

**National Institute of Standards and Technology  
Manufacturing Extension Partnership  
Advisory Board  
Minutes of the March 29, 2019 Meeting**

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**Background**

The Department of Commerce (DOC), National Institute of Standards and Technology (NIST), Manufacturing Extension Partnership (MEP) Advisory Board met in an open session from 8:00 a.m. to 12:13 p.m. on March 29, 2019, at the Ronald Reagan Building and International Trade Center, in Washington, D.C. Approximately 28 attendees, composed of Advisory Board members, NIST and NIST MEP participants, MEP National Network™ participants from MEP Centers, guest speakers, and observers attended the meeting. Carroll Thomas, Director of MEP, is the Designated Federal Officer for the MEP Advisory Board.

**Attendees**

**Board Members**

Jose Anaya, Dean of Community Advancement, El Camino College  
E. LaDon Byars, President and CEO, Colonial Diversified Polymer Products, LLC  
Bernadine Hawes, Vice Chair, MEP Advisory Board, and Senior Research Analyst, Community Marketing Concepts  
Mary Isbister, President, GenMet Corporation  
Mitch Magee, Director, Global Advanced Manufacturing Team, PPG Aerospace Business Unit  
Patricia Moulton, President, Vermont Technical College  
Matthew Newman, Director of Sustainability Advocacy and Development, ONEOK, Inc.  
George Spottswood, Owner and CEO, Quality Filters, Inc.  
Leslie Taito, CEO, Hope Global  
Chris Weiser, Owner and President, J.V. Manufacturing, Inc.  
Jeff Wilcox, Chair, MEP Advisory Board, and Vice President for Digital Transformation, Lockheed Martin

**NIST MEP Participants**

Dave Cranmer, Ph.D., Deputy Director, NIST MEP  
Cheryl Gendron, Advisory Board Liaison, NIST MEP  
Phil Singerman, Ph.D., Associate Director for Innovation and Industry Services, NIST  
David Stieren, Division Chief for Extension Services Division, NIST MEP  
Carroll Thomas, Director of MEP and Designated Federal Officer, MEP Advisory Board

**Guest Speakers**

Robert Gold, Director, Technology and Manufacturing Industrial Base, Office of the Under Secretary of Defense for Research and Engineering, U.S. Department of Defense (DoD)  
Carrie Hines, President and CEO, American Small Manufacturers Coalition (ASMC)

**Observers**

Buckley Brinkman, WCMP  
Nadine DeJesus, NIST MEP  
Bill Donohue, GENEDGE  
J. Chancy Lyford, NIST MEP  
Anne-Louise Marquis, NIST MEP  
Lindsay Milliken, Lewis-Burke Associates, LLC

Mark Schmit, NIST MEP  
Dileep Thatte, NIST MEP  
Ben Vickery, NIST MEP  
Ken Voytek, NIST MEP

### **Welcome and Introductions**

***Speakers: Jeff Wilcox, Chair, NIST MEP Advisory Board; Phil Singerman, NIST Innovation and Industry Services; Carroll Thomas, Director of MEP***

J. Wilcox called the meeting to order at approximately 8:00 a.m. and made introductory remarks, noting that this would be his last meeting as Board Chair. Board members and attendees introduced themselves. P. Singerman thanked Rob Gold for attending the meeting and noted that the DoD just gave NIST a \$1.2 million grant to provide services to small manufacturers serving the defense industrial base, which is consistent with the positive relationship that they have had with Mr. Gold's team at the DoD.

### **MEP Director's Update**

***Speaker: Carroll Thomas, Director of MEP***

C. Thomas began her report noting that Board member Joe Eddy is retiring and will be leaving the Board. She also spoke to the group about the tragic loss of Tab Wilkins, a former employee of NIST MEP and a noted leader within the MEP National Network.

### **MEP Program Budget Outlook (as of 3/11/19)**

- FY 2019 Appropriation Status
  - \$140.0M appropriation approved 2/15/19
  
- FY 2020 Appropriation Status
  - Proposed for elimination in the President's Budget

### **NIST MEP FY 2019 Projected Spend Plan**

- Available Funding
  - Full year appropriation: \$140.0M
  - Carryover from FY 2018: \$6.8M
  - Funding from Other Agencies: \$2.8M
    - Total available funding: \$149.6M
  
- Planned Expenditures
  - Center renewals: \$120.0M
  - Strategic competitions: \$4.5M
  - Contracts: \$7.1M
  - NIST MEP Labor: \$9.8M
  - NIST and Program Overhead: \$8.2M
    - Total planned expenditures: \$149.6M

### **Legislative View**

- GAO Report – Cost Share
  - Report was completed and issued on 3/7/19
  - The report analyzed the effectiveness of the change in cost share, engagement and characteristics of MEP Center services, and what effect the cost share change has had on Center services
  
- NIST Report – Recompensation
  - Draft completed and expected delivery to Congress by early April

- Covers the first and second years of operations for MEP Centers from the recompetition
- Includes details on engagement in services provided by MEP Centers, characteristics of services provided, and volume and type of services

#### MEP National Network 2017-2022 Strategic Goals

- Empower Manufacturers
  - Objective: to assist U.S. manufacturers in embracing productivity-enhancing innovative manufacturing technologies, navigate advanced technology solutions and recruit and retain a skilled and diverse workforce.
- Champion Manufacturing
  - Objective: to actively promote the importance of a strong manufacturing base as key to a robust U.S. economy and for the protection of national security interests; create awareness of innovations in manufacturing; create workforce development partnerships to build a stronger and diverse workforce pipeline; and maximize market awareness of the MEP National Network.
- Leverage Partnerships
  - Objective: to leverage national, regional, state and local partnerships to gain substantial increase in market penetration; identify mission-complementary advocates to help MEP become a recognized manufacturing resource brand; build an expanded service delivery model to support manufacturing
- Transform the Network
  - Objective: to maximize MEP National Network knowledge and experience to operate as an integrated National Network; increase efficiency and effectiveness by employing a Learning Organization platform; and create a resilient and adaptive MEP National Network to support a resilient and adaptive U.S. manufacturing

#### Eighteen-Month Network Priorities

- Create an Integrated MEP National Network Service Delivery System
  - Building capabilities to provide services at a higher level while mitigating risk
- Updated National-level Partnerships and Performance Support Services
  - Creating good foundational support to keep moving forward
- Define Areas of Focus for Manufacturing Technology Advances
  - Helping to deploy new designs quickly while maintaining quality
- Develop Supply Chain National Services and Information and Technology Access
  - Coordinating what is happening with suppliers and helping them build capabilities and move the needle
- Build Infrastructure for MEP National Network Learning Organization
  - Working smarter with a network to bring in many capabilities, including the ASMC and the Foundation for Manufacturing Excellence (FORME)

#### Eighteen-Month Measures of Success - Baselines

- Integrated MEP National Network
  - Engaging 50% of Centers in multi-Center delivery projects and increase market penetration as an integrated National Network by 20%
- Efficiency in Small/Rural Engagements
  - 10% increase of engagements through 3<sup>rd</sup> party partnerships and 5% increased longer-term impactful projects
- Center and Program Office Operational Excellence
  - Attained Operational Excellence in 25% of MEP Centers' operations and in 50% of NIST MEP administration support
- Increased Visibility
  - Increased MEP National Network brand awareness by 10% over baseline

### Progress on Eighteen-Month Measures of Success to Goals

- Integrated MEP National Network: Percent of Goal as of Quarter Four
  - 79% of MEP Centers engage in Multi-Center Delivery
  - 155% of small manufacturers served via third party
  - 134% of rural manufacturers served via third party
- Integrated MEP National Network: Percent of Goal as of Quarter Three
  - Number of Transformational Clients: 116%
  - Job Impact: 129%
  - Sales Impact: 107%
  - Investment Impact: 113%
  - Cost Savings Impact: 86%
- Quarter Four MEP National Network Progress
  - 370 instances of branded searches vs. baseline of 350
  - 838 page views on the webpage vs. baseline of 695
  - 61 backlinks vs. baseline of 14
- Measures of Success to Goals: Operational Excellence
  - 37 MEP Centers engaged in 15 CAP awards
  - NIST MEP staff mitigating risk, establishing and implementing standard operating procedures, and aligning panel review feedback with regional manager coaching

### MEP National Network 'By the Numbers'

*Charts may be referenced in the final presentation, posted online*

- Growth in Projects Completed
  - 22.9% increase in projects completed between FY13 and FY18
    - \$20.0M moved from the NIST MEP budget to MEP Centers
    - New sales reported by MEP clients rose by 72.7%
- MEP Program Impacts Grow Over Time (FY13-FY18)
  - These impact measures all increased significantly based on data reported by MEP Clients.
    - New sales reported by MEP Center clients rose by 72.7%
    - Retained sales jumped by 95.2%
    - New investment increased by 53.8%
    - Cost savings rose by 54.5%.
- Current Three-Year Market Penetration (FY16-FY18) by Establishment Size Category Based on Current Program Funding (\$130.0M)
  - Market penetration for three years counts individual companies, not projects
  - 70% of the establishments have fewer than 20 employees
  - 85% have fewer than 50 employees
  - Optimal market penetration projections of \$154.0M and \$170.0M

### *Discussion*

- B. Hawes said that these projections were too modest and NIST MEP needs to find a way to align the 1-49 employee-sized companies with their champions of manufacturing, especially in rural areas and deep urban areas. C. Thomas added that they are seeing increased activity in the middle of the country as well and could do more in that region. P. Singerman said that these projections are based on a one-on-one model of service, and it would be different if they looked at supply chains and adding technical capabilities that universities and federal labs have available.
- M. Isbister said that WMEP struggled with this as well. It feels better to help the smaller establishments, but this can be counterintuitive given limited resources and metrics for impact. The national organization could help them think about how to structure programs that are not one-on-one and less resource-intensive, but still provide help and support. P.

Moulton agreed and added that additional monies give additional capacity and supported P. Singerman's idea that \$170.0M is the upper limit. C. Thomas suggested that with the advent of new technology there could be new ways for smaller companies to utilize services, such as third-party support. P. Singerman said that programs that work on supply chains and provide support to defense industrial base suppliers would be an additional level of service to bring in more companies.

- P. Moulton agreed that one-on-one support is not always practical, and it can be better to cluster companies. There can be a challenge around competition of small companies, but they can collaborate around the issue of workforce development.

#### Updates - MEP National Network

- MEP National Network: Center Leadership Team
  - Ten Centers have agreed to form a nucleus for building the national structure
    - There will be an overarching Memorandum of Understanding between the MEP Centers
    - The goal is to make it as efficient as possible to leverage information and make it available to everyone
  - Working Committees
    - Outreach Initiative (Tom Bugnitz)
    - Multi-state Engagement (Bill Donohue)
    - Knowledge Sharing/Learning (Buckley Brinkman)
    - Network Evolution (Bonnie Del Conte)
    - Manufacturing Technology Solutions (Mike Coast)
    - Communication (Jim Shillenn)
  - At least 31 Centers are actively involved
- Industry 4.0 Activity
  - Growth of Cybersecurity Practice Area Across the MEP National Network
    - 49 out of 51 MEP Centers participate in the MEP National Network Cybersecurity Working Group
  - MEP Centers Partnering with Manufacturing USA Institutes
    - Looking at what has emerged from collaborations and leveraging new capabilities and relationships on a national level
  - Industry 4.0 Center Training and Events
    - Helping small manufacturers expand their understanding
- Performance-based Peer Panel Review Update
  - Helping MEP Centers to understand that they are only as strong as the weakest MEP Center in the MEP National Network
  - Four rounds of reviews completed or scheduled through the fall of 2019
    - Rounds one and two finished in 2018
      - Round one: CO, CT, FL, IN, MI, NC, NH, OK, OR, TN, TX, and VA
      - Round two: AK, ID, IL, MN, NJ, NY, WA, WI, and WV
    - Rounds three and four currently ongoing
      - Round three: AL, AR, CA, GA, LA, MA, MO, MT, OH, PA, PR, UT, and VT
      - Round four: DE, HI, IA, KS, ME, MS, NV, NM, ND, SC and WY
  - Six of the seven legacy MEP Centers (AZ, KY, MD, NE, RI and SD) have undergone the fifth year legislatively required Secretarial evaluation; FL to undergo evaluation this year
  - Wrap up Best Practices from Round One & Two
    - Adding more quantitative results as a result of the best practices discovered through the process
- NIST MEP Extension Services Division

- Cybersecurity
  - Strong focus on defense manufacturing supplier assistance
- Food Industry Services
  - National Memoranda of Understanding in process with the Food and Drug Administration and the Food Safety Preventive Controls Alliance
- Connecting MEP Center Clients with NIST Labs – MATTR
  - Providing compensation to NIST Labs to further NIST Lab assistance to small manufacturer clients of MEP Centers
- Toyota Kata
  - MEP National Network Working Group leading national capabilities development
- Workforce
  - Ongoing focus on leveraging MEP National Network in workforce connections with Manufacturing USA Institutes
- MEP Special Services and Awards
  - Policy Academy on *Strengthening Your State's Manufacturers*
    - Four cohorts are doing well, with another cohort to be selected in 2019-2020
  - Disaster Assistance Update – Results
    - Updating Centers on services provided, including assessments, tools, and workshops for currently impacted and potential future impacted manufacturers
  - Competitive Awards Program (CAP)
    - NIST MEP awarded 15 multi-center projects to MEP Centers
    - \$12.5M in total funding
  - State Competition for MEP Center in Alaska
    - Awarded to University of Alaska Anchorage, with a start date of April 1, 2019
- MEP National Network Summit
  - Theme: The United State of Manufacturing
  - Dates: September 15-18, 2019 in Atlanta, Georgia
  - Board Meeting will be held on September 15, 2019 at the event hotel in conjunction with pre-Summit programming.
- NIST MEP on the M.O.V.E.
  - Approximately three years are needed to allow for remediation and replacement of the HVAC system in the NIST MEP office space in building 301
  - NIST MEP staff face challenges related to loss of their workspace but are resilient and practicing flexibility to meet the challenges of this temporary situation

#### *Discussion*

- M. Newman noted that cybersecurity is a hot topic that should be part of everyday industrial hygiene, including in government agencies. He anticipates NIST MEP being tasked to help other departments with their cybersecurity initiatives, especially in the energy industry.

### **MEP Advisory Board Working Group Updates**

#### **Supply Chain Development Working Group**

***Speakers: Matt Newman, MEP Advisory Board; Dave Stieren, NIST MEP***

#### **Working Group Deliverable**

- Guidance and perspectives on the MEP National Network support and development of manufacturing supply chains with an emphasis on defense suppliers regarding Defense

Industrial Base gaps; and expertise on who should be brought into the discussion to provide insight on defense supplier gaps

MEP National Network supports DoD supply chains in many areas, including:

- Cybersecurity assistance
- Working with the DoD-sponsored Manufacturing USA Institutes

#### Manufacturing USA Institutes

- There are 14 institutes that are federally sponsored with cost share from the private sector
  - Research and development (R&D) organizations that specifically address MRL/TRL 4-7 with an emphasis on the development side of R&D
  - Eight of the 14 institutes are sponsored by the DoD, five by the Department of Energy, and one by Department of Commerce (NIST)
  - Round One and Two awards operating on no-cost extensions in 2019; Round Three awards operate through August 31, 2019
- MEP Center staff are embedded in the Manufacturing USA Institutes to help the MEP Centers engage small manufacturers and connect them to Manufacturing USA Institutes
- Programmatic results and learnings documented in a March 2019 NIST MEP White Paper. Highlights of findings include the following items:
  - Regardless of where the awards go, the intent was that the awards lead to enduring partnerships
  - Small and medium-sized manufacturers (SMMs) interested in demonstration sites and interactive experiences that help them understand technologies
  - SMMs interested in state-of-the-art technologies that can be leveraged in the very near term
    - SMMs' needs must match Manufacturing USA Institute outputs
  - Local resources (< 2-hour drive) are particularly helpful for engagement

#### *Discussion*

- M. Newman pointed out that middle America is lacking when it comes to local assets and resources, and the MEP National Network needs to fill that gap.
- J. Anaya asked if SMMs found it difficult to adopt technology because their workforce did not have the skillset. D. Stieren said that they did and that there has been an ongoing emphasis on workforce training across the breadth of the Manufacturing USA Institutes.
- M. Magee asked if the Manufacturing USA Institutes had measurable, quantifiable outcomes in terms of penetration and portfolios. D. Stieren said that they recognized that in order for the Manufacturing USA Institutes to have broad national impact, they needed to reach small manufacturers at a national scale. P. Singerman said that the NIST Office of Advanced Manufacturing (OAM) reports statistics of the overall performance of programs, but not the details about each Manufacturing USA Institute.
- P. Moulton asked how the information received by the embedded MEP personnel is spread around the MEP National Network. D. Stieren said that there are several committees involving the leadership of Centers that are responsible for sharing knowledge through vehicles like MEP Connect. There is also cross-sharing among the MEP Center staff at different Manufacturing USA Institutes.

#### Cybersecurity

- Development of MEP National Network cybersecurity assistance capabilities are progressing
  - Continues to be spurred by strong partnerships with DoD programs, Office of the Secretary of Defense – still mainly driven by the Defense Federal Acquisition Regulation Supplement (DFARS) requirements for the defense sector
  - Market still not showing urgency in non-defense manufacturing sectors
  - Closely monitoring other supply chains: auto, food, etc.

- The MEP National Network Center Leadership Team using Cybersecurity to demonstrate operation of MEP National Network
- Also engaging NIST Labs
- Legislation may also influence NIST MEP and the MEP National Network's role (e.g., National Defense Authorization Act)
- Cybersecurity and U.S. Small Businesses
  - Small businesses are less likely to have strategies in place to:
    - Prevent cyber attacks
    - Detect them early if they occur
    - Reduce damage
    - Withstand financial impact of a hack or breach
  - 70% of small businesses not prepared for a cyber attack
  - One in 369 emails received by users in the manufacturing sector are malicious
    - Third highest rate among key industry sectors
- MEP National Network Progress: Cybersecurity Assistance Practice
  - Service to small companies has included awareness, training technical assistance
  - Partnership with the DoD Office of Economic Adjustment (OEA)
    - 19 MEP Centers doing OEA Cyber project work with FY17 and FY18  
OEA funding ~ \$8.8M
  - MEP Cyber-in-a-Box available and shared with MEP Centers
  - NIST Handbook 162 downloaded ~ 45,000 times since November 2017
- MEP National Network Cybersecurity Progress Summary
  - Defense Contractor DFARS Compliance still low
  - 41/51 MEP Centers offer a cyber practice
  - 49 MEP Centers in Cybersecurity Working Group
  - The MEP National Network has made significant progress, but a great deal of work remains

#### *Discussion*

- M. Newman said that many of the MEP Centers are too small to hire a cybersecurity specialist, so NIST should help to verify service providers for supply chains. There could also be a methodology that rewards cybersecurity-compliant supply chains with tax breaks or similar incentives.
- M. Isbister said that many people and organizations do not sense the danger of cyberattacks because they are not fully aware of how much computers are a part of infrastructure. She suggested that the money that groups spent to secure their networks could be put into existing expense categories like the R&D tax credit or Section 125. D. Stieren said that the question of how to deal with cost comes up at every single awareness event, and C. Thomas said that they did something similar with a credit for energy efficiency.
- D. Stieren said that some states are passing legislation requiring certain cybersecurity conditions be met in order to do business in the state, and this could be another angle to explore.
- B. Hawes said a think-ahead for the Board is what a tax incentive would actually look like. She asked whether the agreement with Alaska included any cybersecurity components. D. Cranmer said that while none of the agreements explicitly mention cybersecurity, there is a contract specifically for MEP Centers to work on cybersecurity.

#### **Critical Needs in the Area of DoD's Manufacturing Industrial Base**

***Speaker: Rob Gold, Director, Technology and Manufacturing Industrial Base, Office of the Undersecretary of Defense for Research and Engineering, Department of Defense (DoD)***

Defense Industrial Base and National Defense Strategy



- Aspects of manufacturing in the industrial base underpin the three main principles of the strategy:
  - More lethal force
  - Strengthened alliances and new partnerships
  - DoD business reforms
- Every piece of equipment provided to the warfighter has to go through manufacturing
  - DoD relies on industry partners and generally takes an arms-length approach
- The manufacturing and technology community is well aligned with the national defense strategy's core mission to change the mindset, the culture, and the underlying systems of the national security industrial base

#### Executive Order 13806 Study

- Assessing and strengthening the manufacturing and defense industrial base and supply chain resiliency of the United States
- Involved nine governmental agencies, 16 working groups
  - Sectors such as aircraft and shipbuilding
  - Cross-cutting enablers like electronics and the workforce
- Lots of participation and support from industry
  - Aerospace Industries Association
  - National Defense Industrial Association
  - Professional Services Council
- Five macro forces identified
  - Sequestration and uncertainty of U.S. government spending
  - Decline of the U.S. manufacturing capabilities and capacity
    - In the wheelhouse of the MEP National Network
  - Adverse impact of U.S. government business and procurement practices
    - Could be opportunity for the MEP National Network to provide DoD with feedback from the manufacturing companies about what's going on in industry
  - Industrial policies of competitive nations, i.e. China
    - Could be opportunity for the MEP National Network to provide DoD with feedback from manufacturing companies wanting to compete overseas
      - This was a big deal to the space industrial community
      - U.S. companies cannot compete overseas
  - Diminishing U.S. STEM and trade skills
    - Also relevant to the MEP National Network
  - Ten risk archetypes identified, two in particular fall into the wheelhouse of the MEP National Network
    - Gap in U.S.-based human capital
    - Erosion of U.S.-based infrastructure and product security

#### Opportunities for MEP Participation Expanded

- Space industrial community
  - Small Business Innovation Research Program (SBIR)
    - The private sector has a whole different approach to growing small businesses in the industrial base
    - \$100,000 per year is not enough
    - Outdated innovation approaches compared to private sector
    - DoD is looking at revamping the SBIR program
  - Industrial base meeting on hypersonic aerospace
    - Foundational feedback from the meeting: small businesses are hampered by inability to get people cleared
      - Question of how to bill expenses and innovation

- Independent R&D accounts are small
  - Opportunity for MEP Center staff who are in the trenches with these small companies to collect feedback about the health of the industrial base as it's experienced by small companies
    - The MEP National Network has collected good feedback about cybersecurity at the metric level
- Digital manufacturing
  - The move towards a digital-technical enterprise needs to pervade manufacturing industry from top to bottom
  - There is no sense of advancement toward digitally-enabled, integrated manufacturing enterprise at the smallest levels of defense manufacturing
  - Once a manufacturing capability becomes largely commoditized, big companies push that into smaller companies by selling off machines
    - Hard for small companies to upgrade and innovate
  - The MEP National Network can get information about how quickly small businesses are turning to digital manufacturing and what type of difficulties they face
    - A topic equal to cybersecurity
    - Being able to implement digital manufacturing, working with companies like MxD (recently rebranded from DMDII) on principles and technologies
- Move to the cloud
  - Not necessarily discussed as part of NIST MEP's cybersecurity
  - Big effort for the DoD
  - Some companies are doing this and finding it cost effective
- Other efforts in the DoD
  - Active intelligence gathering and offensive counterintelligence efforts
  - Addressing threats by foreign direct investment
    - Leveraging the Foreign Investment Risk Review Modernization Act and export controls
  - Looking at export control and technology control
    - Technology area program protection plans
  - Relook at intellectual property rights
    - Legal community recommended considering specially-negotiated rights
- Workforce challenge
  - Digital manufacturing reach across the country
    - Leveraging the presence of the Manufacturing USA Institutes and their workforce activity
    - The MEP Centers can help the Manufacturing USA Institutes have a more local presence in each state
    - Possibly working with community colleges to provide training opportunities to people coming out of high school
- Feedback is critical
  - NIST MEP and the MEP National Network can help collect feedback on cybersecurity, the move to digital, success in training the workforce, and progress overall in terms of the state of manufacturing
- Framework for evaluating strategies
  - Four tiers: activity, output, impact, and outcome
    - Good metrics of companies that are moving to cybersecurity
    - Outcome is difficult to get at; the desired outcome is a robust manufacturing base for the U.S.
  - Mapping out the ecosystem of U.S. manufacturing and the place of the NIST MEP and the MEP National Network within this system

## *Discussion*

- L. Byars said that MEP is focusing on workforce development and using technical colleges and community colleges. J. Anaya added that his local MEP Center helps identify the needs of industry so his technical institution can develop training programs to meet those needs. C. Thomas said that MEP Centers work with a lot of community partners who are devoted to workforce training. P. Moulton said that her state's commerce agency is working with an OEA grant to implement an additive manufacturing curriculum. Manufacturing USA Institutes could assist in getting companies to look ahead at skills that will be needed in the future, based on new technologies that the Manufacturing USA Institutes are currently researching.
- L. Taito noted that there can be tension for companies between the push to go digital and the need to continue operating as before in order to meet specifications. R. Gold agreed and said that going digital just for the sake of going digital is not the point.
- B. Hawes asked about the revamp of the SBIR program and the threshold for entry, which is high for some smaller manufacturers. R. Gold agreed and said that thresholds are high because space is an expensive industry. B. Hawes said that MEP Centers probably do not have enough bandwidth to keep pushing SMMs to play in the SBIR space, regardless of the agency. R. Gold said that it might be useful to put together a continuum of opportunities for the MEP Centers.

## **Cornerstone and the MEP National Network**

***Speaker: Carrie Hines, Executive Director, FORME***

### ASMC

- Trade association of the MEP Centers
- ASMC advocates for legislative and programmatic resources helping small manufacturers become more competitive
  - Nationally: following legislation and directing local action when necessary
  - Locally: advocating via MEP Center members who maintain ongoing, regular communications with local members of Congress
- One program of primary focus is the NIST MEP
- Board of Directors made up of representatives from MEP Centers across the country

### FORME

- Established as a 501c3 subsidiary of the ASMC in May 2015
- Mission: FORME's mission is to be the educational foundation for MEP Centers and Trade Adjustment Assistance Centers (TAACs) by providing continuing education throughout the MEP National Network
- Board of Directors made up of representatives from MEP Centers across the country, MEP Center Directors and COOs
- Membership Services
  - Salary Survey of Centers
  - Recompensation Services
  - Manufacturing Studies and Reports
    - Next Generation Manufacturing Study
  - Center Best Practice Conference
  - Center Connectivity Calls
  - Core Consulting Skills Certification Program
  - MEP University (MEPU)
    - Online community platform and learning management system
    - 'Vendor Directory' launching soon

### Current ASMC and FORME Membership

- Current Members: 42 states, including Puerto Rico
- Non-members include:
  - Alaska
  - Arkansas Manufacturers Solutions
  - FloridaMakes
  - MEP of Louisiana
  - Enterprise Minnesota
  - New Hampshire MEP
  - Polaris MEP (RI)
  - University of Utah MEP Center
  - Manufacturing Works (WY)

#### The Cornerstone Program

- Relationship to DoD
  - Cornerstone is under the Undersecretary of Defense for Acquisition and Sustainment's Industrial Base Analysis and Sustainment (IBAS) program
  - IBAS' Navy Shipbuilding Construction Program is also relevant to Cornerstone
- Cornerstone was created out of an "Other Transactional Agreement:" a flexible mechanism for public-private collaboration across a range of specific Industrial Base sectors and requirements in order to strengthen the U.S. Industrial Base and improve U.S. competitiveness
- Membership
  - Private industry (small to large businesses and private capital)
  - Sector specific industry consortiums and associations
  - U.S. nonprofit organizations
- Purpose
  - Monitor and assess the U.S. Industrial Base
  - Address critical issues in the Industrial Base related to urgent operation needs
  - Support efforts to expand the Industrial Base
  - Address supply chain vulnerabilities
- Vision
  - A modern Industrial Base that integrates traditional and emerging sectors to respond at will to national security requirements
  - Cornerstone will accelerate research, development, prototyping, demonstration, qualification and integration of manufacturing capabilities and capacities in the U.S. Industrial Base and supply chains.
  - Cornerstone will address Industrial Base resiliency, assurance and a robust manufacturing innovation ecosystem
- Sectors of Focus
  - 18 sectors of focus with tasks assigned
  - Members identify which areas they can respond to
  - Shipbuilding task is the first, primary area of focus

#### Cornerstone and the MEP National Network

- FORME is a member of Cornerstone as the MEP National Network representative
- FORME will respond on behalf of the MEP National Network to applicable Cornerstone solicitations
- FORME will subcontract with MEP Center members directly to execute Cornerstone tasks as appropriate, with initial focus expected to be shipbuilding (Area 3)
  - Initial DoD interest is to have the MEP National Network work with shipbuilders to address critical needs
- Current Status: FORME is poised and ready to respond when an applicable Cornerstone solicitation is available
- FORME will staff up as necessary upon successful attainment of a Cornerstone task

### *Discussion*

- M. Newman suggested that if the MEPU Vendor Directory was web-based, the verified groups could have the option of advertising via banners in exchange for a fee. C. Hines said that they have talked about even adding outside contractors and third-party providers to MEPU as an option to generate revenue; however, they do not want to jeopardize the conversation and trust amongst MEP Centers in the currently closed community.

## **MEP Advisory Board Working Group Updates (continued)**

### **Performance & Research Development Working Group**

***Speakers: Leslie Taito, MEP Advisory Board; Ken Voytek, NIST MEP***

#### Working Group Deliverable

- Input and guidance on the management portfolio and Program performance measurement processes of the MEP National Network. In addition, the Working Group will provide feedback and suggestions for establishing a research agenda to support and enrich NIST MEP's performance and evaluation management system through improved MEP Center evaluation processes, the promotion of system learning and by enhancing the portfolio of MEP National Network information services for MEP Centers.

#### Final Report of the MEP Advisory Board Performance & Research Development Working Group: Performance Framework

- Final draft completed and Chair review done
- Draft shared with Working Group on August 2, 2018 (feedback incorporated)
- Final report to Board for approval (posted on MEP Connect)
  - Requesting a final approval to vote
- Report consists of 4 Sections:
  - Background
  - Observations
  - Continuous Improvement in Performance Management
  - Recommendations for Research and Development
    - Research on NIST MEP
    - Research on the manufacturing landscape
    - Supporting research and evaluation

### *Discussion*

- B. Hawes noted that there were aspects of the report particularly relevant to the earlier question of what is on the horizon in terms of manufacturing and the education arena
- The MEP Advisory Board Performance & Research Development Working Group: Performance Framework Final Report was approved by a unanimous vote
- *The final report will be posted on the NIST MEP Website*

### **Executive Committee Working Group**

***Speaker: Cheryl Gendron, NIST MEP***

#### Working Group Deliverable

- Provide guidance on future MEP Advisory Board leadership and membership recruitment, provide insights into cultivating strong Board governance as well as explore ways to expand the MEP Advisory Board's role in regard to the local MEP Center Boards.

#### Discussion Topics for the Board

- MEP Advisory Board Annual Report

- Final report on MEP Connect
- Will be posted to the NIST MEP website after Department of Commerce approval and distribution to Congress
- Succession planning:
  - Chair and Co-Chair current terms expire May 31, 2019
  - Three new members on the horizon will bring MEP Advisory Board numbers back to 15
- Next face-to-face meetings
  - Torrance, California: Tuesday, June 18, 2019
    - Board dinner on Monday, June 17, 2019
    - Possible tours being discussed
  - Atlanta, Georgia: Sunday, September 15, 2019 (MEP Summit)
    - Board dinner, Saturday, September 14, 2019
    - Meeting will include Center Board leadership participation

#### *Discussion*

- C. Thomas announced that the NIST Director has approved B. Hawes as the Board's new Chair, and M. Newman as the new Vice Chair as of June 1, 2019. She thanked Jeff Wilcox for all his years of service on the Board and as Board Chair. J. Wilcox thanked the NIST MEP staff and the Advisory Board for all of their support.

### **Wrap-Up/Public Comments**

#### Public Comments

- B. Brinkman, WCMP, listed some take-away points from his Center's perspective. The MEP National Network is very good at providing perspective to people who are trying to solve big problems. SMMs aren't interested in anything that doesn't have a 12 to 18 month return on investment, and the MEP National Network is good at staying engaged. At a recent meeting at the Defense Acquisition University, the MEP National Network was able to gather cybersecurity experts from 22 states to leverage their skills and knowledge. On the topic of workforce development, there are no longer enough people to train, and now productivity growth is key.

#### Concluding Comments

- P. Moulton challenged B. Brinkman's comment about not having any workforce to train; it is difficult with unemployment rates, but there are still a lot of people getting left behind due to issues like lack of access to training. Understanding the value of manufacturing in the U.S. is something that NIST MEP has not necessarily analyzed, and the value it adds in terms of economic impact and supporting various sectors.
- J. Anaya thanked J. Wilcox and the Advisory Board for all of their work and said that it was nice to know that there are people out there who value manufacturing. M. Isbister echoed his comments and said that for people on the ground it is easy to forget that the government is there to help them, and the MEP Program serves them very well.
- M. Magee commented that it was very helpful to have people and programs like NIST MEP and the MEP National Network plus the ASMC to advocate for manufacturing, and said that MEP Connect is a great resource and the epitome of networking.
- G. Spottswood said that to him, the best thing about the MEP Program is that it is run like a business, with emphasis on return on investment and impact.
- L. Byars said that she was grateful for the opportunity to be a voice for small manufacturing and she looks forward to the MEP National Network continuing to grow connections with small manufacturers in the food service industry.
- M. Newman said that he looked forward to serving as Vice Chair and continuing the momentum of the Board.

- P. Singerman said that J. Wilcox was one of the first Board members from a large corporation and he exceeded all expectations as Board Chair. He noted that the relationship between MEP and C. Hines' organizations has not always been positive, and the fact that it is so good now is a credit to C. Hines' consistent efforts over the years.
- J. Wilcox thanked the Board members for their kind words and said that the Board has increased his faith in government as a source of good.
- B. Hawes said that a key word for this meeting was confidence. She thanked everyone for their confidence in her and said that in this next year of leadership she would like to take deeper dives and break open more data that the government and manufacturers are looking for.

#### Next Meeting

The next Advisory Board Meeting is set for June 18, 2019, in Torrance, California.

#### Adjournment

With no further business, J. Wilcox adjourned the meeting at 12:13 p.m.