

**National Institute of Standards and Technology
Manufacturing Extension Partnership
Advisory Board
Minutes of the June 3, 2020 Meeting**

Background

The Department of Commerce, National Institute of Standards and Technology (NIST), Manufacturing Extension Partnership (MEP) Advisory Board (Board) met in an open session from 1 p.m. to 4:30 p.m. on June 3, 2020, via video teleconference. The meeting included about 65 attendees including Board members, NIST and NIST MEP staff, participants from MEP Centers, guest speakers and observers. Cheryl Gendron is the Designated Federal Officer for the MEP Advisory Board.

Attendees

Board Members

Jose Anaya, Dean of Community Advancement, El Camino College
Donald Bockoven, CEO, Fiber Industries LLC
E. LaDon Byars, President and CEO, Colonial Diversified Polymer Products, LLC
Kevin Heller, CEO and CFO, Ziegenfelder Company
Mary Isbister, Vice Chair, MEP Advisory Board and President, GenMet Corporation
Mitch Magee, Director, Global Advanced Manufacturing Team, PPG Aerospace Business Unit
Patricia Moulton, President, Vermont Technical College
Matthew Newman, Chair, MEP Advisory Board and Director of Sustainability Advocacy and Development, ONEOK, Inc.
Kathay Rennels, Special Advisor to the Chancellor for Rural-Urban Initiatives, Colorado State University
George Spottswood, Owner and CEO, Quality Filters, Inc.
Chris Weiser, Owner and President, J.V. Manufacturing, Inc.
Jim Wright, Vice President of Operations, Proof Research

NIST MEP Participants

Cheryl Gendron, Advisory Board Liaison, NIST MEP and Designated Federal Officer, MEP Advisory Board
Rob Ivester, MEP Deputy Director
Carroll Thomas, MEP Director

Guest Speakers

Walter Copan, Under Secretary of Commerce for Standards and Technology and NIST Director
Scott Ritz, Director, Customer Service, Public Service Company of Oklahoma
Dave Rowland, President/CEO, Oklahoma Manufacturing Alliance

Observers

Ray Aguerrevere, Custom Metal Fabricators
Robert Barnes, NIST MEP
Buckley Brinkman, Wisconsin Center for Manufacturing & Productivity
Tom Bugnitz, Manufacturer's Edge
Amber Cassady, Lewis-Burke Associates, LLC

Monica Claussen, NIST MEP
Jose Colucci-Rios, NIST MEP
Dusty Cruise, Missouri Enterprise
Nadine DeJesus, NIST MEP
Doug Devereaux, NIST MEP
Katie Fayman, MxD
Jennifer Hagan-Dier, NIST MEP
Bernadine Hawes, Community Marketing Concepts
Carrie Hines, American Small Manufacturers Coalition
Diane Henderson, NIST MEP
Derek Johnson, Federal Computer Week
John Kennedy, New Jersey MEP
Sarah Kerper, Fors Marsh Group
Tina Kurian, Fors Marsh Group
Brian Lagas, NIST MEP
Wiza Lequin, NIST MEP
Chancy Lyford, NIST MEP
Heather Mayton, NIST MEP
Kevin McIntyre, NIST MEP
Dimitrios Meritis, NIST MEP
Justin Mocca, NIST MEP
Derek Osborn, Tulsa Field Office, U.S. Sen. James Lankford
Mary Ann Pacelli, NIST MEP
Celia Paulsen, NIST MEP
Michael Pease, NIST Engineering Laboratory
Andrew Peterson, NIST MEP
Kim Pinckney, NIST MEP
Katie Rapp, NIST MEP
Kari Reidy, NIST Office of Congressional and Legislative Affairs
Jennifer Rosa, NIST MEP
Mark Schmit, NIST MEP
Megan Spangler, NIST MEP
Dave Stieren, NIST MEP
Michael Taylor, NIST MEP
Dileep Thatte, NIST MEP
Maressa Treat, Tulsa Field Office, U.S. Sen. James Lankford
Ben Vickery, NIST MEP
Marlon Walker, NIST MEP
Jared Ward, Tulsa Field Office, U.S. Sen. James Lankford
Samm Webb, NIST MEP
Michael Wilson, NIST MEP
Bob Zider, Vermont Manufacturing Extension Center

Welcome and Introductions

Speakers:

Matt Newman, Chair, MEP Advisory Board
Dave Rowland, Oklahoma Manufacturing Alliance
Scott Ritz, Public Service Company of Oklahoma
Walter Copan, NIST Director
Carroll Thomas, MEP Director

- M. Newman made introductory remarks and commented on how the MEP National Network™ (MEPNN) has been activated behind the scenes to address supply chain gaps, rally to identify gaps and assist in response to the COVID-19 pandemic. D. Rowland made opening remarks on manufacturing in Oklahoma and discussed the organizational integration supporting manufacturing in the state. S. Ritz discussed the Oklahoma Manufacturing Alliance board and their promising new business model that allows them to identify and satisfy a more complete set of manufacturers' needs. C. Thomas introduced W. Copan. He discussed some of his recent work supporting advanced manufacturing and NIST MEP's response to the COVID-19 pandemic. NIST is working day and night to ensure the CARES Act funding gets out to manufacturers quickly and that the impacts of those funds are well communicated to the American public. He announced that Mojdeh Bahar will be the new Associate Director for Innovation and Industry Services. W. Copan's goals for NIST are to be a national role model for excellence in technology transfer and partnerships, as well as to maximize the impacts of its world class capabilities and discoveries for the American people and industry. Another goal of his is to advance a NIST-wide strategic plan as a repeatable process and to ensure that the actions are implemented and reported with key performance indicators. He challenged Board members to think about the technology innovators of the future and how NIST MEP can continue to provide resources and support for them. NIST is looking to host roundtables to inform U.S. science and technology leadership on the needs of American manufacturers and to ensure they keep up to date with MEP leadership's thinking about the future. Board members and attendees were introduced.

NIST MEP Management Update

Speakers:

Carroll Thomas, MEP Director
Rob Ivester, MEP Deputy Director

MEP Program Budget Outlook (as of May 19, 2020)

- Fiscal Year (FY) 2020 appropriation status:
 - Base funding: \$146 million.
 - \$6 million increase over FY 2019.
 - No cost share requirement.
 - Coronavirus Aid, Relief and Economic Security (CARES) Act.
 - NIST received \$66 million.
 - MEP receives \$50 million of total NIST CARES Act funding.
- FY 2021 appropriation status:
 - President's Budget proposes to eliminate funding for the MEP program.
 - House and Senate budget committees are holding hearings on the funding mark.

NIST MEP FY 2020 Projected Spend Plan

- Available funding:
 - Full year appropriation: \$146 million.
 - Carryover from FY 2019: \$4.7 million.
 - Funding from other agencies: \$900,000.
 - CARES Act supplemental funding: \$50 million.
 - Total available funding: \$201.6 million.

- Planned expenditures:
 - Center renewals: \$118.7 million.
 - Center supplemental funding (CARES Act): \$49.1 million.
 - Strategic competitions: \$9.4 million.
 - Contracts: \$5.4 million.
 - NIST MEP labor: \$10.9 million.
 - NIST and program overhead: \$8.1 million.
 - Total planned expenditures: \$201.6 million.

CARES Act Funding Update

- Hollings Manufacturing Extension Partnership FY 2020 appropriated funding cost share requirements waived.
- Funding available to MEP Centers to prevent, prepare and respond to COVID-19 pandemic.
 - Using request for application (RFA) process for noncompetitive awards.
 - CARES Act funds not subject to cost share requirements.
 - RFA posted April 10, 2020.
- Status:
 - First CARES Act funding application received April 14.
 - As of June 3, 2020:
 - 50 CARES Act funding applications received.
 - 16 application packages at NIST Grants Management Division.
 - 20 awarded.

Competitive Award Program (CAP) Funding Update

- Advanced Manufacturing Technology Services.
 - Funds projects that deploy advanced manufacturing technology services, emphasizing technology-based needs of small U.S. manufacturers. Four projects funded:
 - Purdue University, Indiana MEP: I-SMART Implementing Small Manufacturer Assistance with Robotic Technologies.
 - University of Texas in Arlington, dba TMAC: Applied Advanced Manufacturing Technologies.
 - California Manufacturing Technology Consulting: Industry 4.0 Technical Assistance.
 - Michigan Manufacturing Technology Center (MMTC): D3+ Bringing Digital Technologies to Three Essential Manufacturing Functions.
- MEP Disaster Award Program.
 - Funding opportunity released in March 2020 for MEP Centers to apply for funds as needed based on Federal Emergency Management Agency disaster declarations in their regions.
 - Identify obstacles keeping affected manufacturers from returning to normal operations.
 - Develop plans to support recovery.

- Connect small and medium-sized manufacturers to local, state and federal resources.
- (Rolling) Competitive Award application in review process.
 - Packages in review process.
 - Mix of cybersecurity, workforce and advanced manufacturing projects.

MEPNN Center Leadership Team (CLT)

- Communication and cooperation structure.
 - CLT designing a framework to speed the transition from a broadcast to a national communication and cooperation structure.
- Key role in current pandemic recovery.
 - MEPNN playing a key role in supporting U.S. manufacturing during the pandemic.
 - Facilitating the creation of alternative supply chains and manufacturing capability pivots to support increased production of personal protective equipment within and between states.
 - Assisting manufacturers to find sources of financing and other support.
 - Creating support structures for manufacturers.
 - Sharing best practices in employment safety production guidelines.
 - Providing support services to facilitate manufacturing recovery efforts.

MEPNN Supplier Scouting

- Reestablished/mobilized in March 2020 to help MEPNN respond to national crisis and identify U.S. manufacturers with capabilities and capacities to produce short supply and critical need items for national and state-based needs.
- 51 MEP Centers are participating.
- Leveraging online collaboration platforms MEP Connect and MEPU for MEP Centers to organically communicate about and respond to national and state-based needs.

MEP-Assisted Technology and Technical Resource (MATTR)

- High current interest to connect small manufacturing clients of MEP Centers with NIST laboratories.
- MEPNN recognized as conduit to help NIST scientists and engineers offer assistance to U.S. manufacturing clients of MEP Centers in response to national crisis; following process similar to MEPNN Supplier Scouting.
- MEPNN MATTR Working Group continuing to develop MATTR as an MEP Center service.
- NIST MEP facilitating Cooperative Research and Development Agreements between MEP Center clients and NIST laboratories; also compensating NIST laboratories, as warranted by MATTR opportunities.

Advanced Manufacturing/Industry 4.0 for End-to-End Cyber-Physical Connectivity

- Advanced Manufacturing Technology Services awards made by NIST MEP in May 2020 for multi-Center projects to accelerate MEP Center service delivery in Industry 4.0 to Centers in California, Indiana, Michigan and Texas.
- CAP project led by Oregon MEP, involving multiple MEP Centers, sharing useful foundational information across MEPNN; also working closely with CLT.
- MEPNN Industry 4.0 Working Group operating to share best practices and highlight Center work underway; facilitated by NIST MEP with dozens of MEP Centers participating.
- MEP Centers using user/demonstration facilities and continuing to collaborate with Manufacturing USA Institutes.

Cybersecurity Practice Developing Across the Network

- MEPNN Cyber Working Group sharing best practices among Centers.
 - 50 MEP Centers currently participating.
- MEPNN Cybersecurity for Defense Manufacturing Special Project Award from NIST MEP to MMTC focused on awareness, assistance for over 1,000 defense contractors; participation from more than 30 MEP Centers, two NIST laboratories; currently experiencing tasking interruptions.
- Over 3,400 small and medium-sized manufacturers served.
- Approximately 226 awareness/training events.
- Approximately 84,000 NIST Handbook 162 downloads since 2017 publication.
- Approximately 173,000 NISTIR 7621 downloads since 2016 publication.
- Over 900 projects conducted since 2015.

FY 2019 MEP Impacts: Economics Analysis

- In May 2020, Summit Consulting and the W.E. Upjohn Institute for Employment Research published a study on the MEP program's impacts with findings including:
 - The MEP program generated a substantial 13.4:1 return on investment for the \$140 million invested in FY 2019 by the federal government.
 - Total employment in the U.S. was over 217,000 higher because of MEP Center projects than without the program.
 - U.S. GDP was \$22.9 billion larger because of MEP Center projects.

NIST MEP Updates

- Mojdeh Bahar will start as the new Associate Director for Innovation and Industry Services on June 7, 2020.
- Rob Ivester is now the Deputy Director of NIST MEP.
- Michael Taylor has joined the NIST MEP Extension Services Division as a project manager.

NIST Campus Locations Status

- All NIST staff, including NIST MEP staff, on mandatory telework since mid-March 2020.
- Phased reopening will emphasize employee safety and will focus on NIST laboratory staff having access to laboratories.
- NIST MEP staff will remain on maximum telework for an extended period, returning in later phases.
- NIST MEP MOVE Back In Committee suspended until office construction resumes.

MEP National Network 2017-2022 Strategic Plan Update

- MEP National Network 2017-2022 Strategic Goals.
 - Empower manufacturers.
 - Champion manufacturing.
 - Leverage partnerships.
 - Transform the Network.
- Latest 18-month goals (September 2019 to March 2021).
 - Consensus within integrated National Network.
 - Reach Network consensus on definition of "project" and client manufacturing establishment interaction.
 - Center and program office operational excellence.
 - Operationally improve reporting via measurement of on-time and accurate reporting.
 - Increase projects and new clients.
 - Increase reported projects by 10% and reported new clients by 5%.

- Increased visibility.
 - Amplify and measure Network brand awareness by at least 10%.
- Quarterly Center survey requests.
 - NIST MEP postponed the Quarter 1 (Q1) 2020 MEP Client Impact Survey.
 - The Quarter 2 (Q2) 2020 survey, scheduled for fielding from mid-July to mid-August, will begin as scheduled. This survey will combine clients from the postponed Q1 survey with those surveyed in Q2.
 - Centers will be able to update records for selected clients included in survey confirmation.
 - During survey confirmation, Centers will have the opportunity to indicate which manufacturers have closed and will be permanently excluded from survey.
 - Clients unable to be surveyed in this period can be pushed into future quarters.
 - Survey response rate will be removed from the ten metrics used to measure Center performance until late 2021. NIST MEP will give more weight to the two measures of market penetration in measuring Center performance to accommodate the expected increase in clients served from the CARES Act funding.
- 18 month measures of success.
 - Goal: Improve on-time reporting.
 - Four elements measured:
 - Progress plan.
 - Progress data.
 - Success story.
 - Survey confirmation.
 - Baseline (Q2 2019):
 - 40 Centers reported on time with first three elements.
 - 24 Centers reported on time across all four elements.
 - Progress to date (Q1 2020):
 - Q1 survey postponed; data incomplete.
 - Goal: Definitional success.
 - Define:
 - Client/project.
 - Client manufacturing establishment interaction.
 - Working group of Center directors established.
 - Center Working Group has been convened and is on hold. Will resume when emergency operations are completed.
 - Goal: Amplify and measure Network brand awareness by at least 10%.
 - Brand measure (progress to date for Jan. 1-March 31, 2020):
 - Backlinks.
 - Goal: 114.
 - Baseline: 104.
 - Progress to date: 97.
 - Brand mentions.
 - Goal: 138.
 - Baseline: 125.
 - Progress to date: 127.
 - Manufacturing Innovation blog subscribers.
 - Goal: 27,412.
 - Baseline: 24,920.
 - Progress to date: 28,853.
 - Social media followers.

- Goal: 17,864.
- Baseline: 16,240.
- Progress to date: 16,488.
- #MEPNationalNetwork hashtag occurrences.
 - Goal: 367.
 - Baseline: 334.
 - Progress to date: 234.

CARES Act Update

Speaker: Rob Ivester, NIST MEP Deputy Director

CARES Act Cost Share Relief

- Fulfill Congressional intent, maintain legal compliance.
 - Congress intended the relief to be effective for one year, starting immediately.
 - CARES Act language relief tied to FY 2020 Appropriations Act.
 - CARES Act language enables Centers to forego relief to preserve contingent state funds.
 - NIST challenged to execute quickly, maintain legal compliance.
- MEP Centers' annual renewal staggered across quarterly intervals.
 - Renewals effective on October 1, January 1, April 1 or July 1.
 - In 2020, January and April renewals receive FY 2020 Consolidated Appropriations Act funds.
 - July and October renewals operate on FY 2019 appropriated funding.
 - Most Centers did not have FY 2020 funding, presenting a barrier to cost share relief.
- NIST MEP Director Memo to Center Directors April 13, 2020, 17 days after CARES Act signed into law.
 - Centers electing for relief must update documents for Cooperative Agreement modification.
 - Immediate relief for January and April renewals, update documents later.
 - Nearly immediate relief for July and October renewals, must request emergency bridge funding, notify NIST in advance and carefully account for these expenses separately.
 - NIST Grants Management Division follow-up memo sent May 13, 2020.
- All Centers are getting the cost share relief that they need.

CARES Act Appropriations

- \$50 million for Centers to prevent, prepare for and respond to the COVID-19 pandemic.
 - Identify companies capable to respond to regional and national critical needs.
 - Connect to resources needed to support companies that can transition.
 - Technical assistance for companies to transition production to meet critical needs.
 - Outreach to assess broadly the needs of manufacturing clients.
- Noncompetitive awards through RFA posted April 10, 2020.
 - RFA posted 14 days after CARES Act signed in to law.
 - MEP can help guide Centers with proposal refinement, unlike in a competition.
 - Merit reviews by MEP staff, including resource manager and federal program officer.
 - Program official recommends to selection official or identifies need for changes.
 - Grants Management Division processes applications packages, creates awards.
 - NIST goal:
 - All awards made by June 25, 2020.

- Status
 - First application received April 14, 2020, four days after the RFA was posted.
 - 50 applications received and 20 awarded as of June 3, 2020.

Discussion

- K. Rennels asked how long the pause for the strategic plan goal on definitional consensus is expected to last. C. Thomas said it will be put off until FY 2021 to allow Centers to handle the current emergency situation. NIST MEP hopes to restart the effort by September or October 2020 and C. Thomas believes they can complete it within a year. The goal for on-time reporting is also expected to restart in FY 2021.
- M. Magee asked if there was a sense of how much of the CARES Act funding goes to supporting Centers or if some is also going directly to small manufacturers. C. Thomas said NIST MEP is not authorized to give any funding to small manufacturers. All of the money they provide to Centers from NIST MEP appropriations and CARES Act funding goes to supporting Center staff salaries and infrastructure. There have been discussions about possible additional stimulus funds that could go directly to companies, but NIST MEP would need the authority to dispense them.
- P. Moulton commended NIST MEP for getting much-needed funds out to the Centers quickly.

MEP National Network Current and Future Strategic Planning

Speaker: Carroll Thomas, MEP Director

NIST 2020-2025 Strategic Plan

- First NIST Strategic Plan since 2001-2010.
- Four goals:
 - Position NIST to advance U.S. science and innovation.
 - Maximize NIST's stakeholder impact through high-value service delivery.
 - Create the infrastructure for a 21st century research institution.
 - Build a One NIST culture.

MEP National Network Next Strategic Plan

- Purpose: to provide long-term, program direction for the MEPNN and to unite and align stakeholders, partners, management and staff with this direction.
 - Provide guidance on what to do as well as what not to do.
- Development of the 2023-2028 Plan.
 - MEP Advisory Board Strategic Planning Working Group members:
 - Board leadership: Matt Newman and Mary Isbister.
 - Board members: Kevin Heller, Willie May, Kathay Rennels, Jim Wright.
 - NIST MEP senior management: Rob Ivester and Carroll Thomas.
 - NIST MEP Staff: Wiza Lequin
 - Working Group meetings begin July 2020.
 - Begin with feedback sessions with several groups of stakeholders (Center directors, Center boards, practitioners, NIST MEP staff and a Request for Information.
- Implementation plan timeline.
 - August 2020-January 2021.
 - Gather input from the MEP Advisory Board, Center directors, Center boards, staff and partners.
 - February 2021.
 - Initial draft implementation plan.

- March 2021-March 2022.
 - MEP Advisory Board Working Group review draft implementation plan progress by March 2021.
 - Revise and complete review of implementation plan no later than March 2022.
- March-September 2022.
 - Finalize implementation plan.
 - Obtain full MEP Advisory Board concurrence and partner and stakeholder feedback by September 2022.
- 2023-2028.
 - Execute implementation plan.
 - Review and update the plan.

Wrap-Up/Public Comments

C. Thomas noted changes to the MEP Advisory Board officers as of June 1, 2020:

- Matthew Newman is the new MEP Advisory Board Chair.
- Mary Isbister is the new Vice Chair.
- NIST MEP thanked Bernadine Hawes for her six years of service on the MEP Advisory Board.
 - B. Hawes said the transition has been successful and felt it is a good practice for the Vice Chair to succeed the sitting Chair in order to maintain continuity.

There were no public comments.

Concluding Comments

- J. Anaya said his word to describe this meeting was “impactful.” The impact of the NIST MEP program is exactly what the country needs as it emerges from the current COVID-19 situation.
- L. Byars said that if her company did not have the trusted resources to call on during this challenging time, pulling through would be far more difficult.
- K. Rennels said she was eager to see strategic planning on the pathway between research, manufacturing and the supply chain, along with adjustments to an uncertain future. There are great opportunities present as part of the strategic plan fact gathering to envision where manufacturing could be situated coming out of the crisis.
- M. Magee said manufacturing is the solution to a lot of the problems the country is currently facing, providing good pay and a sense of purpose. NIST MEP’s work to support the manufacturing sector is extremely important for the country.
- J. Wright said the MEPNN has been a critical asset that has helped clients to respond to the COVID-19 crisis. He is excited about the strategic planning process because there is much that can be done to get valuable information out to U.S. manufacturers.
- G. Spottswood commended NIST MEP staff for putting together a successful virtual meeting.
- C. Weiser encouraged NIST MEP to continue their focus on education and workforce development. There are many opportunities to bring manufacturing back to the U.S. and improve processes, in which NIST MEP can play a key role. He volunteered to assist on the strategic planning working group.
- D. Bockoven said we are in unprecedented times. NIST MEP has demonstrated determination, resilience and flexibility during the pandemic. COVID-19 has made people aware that the U.S. is too reliant on foreign sources for its supply chain, which provides a unique opportunity to partner with other agencies to help bring manufacturing back to America. He also volunteered to assist with strategic planning efforts.

- R. Ivester said the positivity from NIST MEP, the Centers and the MEP Advisory Board has been very motivating for him.
- C. Thomas said we do a lot of work at the program office, but we do not work directly with manufacturers. It is the 51 MEP Centers who work hard and deserve the bulk of the credit for the impact of the MEP program. The program's impact on the U.S. economy is getting noticed. An important component of the strategic plan will be to get businesses to look at long-term gains and viability using ESG (environmental, social and governance) criteria as part of their strategy for growth.
- M. Isbister said she has learned during this time to be ever more grateful for the things we have, such as the MEPNN, which has helped her company and other manufacturers grow more resilient. She was also grateful for the time she was able to spend working with former MEP Advisory Board Chair Bernadine Hawes.
- M. Newman said that the response to the pandemic over the previous months has made him increasingly optimistic about the future of manufacturing in the U.S. There is bipartisan support for the MEP program and a cohesive network with a lot of positive visibility. The MEP program is uniquely qualified to help bring supply chain sustainability and resiliency back to America. The U.S. government has demonstrated great nimbleness in getting the CARES Act funding out in a timely way that was able to make a difference for manufacturers.

Next Meeting

The next MEP Advisory Board Meeting will be held in September. The date has not yet been scheduled.

Adjournment

With no further business, M. Newman adjourned the meeting at 4:26 p.m.