their manufacturing community. This Committee also builds Center teams focused on securing NIST MEP supplemental funding that enables development of improved capabilities and approaches to solving SMM technology challenges.



Multistate Engagement Committee – An important strength of the Network is that multiple Centers can work collaboratively to serve manufacturers across the nation. To take fuller advantage of this capability, in 2019 the Multistate Engagement Committee developed a Multistate Engagement Memorandum of Understanding (MOU) that establishes protocols and guidelines for MEP Centers to work together on multistate client projects that will reduce the business friction of multiple Centers working together and increase the velocity and frequency of collaborative projects across multiple Centers.



Network Evolution Committee – The Network Evolution Committee focuses on the adoption of principles and behaviors that create a functioning operational network of MEP Centers. The Committee fosters coordination and feedback mechanisms that result in new ways to improve the network of Centers as clients' needs change.



Outreach Committee – To succeed, the MEP National Network needs all Centers involved and committed to the National Network model. In the short term, the Outreach Committee is charged with helping build the National Network by communicating the philosophy, ethos and behaviors that have been defined and also making stakeholders aware of the value and requirements of being part of the National Network. Outreach involves direct and individual communication with Centers and stakeholders with clear messages about the purpose and value of the MEP National Network.

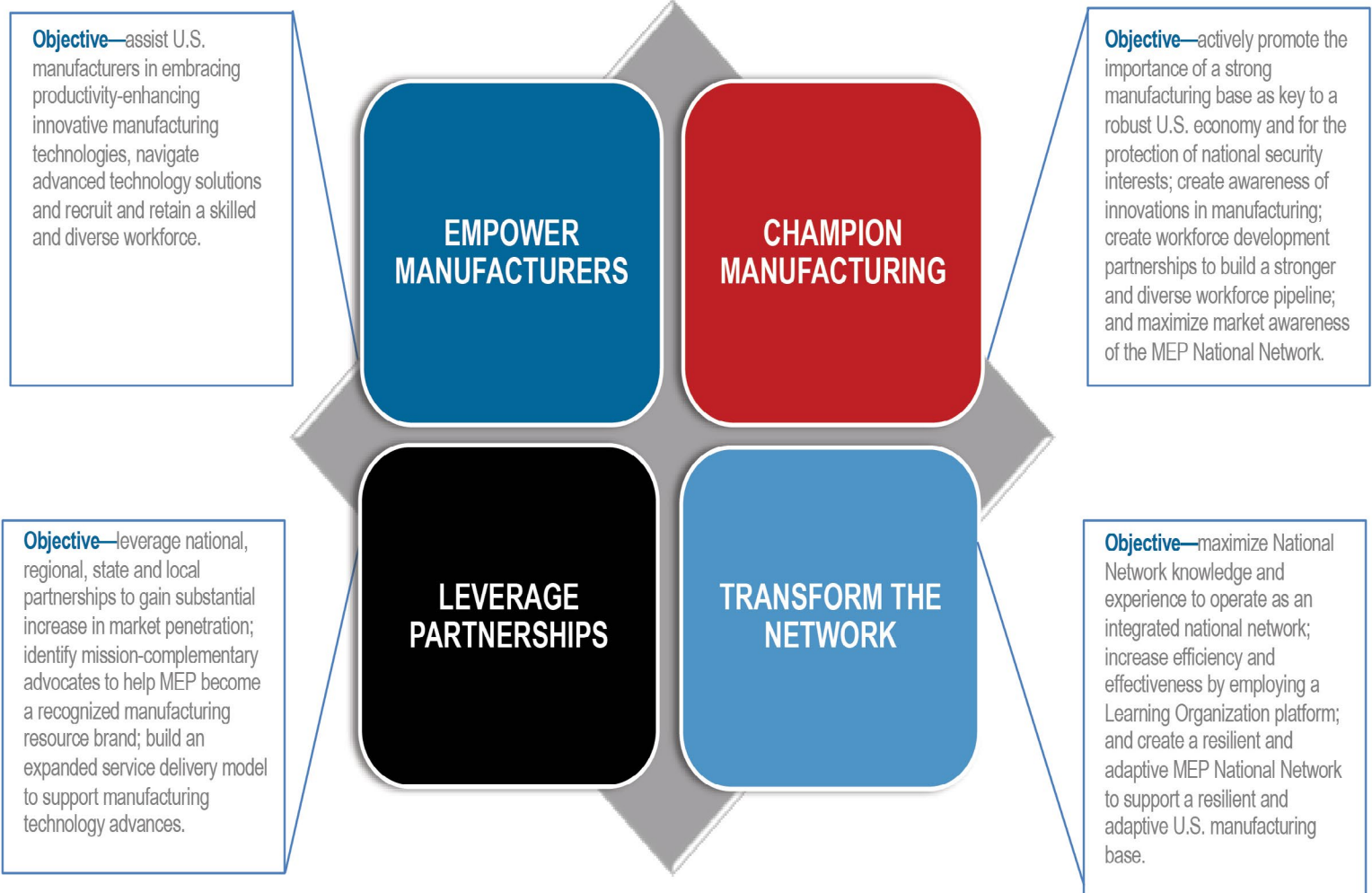


MEP NATIONAL NETWORK 2017-2022 STRATEGIC PLAN

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 FY 2019):

- Piloted integrated MEP National Network approach to delivery system engaging 50% of Centers in multi-Center delivery projects.
- Increased small/rural engagements through third party partnerships by 10% and increased longer-term impactful projects with these smaller firms by 5%.
- Attained Operational Excellence in 25% of Centers' operations and in 50% of NIST MEP administrative support.
- Increased awareness of the MEP National Network brand by 10% over base brand recognition measurement a year after the Network launched the brand.

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. A doubling of federal and state funding in the Network along with a strategic expansion of the current members of the MEP National Network:

- Known and recognized by U.S. manufacturers as the go-to resource for manufacturing.
- Tripled the number of manufacturers served annually.
- Increased the MEP National Network impact numbers four-fold.

Accomplishments and New Goals

At each meeting, the Board received detailed updates from the MEP Director on progress toward goals for the MEP National Network 2017-2022 Strategic Plan's first 18-month period. Steady progress toward these 18-month goals was seen across the Network and the September 2019 meeting featured reports of this progress on key measures of success in terms of an integrated National Network, efficiency in small/rural engagements, Center and Program Office operational excellence and increased visibility of MEP National Network brand awareness.

The September 2019 Board meeting also included a discussion of new goals and baselines for each of these new measures moving forward. The new 18-month goals are:

- Reaching consensus across the MEP National Network on the definition of project and client manufacturing establishment interaction to ensure accurate and consistent measurement.
- Operationally improving reporting via measurement of on-time and accurate reporting.
- Increasing reported projects by 10% and reported new clients by 5%.
- Amplifying and measuring MEP National Network brand awareness by at least 10%.



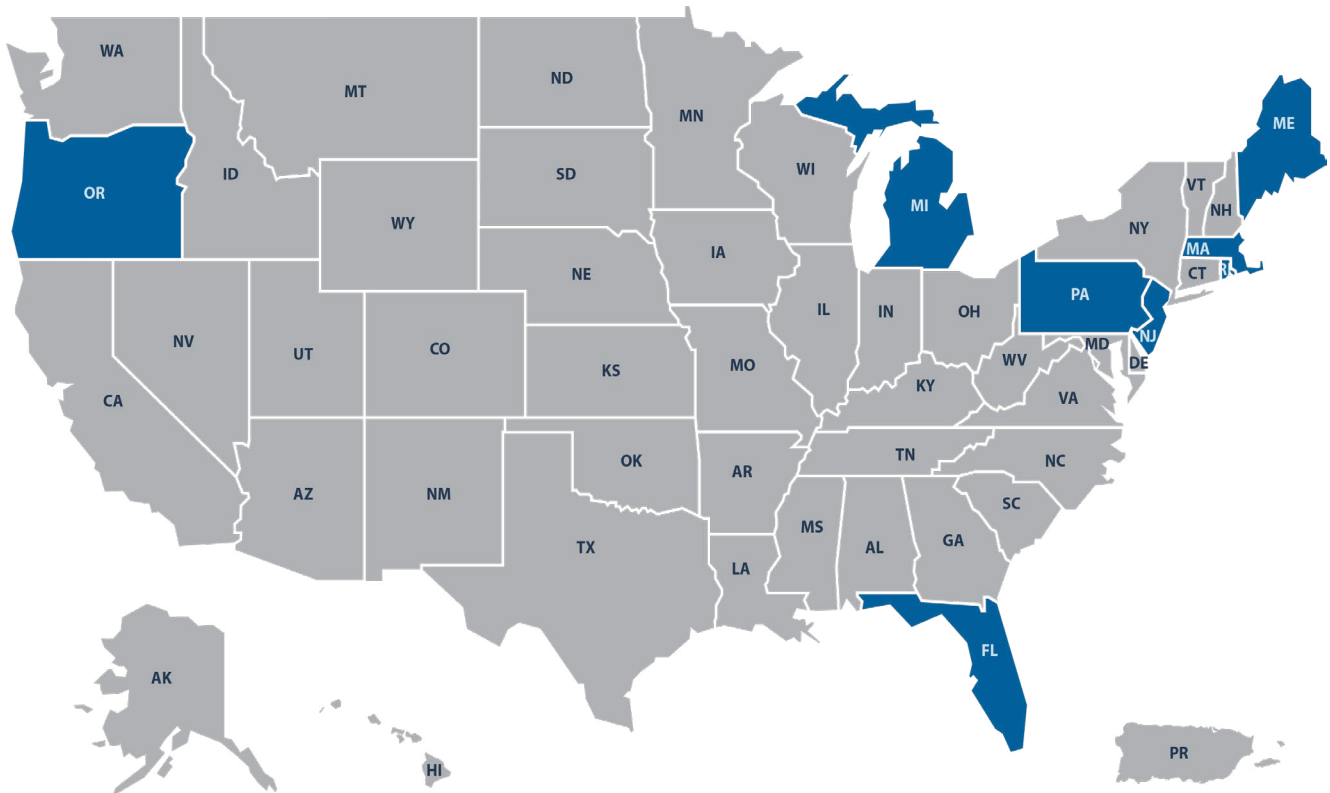


NIST MEP Competitive Awards Program

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.

In 2019, eight additional awards were made totaling over \$7 million and issued to MEP Centers in Florida, Maine, Massachusetts, Michigan, New Jersey, Oregon, Pennsylvania and Rhode Island (see below). These awards will add capabilities to the MEP National Network in diverse areas from cybersecurity, workforce development and Kata to food manufacturing and Industry 4.0. Each of these awards will increase the ability to effectively serve MEP clients across the whole Network.

- **FloridaMakes**, Orlando, Florida
- **Maine Manufacturing Extension Partnership**, Augusta, Maine
- **Massachusetts Manufacturing Extension Partnership**, Worcester, Massachusetts
- **Michigan Manufacturing Technology Center**, Plymouth, Michigan
- **New Jersey Manufacturing Extension Partnership**, Cedar Knolls, New Jersey
- **Oregon Manufacturing Extension Partnership**, Portland, Oregon
- **Pennsylvania Manufacturing Extension Partnership**, Williamsport, Pennsylvania
- **Polaris Manufacturing Extension Partnership**, Kingston, Rhode Island



Memorandum of Understanding with FDA

In 2019, an MOU was executed between NIST MEP and the U.S. Food and Drug Administration (FDA), Office of Regulatory Affairs, Office of Partnerships to establish collaborative efforts between NIST MEP and the FDA to support the U.S. food manufacturing sector and advance and improve safe food manufacturing practices in the U.S.

The sharing of food safety manufacturing practices is critical to advance safe food manufacturing practices in the U.S. The FDA, together with U.S. Department of Agriculture, has funded a network of public and private partners in state, federal, tribal and international governments, industry and academia for the development and delivery of Food Safety Modernization Act (FSMA) training. Via this MOU, the MEP National Network is recognized by the FDA as an additional, value-adding resource to extend assistance to small U.S. food processors relating to food safety best practices and how to implement FSMA and food safety requirements and standards.

The MEP National Network is developing capabilities and capacities across the nation in which local MEP Centers are striving to be go-to sources of expertise for small U.S. food processing companies in all areas of good manufacturing practices – highlighting food safety and awareness and implementation of FSMA requirements. Through this MOU, the FDA will serve as a partner resource to NIST MEP to assist with providing food safety training and awareness to small U.S. food processors across the nation that otherwise are challenged to receive information on food safety requirements and FDA guidance via existing FDA networks and alliances.

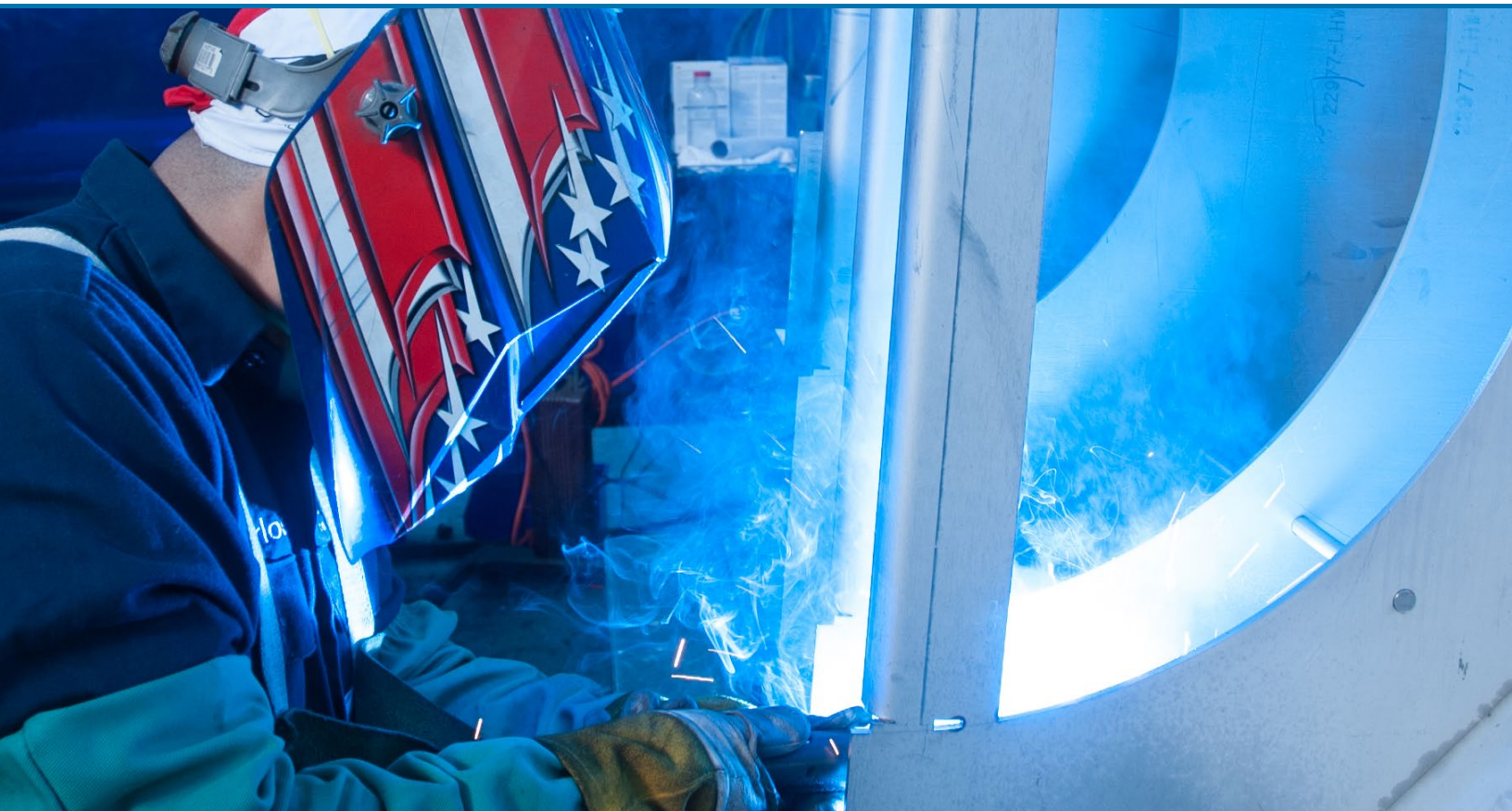




Government Accountability Office Cost Share Report

The NIST MEP Program worked to change the nonfederal to federal cost share ratio from 2:1 to 1:1 for MEP Centers for over a decade to enable the Centers to work with a more diverse group of companies and offer a broader array of programs. A change in cost share finally came in early 2017 with the signing of P.L. 114-329, the American Innovation and Competitiveness Act (AICA), a major change in the authorizing legislation of the Program.

The AICA required a report by the General Accounting Office (GAO) to Congress within two years of enactment on the impacts of the change in cost share. Based in part on input from the MEP Advisory Board, the GAO's report was published in March 2019 and is [available online](#). The GAO reported that most Centers told them this change improved their financial stability, allowing them to better serve very small and rural companies, however the impacts of the change in the cost share were hard to distinguish from other factors. Subsequently, NIST Director Dr. Walter Copan completed and submitted a report to Congress on the first and second years of operation for Centers from the recompetition. This report, also required by the AICA, provided details on the engagement in services provided by Centers, the characteristics of services provided, and the volume and type of services.



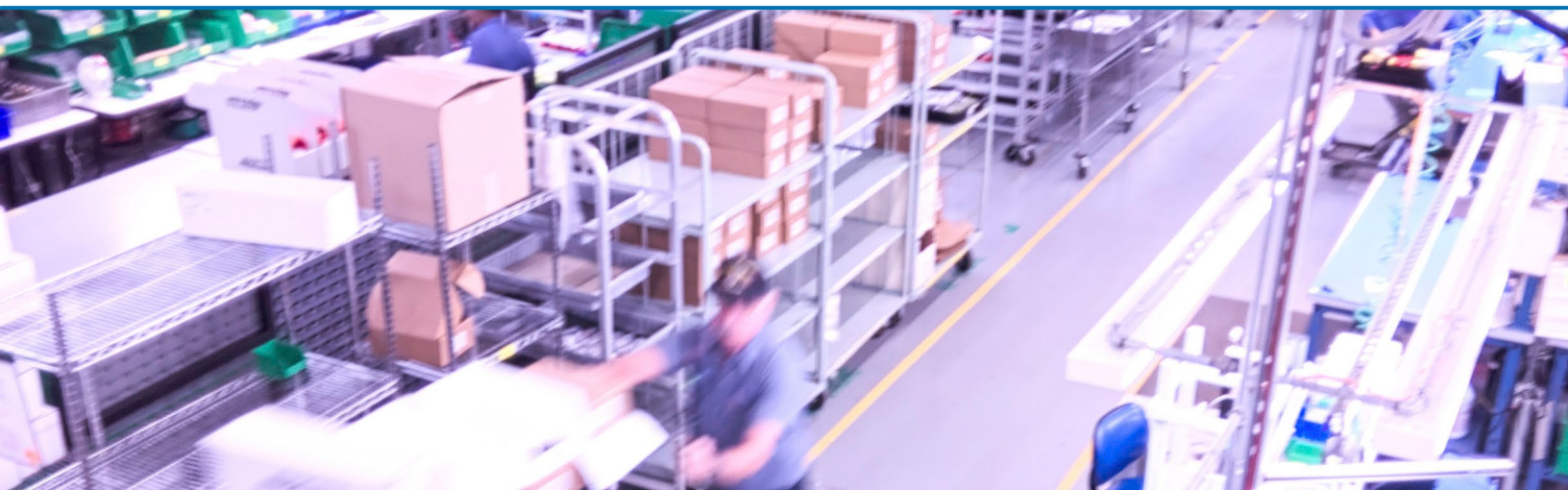
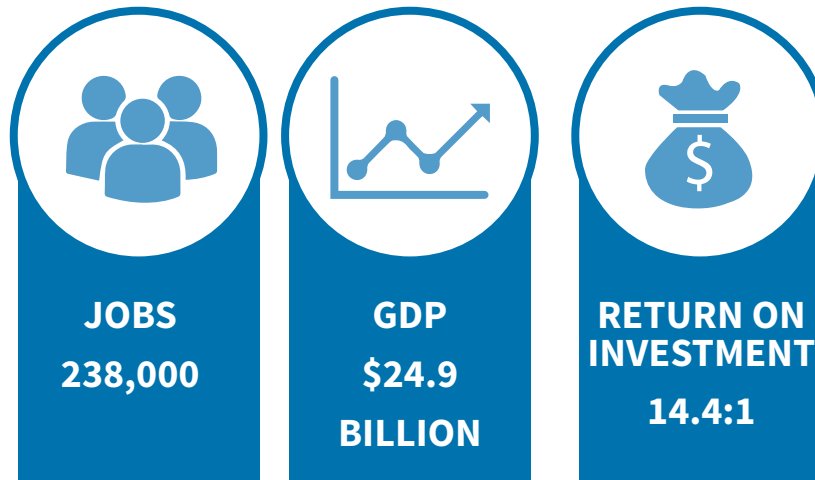
W.E. Upjohn Institute Report

In May 2019 the W.E. Upjohn Institute released an updated study which found the MEP Program generated a substantial economic and financial return of nearly 14.4:1 for the \$140 million invested in the program in FY 2018 by the federal government.

The study also found that total employment in the U.S. was over 238,000 higher because of MEP Center projects than without the program. The Upjohn study also examined additional areas of economic impact not previously reported by the MEP Program:

- Personal income is \$15 billion higher.
- GDP is \$24.9 billion larger, translating into an increase of \$2.02 billion in personal income tax revenue to the federal government than without the MEP program.

The W.E. Upjohn Institute report is [available online](#).

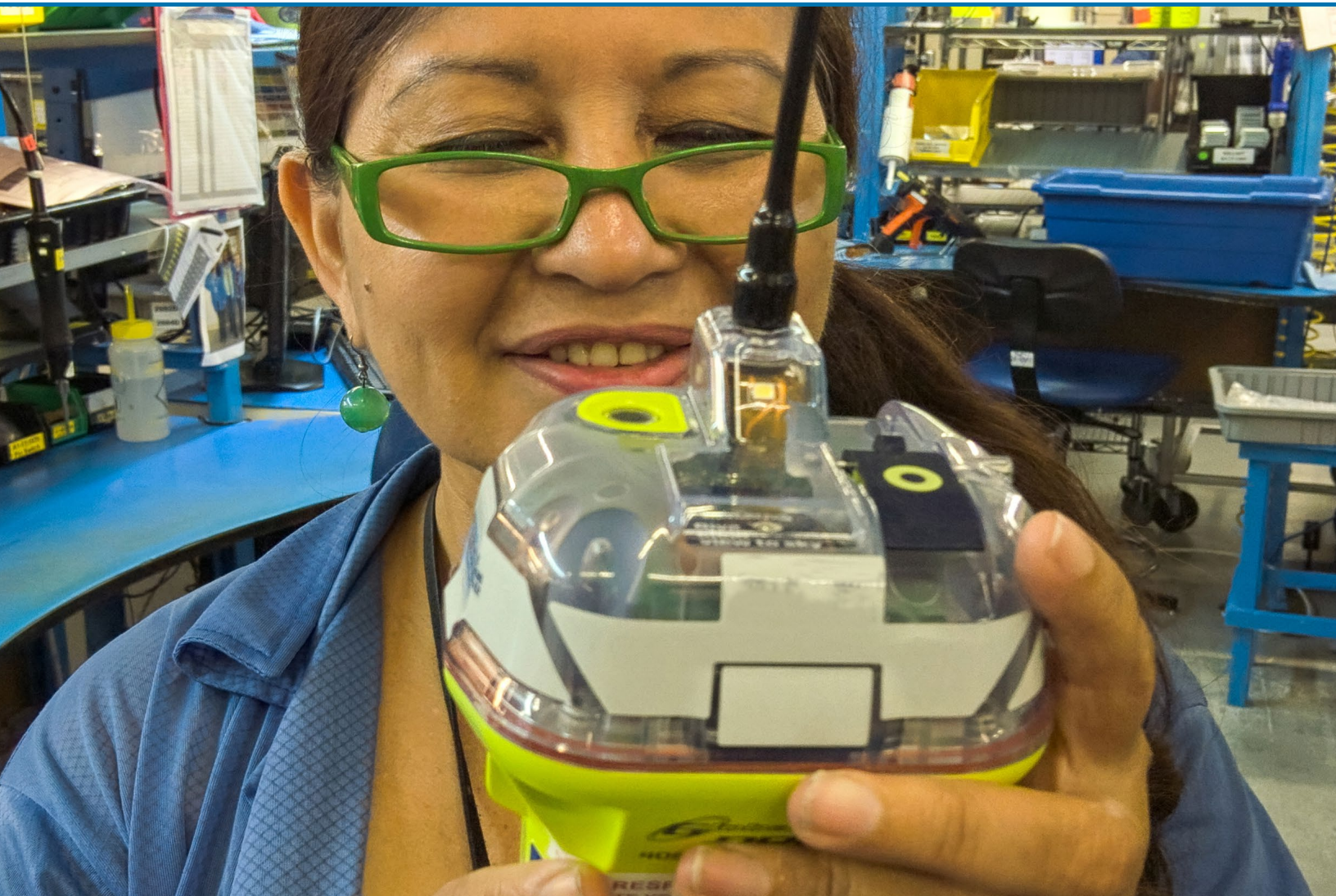




NIST MEP Budget

The FY 2019 appropriation for the MEP program was \$140 million, which was the same as MEP's FY 2018 funding amount. The President's FY 2020 budget request for MEP which was released on March 11, 2019 eliminated federal funding for the Program and provided no funding to wind down operations. However, Congress jointly approved an FY 2020 appropriation of \$146 million for MEP, which the President signed on Dec. 20, 2019. Of this, \$126.7 million will go directly to MEP Centers in FY 2020.

Approximately \$121 million of MEP's funding went directly to the MEP Centers in FY 2019. Additional funds were provided in direct support of the MEP National Network's work with manufacturing firms, such as federal funding opportunities for Centers or contracts to train MEP Center staff.



Mission and Vision

The MEP Advisory Board is confident the changes continuing to be implemented through the MEP National Network will result in increased effectiveness of the MEP Program and bring even more impact to the Network's mission and future vision, as stated in the MEP National Network Strategic Plan.



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.

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

100 BUREAU DRIVE M/S 4800
GAITHERSBURG, MD 20899

PHONE: (301) 975-5020
EMAIL: MFG@NIST.GOV
WEB: WWW.NIST.GOV/MEP