

**National Institute of Standards and Technology  
Manufacturing Extension Partnership  
Advisory Board  
Minutes of the September 13, 2023, Meeting**

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## **Background**

The Department of Commerce (DOC) National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP) Advisory Board (Board) met in an open session from 10:00 a.m. to 5:43 p.m. on September 13, 2023, at the Buffalo Niagara Convention Center in Buffalo, NY. The meeting had 42 attendees, including Board members, NIST and NIST MEP staff, participants from MEP Centers, guest speakers and observers. Beverly Bobb is the Designated Federal Officer for the MEP Advisory Board.

## **Attendees**

### **Board Members**

**Bernadine Hawes**, Econsult Solutions, Inc., Chair  
**Donald Bockoven**, Darling Fibers, Vice Chair  
**Beth Bafford**, Calvert Impact  
**Louis Foreman**, Enventys Partners  
**Gail Friedberg Rottenstrich**, Zago Manufacturing Company, Inc.  
**Michael Garvey**, M-7 Technologies  
**Sean Ketter**, Oshkosh Corporation  
**Miriam Kmetzo**, Welding Technology Corp.  
**Chris Mathews**, National Custom Hollow Metal Doors and Frames & Maple Leaf Awning & Canvas  
**Patricia Moulton**, Vermont State Colleges' Workforce Division  
**Dr. Annette Parker**, South Central College  
**Tyrome Smith**, Common Mission Project  
**David Vasko**, Industry Consultant  
**John T. Smith**, Wood-Mizer

### **Staff Members**

**Beverly Bobb**, Chief of Staff and Designated Federal Officer, NIST MEP Advisory Board  
**Pravina Raghavan**, Director, NIST MEP  
**Mojdeh Bahar**, Associate Director for Innovation and Industry Services, NIST MEP  
**G. Nagesh Rao**, Deputy Director, NIST MEP  
**Heather Mayton**, NIST MEP  
**Melissa Ayala**, NIST MEP  
**Mark Schmit**, NIST MEP  
**Jyoti Malhotra**, NIST MEP  
**Brandyi Phillips**, NIST MEP  
**Nico Thomas**, NIST MEP  
**Nadine DeJesus**, NIST MEP  
**Diane Henderson**, NIST MEP  
**Thomas J. Williams**, NIST MEP

**Joi Neal**, NIST MEP  
**Jennifer Rosa**, NIST MEP

## Guest Speakers

**Jeff Spain**, MEP at Columbia State  
**Peter Connolly**, NJ MEP  
**Dusty Cruise**, Missouri Enterprise!  
**Kathie Mahoney**, MASS MEP  
**Jessica Herbert**, NY MEP

## Observers

**Carla Wuthrich**, Vermont MEP  
**Matt Fieldman**, MAGNET/America Works  
**Don Wiesenforth**, Center for Economic Growth  
**Steve McManus**, RTI  
**KeAnne Hoeg**, NC MEP  
**Michael Marusic**, AIM/NY MEP  
**Chuck Smith**, Chief Executive Network

## Authority

The MEP Advisory Board is authorized under Section 3003(d) of the America COMPETES Act (Pub. L. 110–69), as amended by the American Innovation and Competitiveness Act, Public Law 114–329 sec. 501 (2017), and codified at 15 U.S.C. 278k(m), in accordance with the provisions of the Federal Advisory Committee Act, as amended, 5 U.S.C., App.

## Welcome and Introductions

### Speakers:

**Bernadine Hawes**, Chair, NIST MEP Advisory Board  
**Donald Bockoven**, Vice Chair, NIST MEP Advisory Board  
**Pravina Raghavan**, Director, NIST MEP  
**Mojdeh Bahar**, Associate Director for Innovation and Industry Services, NIST MEP  
**G. Nagesh Rao**, Deputy Director, NIST MEP

B. Hawes called the MEP Advisory Board meeting to order at 10:00 a.m. P. Raghavan introduced Beverly Bobb, Chief of Staff at NIST MEP, who briefed the Board on the guidelines for the meeting as set forth in the Federal Advisory Committee Act (FACA). B. Hawes and D. Bockoven delivered opening remarks, welcoming attendees and members of the Board. Board members and guests introduced themselves, their organization, and shared how long they'd been involved with MEP. B. Hawes delivered further remarks about the day's proceedings and gave the floor to P. Raghavan.

P. Raghavan briefed the Board on NIST's new outcomes-oriented plan, which is based on three strategic pillars: (1) narrowing the workforce gap, (2) mitigating supply chain vulnerabilities, and (3) leveraging and adopting technology/innovations. P. Raghavan introduced Mojdeh Bahar, the NIST Associate Director for Innovation and Industry Services, who delivered some brief remarks about the suite of extramural programs offered at NIST: (1) the Technology Partnerships Office for intramural programs, (2) the Baldrige Performance Excellence Program, (3) the Manufacturing USA Program which is a network of 17 vertical industry-led consortia, and

(4) the Manufacturing Extension Partnership which is celebrating its 35th Anniversary. The MEP National Network's active engagement with the manufacturing industry has resulted in over 54,000 completed projects among more than 23,000 different manufacturing clients, leading to \$47.6 billion in sales, \$7.3 billion in cost savings, \$16.2 billion in new client investments, and, in turn, creating and retaining more than 346,000 jobs.

M. Bahar remarked that the creation of the Supply Chain Optimization and Intelligence Network (SCOIN) will strengthen U.S. supply chain, empower American driven innovation, and lead the United States in a 21st Century Economy. It will also be the only federal platform with a granular view of small manufacturers. Through this and other initiatives, the MEP National Network Continues to drive innovation and sustainability in manufacturing, showing unwavering commitment to 51 MEP Centers by providing resources to any and all small- and medium-sized U.S. manufacturers to ensure that they succeed.

Through its mission of metrology and standards, NIST MEP helps advance science in the interest of competitiveness and innovation, seamlessly proceeding from ideation to manufacturing. The MEP National Network is a network of networks, and amazing things happen when you connect these networks together. M. Bahar discussed how they have started to connect MEP into the fabric of NIST through partnerships with NIST's Office of Advanced Manufacturing, other federal agencies, and Manufacturing USA institutes such as the Manufacturing x Digital (MxD) institute. MEP has also been working with RAPID Manufacturing USA Institute on MATTR+, a program which connects the outside world, particularly the small manufacturer, with the expertise that resides at NIST. MATTR+ are less formal engagements that do not require to a collaborations or development agreements such as those in the MATTR program.

Connections among MEP and Manufacturing USA are happening at the regional and state level as well, such as in the case of Advanced Robotics for Manufacturing USA Institute (ARM) and Catalyst Connection, which is part of the Pennsylvania MEP. A Build Back Better Initiative-funded \$12 million community-directed spending award focuses on advanced technology learning lab initiatives. Advanced Functional Fabrics of America (AFFOA) located at Massachusetts and North Carolina State Universities Industrial Expansion Solutions are jointly working on programs to develop smart textiles and wearable technology. New York MEP and three New York State-based Manufacturing USA institutes - AIM Photonics, RAPID, and REMADE Institutes - are actively partnering to bring needed technologies to small and medium sized manufacturers. NIST MEP staff has continuously volunteered to advise and review a lot of the proposals that NIST received, including the Small Business Innovation Research Grants and the Binational Industrial Research and Development (BIRD) Foundation between US and Israel. NIST MEP and Baldrige Performance Excellence teams have collaborated on strategic partnerships to further develop programs and services for targeted sectors.

M. Bahar went on to discuss the Job Quality Toolkit put together by the Departments of Commerce and Department of Labor. To date, 79 Baldrige job quality assessments have been completed by more than 12 MEP Centers, and a \$1 million competitive award was made to Florida Makes in partnership with IMEP, the Illinois MEP to create Baldrige-based assessment tool for Industry 4.0 and yielded 92 client assessments to date. NIST MEP is a part of many interagency councils including the National Science and Technology Council Supply Chain Implementation Team / Department of Commerce Educational Workforce Development Team, and the Department of Energy's Clean Energy Sector Committee. NIST MEP has recently partnered with the Association of Public Land-grant Universities (APLU) to develop a toolkit to facilitate the collaboration between MEP, universities, and manufacturers. NIST MEP has also recently worked with the Department of Defense Office of Local Defense Community

Cooperation to help with defense manufacturing proposal reviews. These types of connections have led to partnerships between local MEP Centers and Manufacturing USA institutes to jointly submit proposals to the U.S. Department of Defense, Office of Local Defense Community Cooperation and the Department of Energy's Smart Manufacturing program. Finally, NIST MEP has been working closely with the U.S. Treasury on the State Small Business and Credit Initiative (SSBCI) on how to bring more affordable financial capital to the manufacturing sector. M. Bahar expressed a desire to work with the Board members to identify all the partners with whom NIST MEP interacts.

P. Raghavan introduced G. Nagesh Rao, NIST MEP's new deputy director. G. Rao remarked on his commitment to change management and described his experience in both the public and private sector, including as CIO of the Department of Commerce Bureau of Industry and Security, where he began to appreciate why technology adoption and workforce development is important to national security.

P. Raghavan delivered the Director's Update and discussed the organizational shift within NIST MEP.

## MEP Director's Update

### Speakers:

**Pravina Raghavan**, Director, NIST MEP

### **Other New NIST MEP Team Members**

- Division 483 – National Programs
  - **Savann Thorn**, Cyber Specialist
- Division 485 – Outreach and External Affairs
  - **Brandyi Phillips**, Division Chief Outreach and External Affairs
- Division 486 – Internal Operations
  - **Joi Neal**, Program Compliance and Audit Liaison
  - **Sevan Simonian**, Administrative Officer

### **Helping SMMs Overcome Challenges**

- Narrowing the workforce gap
- Mitigating supply chain vulnerabilities
- Leveraging technology

### **Supply Chain Optimization and Intelligence Network (SCOIN)**

- Supply Chain Optimization Operational Team
- Webinars and trainings
- Knowledge of manufacturing ecosystem
- OEM mapping
- Identify critical sectors and your support
- Map-out critical and new industries important to U.S. Government
- Gathering, storing and sharing data
- FTE and report progress
- Success stories
- What is not working stories
- Other goals

- This is an investment from MEP into the MEP National Network to build a sustainable program or offerings in supply chain. This is a collaboration between NIST MEP and MEP Centers.

### **New Structure for Working Groups**

- **Strategic Plan Implementation Groups consisting of:**
  - MEP Advisory Board
  - Center Leadership Team
  - MEP Center Directors
  - Key Stakeholders (including OEMs)
- **Three groups focused on the strategic pillars:**
  - Supply Chain
  - Workforce
  - Technology and Innovation
- **Operational Groups**
  - One focus group for Supply Chain Optimization
  - Communities of Practitioners
    - Industry 4.0/Cybersecurity
    - Food Processes
    - Semiconductor
    - Toyota Kata
    - Workforce
    - Marketing
    - Performance Metrics
    - Learning Management
    - Financial Management

### **Discussion**

- B. Hawes suggested that the NIST MEP team create a toolkit for the Board members containing a list of acronyms and mnemonics. The Chair then opened the floor to questions from the Board.
- M. Garvey asked P. Raghavan how far along the NIST MEP is from a critical path planning perspective. P. Raghavan replied that NIST MEP just disbursed the SCOIN money in June, and will get the first data back from the centers in September. The CHIPS and Science Act provides for the development of a national supply chain database, and since the government buys not builds, it is going to be requiring a deeper line of sight than it has been in the past in suppliers in the supply chain. P. Raghavan discussed leveraging name-brand celebrities who are also manufacturers, like Rihanna, to market the benefits of partnering with MEP National Network and to help change the face of manufacturing.
- S. Ketter asked for the elevator pitch on SCOIN. P. Raghavan replied that the SCOIN addressed two focus areas: (1) if you are looking for a supply that you can't find then reach out to your local MEP Center and they will help you find it; and (2) do you know who your OEMs are and how you get into their supply chain?
- A. Parker raised the issue of workforce and asked about NIST MEP's partnership with APLU in light of the demographic shift within minority serving institutions (MSIs). M. Bahar replied that working with APLU is the first step to engaging with all MSIs, and also discussed the impact of workforce on how quickly MSIs commercialize.

## Program Update, Part One

### 486: Internal Operations Division

#### Speakers:

**Heather Mayton**, Division Chief and Executive Officer, Internal Operations Division

#### **Internal Operations Division - Team Members**

- **Heather Mayton**, Division Chief and Executive Officer
- **Autumn Hernandez**, Administrative Officer
- **Sevan Simonian**, Administrative Officer
  - **Kathy Martin**, IT Security Officer
  - **Justin Mocca**, IT Specialist
  - **Michele Montgomery**, Receptionist
  - **Joi Neal**, Program Compliance and Audit Liaison
  - OISM Embedded Desktop Support Position

#### **Internal Operations: Division Overview**

- Build effective collaboration with MEP staff and internal/external stakeholders
- Budget
- Human Resources
- Program Compliance
- Audits
- IT Security and IT access for MEP staff
- Property
- Administrative Operations of MEP

#### **MEP Program Budget Outlook**

- **FY 2023** - Appropriation Status
  - \$175 million for MEP
  - \$13 million in disaster supplemental
  - Funding not subject to cost share requirements (elective for Centers receiving state funds conditioned on federal cost share requirement)
- **FY 2024** - Appropriation Status
  - \$277.2 million for President's budget
  - \$200 million House
    - Includes cost share relief
  - \$175 million Senate
    - No cost share relief
- Numbers are subject to change

#### **NIST MEP Projected Spend Plan Through Sept. 30, 2023**

- Available Funding:
  - Appropriation: \$175.0M
  - Disaster Supplemental: \$13.0M
  - Carryover from FY 2022: \$5.6M
  - Prior-year recoveries: \$0.4M
  - Total available funding: \$194.0M
- Other Funding:
  - Earmark: \$1.0M

- Planned Expenditures:
  - Center renewals: \$134.6M
  - RCAP/MSE: \$1.3M
  - Expansion Awards: \$20.4
  - Disaster Awards: \$0.3M
  - Contracts: \$6.2M
  - NIST MEP labor: \$11.0M
  - NIST and program overhead: \$20.2M
  - Total planned expenditures: \$194.0M
- 11.22% efficiency rate
- Numbers are subject to change

## 481: Network Agreements Management Division

### Speakers:

**Mellissa Ayala**, Acting Division Chief, Network Agreements Management Division

### Network Agreements Management Division (NAMD) - Team Members

- **Mellissa Ayala**, Acting Division Chief
- **Adrienne Montague**, Administrative Assistant
  - **Nadine DeJesus**, Group Manager (A)
    - Midwest Centers
      - **Hope Snowden**, FPO
      - **Gerson Santos-Leon**, RM
    - Mountain Centers
      - **Gloria Solomon**, FPO
      - **Tony Mastalski**, RM
    - Northeast Centers
      - **Scott Dockum**, FPO
      - **Tom Williams**, RM
  - **Sekou Johnson**, Acting Group Manager (B)
    - East Centers
      - **Brooke Linehan**, FPO
      - **Andrew Nobleman**, RM
    - Southeast Centers
      - **Sekou Johnson**, FPO
      - All RM's Covering
    - West Centers
      - **Julia Shriner**, FPO
      - Temporary RM
  - **Bryana Head**, Competitions

### Center Resource Management Teams (CRMTs)

- Consists of a Federal Program Officer (FPO) and a Resource Manager (RM).
- Shared responsibility for providing financial and programmatic oversight of NIST funds awarded to MEP Centers.
- Provide guidance, support and operational assistance to Centers in fulfilling the terms of the cooperative agreement.
- Monitor Centers' programmatic and financial performance and recommend corrective actions where appropriate.

## **NAMD Roles and Responsibilities**

Establishment and programmatic oversight of cooperative agreements for funding MEP Centers in support of the MEP mission.

- Work with MEP Centers
  - Provide guidance and assistance with cooperative agreement compliance
  - Provide programmatic assistance to foster MEP Center growth and development
  - Strengthen strategic alliances with local and regional entities
  - Maintain partnership relationships to facilitate Center improvement
  - Conduct competitions for base MEP and strategic awards
- Work with NIST MEP, NIST and DOC to ensure program integrity and compliance
  - PEEI (Award Performance and Evaluation)
  - National Programs (I4.0, MATTR+, Food Safety)
  - National Platforms (Network Learning, Supplier Scouting Team)
  - Grants Management Division (GMD)
  - DOC Federal Assistance Law Division (FALD)

## **New Awards**

- **Supply Chain Optimization and Intelligence Network Awards**
  - All 51 Centers: Awarded June 1
- **New Center Awards**
  - Arizona and Maryland: Awarded July 1
    - Kick-off meetings conducted onsite in Phoenix and Columbia
    - Maryland MEP now supports the MEP program for the District of Columbia

## **Recompetition of the MEP National Network**

- April 1, 2025
  - **Florida**
- July 1, 2025
  - **Colorado, Connecticut, Indiana, Michigan, New Hampshire, North Carolina, Oklahoma, Oregon, Tennessee, Texas, Virginia**
- Jan. 1, 2026
  - **Idaho, Illinois, Minnesota, New Jersey, New York, Washington, West Virginia, Wisconsin**
- Oct. 1, 2026
  - **Alabama, Arkansas, California, Georgia, Louisiana, Massachusetts, Missouri, Montana, Ohio, Pennsylvania, Puerto Rico, Utah, Vermont**
- April 1, 2027
  - **Delaware, Hawaii, Iowa, Kansas, Maine, Mississippi, Nevada, New Mexico, North Dakota, South Carolina, Wyoming**
- July 1, 2029
  - **Alaska**

## **Discussion**

- M. Garvey asked where the highest performing MEP centers are in the country. P. Raghavan replied that MEP centers with more partnerships do better than centers without fewer partnerships. There are no MEP centers which have not received funding from, or are out of compliance with, NIST MEP.
- T. Smith asked a question about the combined center for Maryland and the District of Columbia (D.C.), to which P. Raghavan replied that Maryland receives extra funding as



the designated center supporting D.C., which only has about 57 manufacturers, because D.C. is not a state.

- M. Kmetzo asked if there is a budget line item allocated to supporting MEPs in states that undergo a disaster, to which M. Ayala replied, yes, there are funds in the MEP Disaster Assessments Program (MDOP) which supports FEMA-designated emergency areas. P. Raghavan added that the MDOP is dependent on available funding and disasters are only increasing. B. Hawes suggested that the Board advocate for additional funding. P. Moulton suggested a need to develop a disaster preparation and recovery manual as an industry guideline for disaster assistance. P. Raghavan foreshadowed the presentation of resiliency metrics which would address the member's comments.

## 485: Outreach and External Affairs Division

### Speakers:

**Brandyi Phillips**, Division Chief, Outreach and External Affairs Division

### **Outreach and External Affairs – Team Members**

- **Brandyi Phillips**, Division Chief
  - **Nicole Ausherman**, Digital Information Specialist
  - **Cheryl Gendron**, Event & Board Specialist
  - **Katie Rapp**, Writer/Editor
  - **Jennifer Rosa**, Marketing & Communications Specialist

### **Outreach and External Affairs: Division Overview**

- **External Events**
  - MEP Advisory Board meetings
  - Conferences
  - Trade shows
- **News and Information**
  - MEP news roundup
  - Network News
  - MEP Manufacturing Innovation Blog
- **Reports and Resources**
  - Annual reports
  - Report submissions to the DOC Secretary & NIST Director
  - NIST MEP Style Guide
- **MEPNN Brand Support**
  - Branding
  - National awareness campaign
- **Marketing Collateral**
  - Infographics and other marketing resources
  - Video
  - Photography
  - White papers, one sheets
- **Digital Channels**
  - Social media
  - NIST MEP public website and MEP Connect migration to the cloud (in progress)
- **Communication**
  - MEP Advisory Board assistance

- Coordinate with NIST Public Affairs Office & NIST Congressional & Legislative Affairs Office
- Marketing Community of Practitioners and Marketing Steering Committee
- Amplify MEPNN achievements, new opportunities and expertise

### **Marketing and Communication**

- **Marketing Steering Committee**
  - Provides support, guidance and oversight to the Marketing Community of Practitioners. Fosters communication and activities that are critical to the Network.
- **Marketing Community of Practitioners**
  - Fosters information exchange between MEP Centers. Provides strategic and tactical guidance, and oversight to advance Network communication priorities.

### **Workforce Assistance by State**

- Manufacturing companies are facing a critical talent shortage and skills gap and the [MEP National Network™](#) is here to support you. The Network consists of MEP Centers located in all 50 states and Puerto Rico, offering a wide range of [workforce development programs and resources](#).
- By investing in workforce development and training, you have the opportunity to address these challenges head-on. The MEP National Network understands the importance of remaining competitive in today's rapidly evolving marketplace, and can provide you with a solid foundation for growth through the workforce services offered.
- Below you will find a guide to the workforce-related programs offered by MEP Centers in every state and Puerto Rico. An [interactive map](#) with the ability to search keywords and phrases is also available with the same information. Please note that this guide is not exhaustive, so we encourage you to reach out to [your local MEP Center](#) for more detailed information and personalized assistance.

(Source: <https://www.nist.gov/mep/mep-national-network-workforce-programs-services-and-trainings>)

### **Outreach and External Affairs: Legislative Topics**

- **Supply Chain**
  - Supply Chain Optimization and Intelligence Network
  - Semiconductors
- **Workforce**
  - Retirements and finding skilled workers
- **Technology**
  - Innovation, automation, cybersecurity

## **482: Performance Evaluation and Economic Impacts Division**

### **Speakers:**

**Mark Schmit**, Division Chief, Performance Evaluation and Economic Impacts Division

### **Performance Evaluation and Economic Impacts - Team Members**

- **Mark Schmit**, Division Chief
- **Megan Spangler**, Administrative Assistant
  - **Nico Thomas**, Center Business Intelligence
  - **Steve Campbell**, Group Manager, Performance Metrics and Evaluations

- **Megean Blum**, Success Story Admin
- **Kim Coffman**, MEIS Project Manager
  - 6 IT Contractors
- **Missy Davis**, Reporting and Survey Admin
- **Diane Henderson**, Panel Review Manager
- **Holly Jackson**, D&B Admin
- TBD, Data Analytics
- TBD, State Relations

### Strategic Priorities

- Evaluate, via various means, the performance of MEPNN as well as the individual Centers
- Map and define manufacturing ecosystems and identify supply chain gaps
- Expand MEP's research agenda
- Integrate MEP into broader state-based economic development
- Be visible among NIST MEP and the MEP National Network, including the CLT and MAB, and external stakeholders and partners

### Data: Measure What Matters

- Our division is the key link in **MEP defining, measuring and articulating** our collective successes and opportunities to do better.
- The focus on performance has guided MEP since its inception and **demonstrates that it has made a positive impact** on the program and Centers.
- The information gathered shows the program makes a **meaningful difference for its clients** and creates **broader economic benefits** beyond positive client outcomes.

### Data Collected by MEP

- **MEP Center Quarterly Reporting**
  - Center locations
  - Center staff
    - Count and names
  - Center partners
    - Names and locations
  - Center clients
    - Name and location
    - Size (employees)
    - Industry
  - Center projects
    - Title and description
    - Type and delivery mode
    - Intensity (hours)
    - Total value (dollars)
    - Internal vs. 3rd party service delivery
- **Client Impact Survey**
  - New and retained sales
  - Jobs created and retained
  - New client investment
  - Cost savings
  - Client challenges
  - Client satisfaction (NPS)
  - Client suggestions (narrative)

- Survey response rate
- Percent of manufacturers improving competitiveness
- **Other Data Sets**
  - MEP Center success stories
    - Client based
  - Progress plans/technical reports
    - Semi-annual reporting
    - Narrative progress reporting
  - Operating outcomes
    - Client engagement with very small, rural and start-up manufacturers

### **Challenges**

- NIST MEP only captures a portion of MEP Center client engagements
  - MEP only tells a portion of our story
  - MEP Centers do not get “credit” for some of the work being done
- Not all engagements are surveyable – this creates a NIST MEP made barrier to capturing certain types of engagements
  - Overcoming this is essential as we communicate achievements in workforce, supply chain, and technology
- While we have substantial knowledge, there's room for improvement in integrating all insights to offer diverse solutions

### **Evolving Toward**

- What are factors related to differences in Center performance?
- Expand the use of case studies and other approaches to examine focus area programs.
- Research on underserved segments of the manufacturing marketplace.
- Analyzing and aggregating data differently using newer, more capable technologies.
- More research into the broader economic and business environment faced by manufacturers.
- Broaden the bench of researchers focusing on manufacturing (particularly SMMs) and MEP.

### **Discussion**

- P. Moulton asked about how to integrate MEP into a broader comprehensive economic development strategy and how to communicate to the public that manufacturing is not your great grandfather's manufacturing anymore, but rather a rapidly advancing field of technological innovation. M. Schmit replied that every one of the 51 MEP centers is different and meets industry stakeholders where they are.

## ***Meeting Break to Participate in MEPNN Forum Lunch and Plenary***

### **Program Update, Part Two**

#### **483: National Programs Division**

#### **Speakers:**

**Jyoti Malhotra**, Division Chief, National Programs Division

#### **483 National Programs Division - Team Members**

- **Jyoti Malhotra**, Division Chief
- **Carol Shibley**, Administrative Assistant
  - **Jose Colucci**, Industrial Specialist
  - **Brian Lagas**, Industrial Specialist
  - **Kim Pinckney**, Industrial Specialist
  - **Michael Taylor**, Senior Engineer
  - **Marlon Walker**, Physical Scientist
  - **Doug Devereaux**, Industrial Specialist
  - **Savann Thorn**, Cyber Specialist
  - General Engineer (recruiting)
  - **Dimitrios Metitis**, Industrial Specialist

#### **National Programs Impacts: Leveraging Technology & Empowering Manufacturers**

- Food Industry Services
- Industry 4.0
- MATTR/MATTR+
- Cybersecurity
- ExporTech
- Toyota Kata
- Partnerships and Collaborations
- OEM Engagements
- Targeted Industry Sectors

#### **Food Industry Services**

- Food community of practitioners' impacts
  - In CY 2023 YTD, MEP Centers completed 508 projects with 417 different clients in the food manufacturing industry
  - Food manufacturing clients are also reporting strong economic impacts so far in calendar year 2023 as a result of working with MEP Centers
- These impacts include:
  - \$198,133,457 new and retained sales
  - 2,307 jobs created and retained
  - \$146,922,610 total client investments
  - \$476,444,285 total cost savings
- Food community of practitioners' training sessions:
  - There were 5 new training workshops offered to the FISCP in 2023

#### **National Programs Impacts**

- **Partnerships/Collaborations**
  - Two new MOUs in the works
    - MEP-DOT, MEP-APATC
  - One MOU Executed
    - MEP-MxD
  - Expanding MEP-MFG USA partnerships/collaborations and MEP-Baldrige collaborations
- **Targeted Industry Sectors**
  - Semiconductor
  - Clean energy
  - Aerospace sector

- Medical devices
- Biomanufacturing
- Defense
- **OEM Engagements**
  - **Semiconductor:** Intel, NXP, Applied Materials & Skywater
  - **Medical Devices:** Stryker, Medtronic, Baxter, Edwards Life Sciences
  - **Clean Energy:** GE Vernova, GE Aerospace, SAFT America, TotalEnergies
  - **Sustainability:** TotalEnergies, SAFT America
  - **I4.0/Cyber:** Rockwell
  - **Aerospace:** Airbus, GE Aerospace

### National Programs Impacts

- **Industry 4.0**
  - OLDCC funding opportunity
  - I4.0 subgroups formed
  - MAT Team expanding from 20 to 24 Centers
  - Five AMTS projects completed
- **Cyber Security**
  - Integrating NIST SMEs to cyber community of practitioners
  - Launching a contract to expand cyber services across the MEPNN

### MATTR/MATTR+

- **MATTR**
  - One CRADA (analytical testing) and one RCA (additive) renewal with NIST labs
  - Manufacturer's Edge (soil contaminant removal)
  - GENEDGE (generic drugs used in the U.S.)
  - Missouri Enterprise (1. chemical handling; 2. and calibration lab)
  - PRiMEX (corrosion issues with welds)
- **MATTR+**
  - Florida-based company (power generating device scale-up)
  - Maryland-based company (device encasements and scale-up)
  - Massachusetts-based company (polymer additive manufacturing)
  - Scale-up/contract manufacturing inquiries from MD, MA, FL,VA companies
  - AI in manufacturing inquiry from WI
  - Manufacturing inquiry from SC involving fiber production

### National Programs Impacts

- **ExporTech**
  - MEP Centers completed 18 export-related projects with 18 different clients
  - Manufacturing clients served with export-related services are also reporting strong economic impacts so far in calendar year 2023 as a result of working with MEP Centers. These impacts include:
    - \$27,781,400 new and retained sales
    - 78 jobs created and retained
    - \$7,361,120 total client investments
    - \$2,315,000 total cost savings
- **Toyota Kata FY2023Q1 Average Results**
  - \$1,475,741 new/retained sales
  - \$507,395 total cost savings
  - \$409,495 total new client investments
  - 12 jobs created or retained

## Discussion

- Noting the MOU signed between NIST MEP and Manufacturing x Digital (MxD), D. Vasko asked what other institutes NIST MEP is talking to. J. Malhotra replied that NIST MEP is currently pursuing MOUs with 15 institutes including the Southeastern Consortium for Minorities in Engineering (SECME), the Institute for Advanced Composites Manufacturing Innovation (IACME) and Advanced Functional Fabrics of America (AFFOA). T. Smith asked how NIST MEP goes after industry sectors such as aerospace. J. Malhotra replied that NIST MEP begins by leveraging its existing relationships, asking what the interest and needs are of the MEP National Network and finally aligning those priorities with the Biden-Harris Administration.

## 484: National Platforms Division

### Speakers:

**Jyoti Malhotra**, Acting Division Chief, National Platforms Division

### **National Platforms Division - Team Members**

- **Jyoti Malhotra**, Acting Division Chief
- **Megan Spangler**, Administrative Assistant
  - **Supply Chain Manager**, Recruiting
    - **Robert Barnes**, Supply Chain Staff
    - **Supply Chain Specialist**, Recruiting
    - **Samm Webb**, Industrial Specialist, Supply Chain
  - **Ben Vickery**, Group Manager, Supervisory Industrial Specialist
    - **Adelwiza Lequin**, Network Knowledge Management Specialist
  - **Workforce SME**, Recruiting

### **Mitigating Supply Chain Vulnerabilities Supplier Scouting: February - July 2023**

- **58 opportunities scouted**
  - 27 from three federal agencies
  - 24 from MEP Centers
  - 7 from private industry
- **Approx. \$9 million**
  - potential annual business opportunities
- **86 unique companies**
  - identified by MEPNN in response to opportunities
- Supply Chain Optimization Focus Group (operational) kick-off on Aug. 1, 2023
- Automated Supplier Scouting Process

### **New Workforce-Focused Partnerships**

- **Historically Black Colleges and Universities (HBCUs)**: Clark Atlanta, Morgan State University, North Carolina Agricultural Technical State University, Prairie View A&M University, Xavier University of Louisiana
- **Technical and Community Colleges**: Columbus State Community College, Highland College, Ivy Tech, Pasadena City College, Portland Community College, Rio Salado College
- **Four-Year Colleges and Universities**: Arizona State University, Penn State University, SUNY Polytechnic Institute, University of California - Santa Barbara, University of New Mexico

- **Tribal Colleges and Universities:** Dine College, Fond du lac Tribal and Community College, Navajo Technical University, Oglala Lakota College, Salish Kootenai College
- **Other minority-serving institutions:** Interamerican University of Puerto Rico, Polytechnic University of Puerto Rico, University of Puerto Rico – Humacao, University of Texas at El Paso (UTEP) and Texas Rio Grande Valley (UTRGV), University of Turabo

### **Learning and Knowledge Management System**

- Conducting a project in 2023 that will help capture and share knowledge and information with the entire Network more seamlessly and effectively
- The Network Learning and Knowledge Sharing System Roadmap project will develop a clear roadmap and implementation methodologies to guide the development of the future MEP knowledge systems
- The effort will include:
  - Planning and facilitating a current state assessment
  - Developing a report that details the current state of knowledge management
  - Gathering insights to help identify specific capabilities of interest
  - Development of a visually engaging, accessible, and easy-to-understand roadmap
  - Development of detailed, technical requirements needed

### **Other Offerings to MEPNN**

- Tab Wilkins Emerging Leaders Program
- Center Director Executive Program
- Center Board Development

### **Discussion**

- D. Vasko asked if knowledge management includes a database of problems, solutions, and use cases, to which J. Malhotra replied that the platform is in its infancy state through a third-party contractor. S. Ketter and J. Malhotra discussed the knowledge management framework as one platform capturing all actionable insights for the National Network. G. Rao discussed his experience designing knowledge management systems, which tend to require continuous curation of content.

## **Strategic Plan Metrics - Discussion**

### **Speakers:**

**Pravina Raghavan**, Director, NIST MEP

**Nico Thomas**, Performance Analyst, NIST MEP

## **2023-2027 MEPNN Strategic Plan Metrics**

### **Mitigating Supply Chain Vulnerabilities**

#### **Engaging Industries Critical to US Supply Chain**

- The Administration’s 100-day supply chain report identifies 4 critical industries:
  - Semiconductor manufacturing and advanced packaging
  - Large capacity batteries
  - Critical minerals and materials
  - Pharmaceuticals
- **Goal:** Increase engagement with critical industries to mitigate supply chain vulnerabilities



- Centers worked with **476 clients** in critical industries in 2022
- 12-month goal of a **3% increase** would result in **492 clients** engaged
- Note: SCOIN will enable MEP to learn about additional critical industries at regional level

### Assessing and Mitigating Business Risk Through Resiliency Planning

- MEP Centers help make manufacturers more resilient
- **Goal:** Mitigate supply chain vulnerabilities by increasing MEPNN's business risk assessment and mitigation projects
  - MEP Centers completed **749 business resiliency** projects in CY22
  - 12-month goal of **3% increase** in projects would set target of **775 projects**

### Question

What areas are domestic manufacturing and U.S. manufacturers most vulnerable in their operations?

### Narrowing the Workforce Gap

- **Expanding Workforce Partnerships to Narrow Workforce Gap**
  - There are currently 690 workforce supporting partnerships in MEIS
    - Community Colleges: 19.1%
    - EDA University Centers: 0.6%
    - Local/Regional Economic Development Org: 42.0%
    - State Workforce/Labor Agencies: 3.5%
    - Technical Colleges: 6.8%
    - Universities: 24.5%
    - Workforce Investment Boards: 3.5%
- **Goal**
  - Grow the number of partnerships that are workforce-focused
  - 12-month goal of **3%** would result in **21 new partnerships**

### Question

What partnerships should MEP National Network be pursuing or leveraging?

### Training Manufacturers to Leverage Advanced Manufacturing Technology

- Identified Center reported projects that were related to the following advanced manufacturing practices:
  - Augmented reality/virtual reality
  - Cloud
  - Artificial intelligence
  - Simulation
  - Robots/cobots
- Once advanced manufacturing tech projects identified, then focused search to only include training engagements
- **Goal:** Increase the number of training projects focused on advanced manufacturing technology
  - Increasing projects by **10** (based on CY22 data) would represent a **15% increase**

### Adopting and Leveraging Technology

- **Awareness and Education on Advanced Manufacturing Technologies to Small Manufacturers (<100 employees)**

- Identified Center reported projects that were related to the following advanced manufacturing practices:
  - Augmented reality/virtual reality
  - Cloud
  - Artificial intelligence
  - Simulation
  - Robots/cobots
- MEP Centers completed **172 advanced manufacturing technology** projects with small manufacturers in CY22
- **Goal:** Increase adoption of technology by smaller manufacturers by engaging and exposing more technology to these companies (more projects)
  - 12-month goal of **10% increase** would result in **190 projects** completed

### **Increasing Cybersecurity Awareness and Adoption Among Manufacturers**

- Cybersecurity is critical to the implementation of technology and resiliency of supply chains
- MEP Centers had **709 cybersecurity** related projects in CY22
- **Goal:** Enable manufacturers to safely adopt technology through stronger cybersecurity practices
  - 12-month goal of a **5% increase** would result in target of **745 projects** completed

### **Question**

How can MEP encourage manufacturers to become more proactive about adopting cybersecurity practices and advanced manufacturing technologies?

### **Metrics Summary**

- **Mitigating Supply Chain Vulnerabilities**
  - **Goal:** Increase engagement with critical domestic manufacturing industries to mitigate supply chain vulnerabilities.
    - 12-month target of **492 clients** engaged in critical industries represents a **3% increase** from the previous year.
  - **Goal:** Mitigate supply chain vulnerabilities by increasing MEPNN's business risk assessment and mitigation projects.
    - 12-month target of **775 resilience projects** completed represents a **3% increase** from the previous year.
- **Narrowing the Workforce Gap**
  - **Goal:** Grow the number and depth of partnerships that are workforce-supporting.
    - 12-month target of **711 workforce-supporting partnerships** represents a **3%** increase from the previous year.
  - **Goal:** Increase the number of advanced manufacturing training projects delivered across the MEPNN.
    - 12-month target of **75 advanced manufacturing training projects** represents a **15% increase** from the previous year.
- **Adopting and Leveraging Technology**
  - **Goal:** Increase advanced manufacturing technology awareness and education engagements (projects) targeted to smaller manufacturers (less than 100 employees) in order to better prepare manufacturers to adopt new technologies.
    - 12-month target of **190 projects** completed represents a **10% increase** from the previous year.

- **Goal:** Increase cybersecurity awareness and adoption projects to make manufacturers more resilient and prepared to adopt new technologies.
  - 12-month target of **745 projects** completed represents a **5% increase** from the previous year.

## Discussion

- B. Bafford asked what the addressable market is for mitigating supply chain vulnerabilities. N. Thomas replied that the number of critical industry manufacturers is the growth denominator.
- Regarding resiliency, M. Garvey asked whether NIST MEP is overlaying these activities on MEP Centers that are located in Defense Manufacturing Communities (DMCs), which must attain a certain level of qualification to be able to participate independently on DoD contracts. N. Thomas replied that MEP Centers work with manufacturers to get them ready to participate in DoD supply chains, but they haven't done an analysis to determine how specific actors in DMCs are leveraging resiliency work to address certain concerns.
- Referencing an anecdote about shipments of apparel being left in U.S. ports, B. Hawes commented on the vulnerability of land and water uses with regard to manufacturing resiliency. P. Moulton also raised the impact of climate change on resiliency. G. Rottenstrich remarked that plants and warehouses that traditionally have been used for manufacturing are now serving logistics and supply chain functions, leaving very little real estate for manufacturing. She also discussed the importance of the electric grid to manufacturers. T. Smith asked, rhetorically, "If we are going to not be vulnerable, what must be true?" A. Parker raised the issue of insufficient workforce housing. B. Hawes recommended that manufactures treat resiliency the same way they treat continuous improvement, a goal which never goes away in the language of manufacturers. D. Vasko remarked that resiliency means some degree of duplication and loss of productivity because of efficiencies. M. Kmetzo suggested using the key terms agility and diversification when talking about resiliency.
- Regarding narrowing the workforce gap, B. Hawes asked if there is a recruitment bias that has been introduced by MEPs based at universities. N. Thomas replied that it is definitely easier for universities to matriculate graduates into the workforce. Regarding expanding workforce partnerships, A. Parker recommended that NIST MEP merge the categories of community college and technical college. M. Kmetzo asked whether there was a formal definition of partnership, to which N. Thomas replied that use of that term differs across the centers, and they tend to focus on longer-term relationships. Both for-profit and not-for-profit institutions are included under "Universities."
- T. Smith remarked that MEP Centers should pursue partnerships and relationships with Historically Black Colleges and Universities, tribal universities and other minority-serving institutions. P. Moulton remarked that the partnerships that the MEP National Network should pursue are those that result in actual workforce-related projects, including referral and succession planning. N. Thomas commented that NIST MEP is currently adding more granularity to their coding in order to more accurately identify projects that straddle many competencies, themes, and focus areas. NIST MEP is also now allowing centers to report light interactions that do not rise to the level of requiring the rigorous follow-up survey process, therefore N. Thomas expects the number of clients and projects reported to NIST MEP to grow. D. Vasko recommended that MEP have a partnership with every single Manufacturing USA institute; the MEP should be the delivery arm to reach the small- and medium-sized manufacturers from those institutes, and those institutes should benefit from the relationships with MEP's broad base of customers that can come to them with problems. M. Bahar echoed the comments of D. Vasko, saying

that NIST has been strategically implementing this relationship with Manufacturing USA, and that there have to be well-known and well-defined on-ramps for different entities to enter from the institutes to the MEPs and vice versa. C. Thomas urged the Board and staff to consider what partnerships will bring NIST MEP to the strategic goals outlined by the Director.

- N. Thomas discussed upskilling the workforce in advanced manufacturing technologies such as augmented and virtual reality, cloud technology, artificial intelligence, simulation and automation, and robots and cobots. D. Vasko suggested adding emulation and digital twins to the growing list of advanced technologies.
- When considering how MEP can encourage manufacturers to adopt and leverage advanced manufacturing technologies, the Board and staff extensively discussed the importance of cybersecurity best practices. Board members shared stories about industry cyber-attacks and suggested gathering more first-hand experiences and lessons learned from industry stakeholders. S. Ketter mentioned incorporating cybersecurity into their supplier vetting process and sharing risk data with their suppliers during regular engagements. B. Hawes mentioned the roll-out of MEP's Cyber-in-a-Box. P. Moulton emphasized the necessity for industry to invest in cybersecurity practices like cyber insurance and multi-factor authentication. B. Hawes recommended focusing on the young employees of a manufacturer when promoting new technology adoption. T. Smith suggested that NIST MEP look at adjacent industries to understand how to reach their target population with cybersecurity practices. M. Kmetzo noted a gap in the human resource function of small manufacturers.

## *Meeting Break*

## **MEPNN Workforce Panel and Discussion**

### **Speakers:**

**Pravina Raghavan**, Director, NIST MEP

**G. Nagesh Rao**, Deputy Director, NIST MEP

**Jeff Spain**, Center Director, Ohio MEP Subrecipient

**Peter Connolly**, Center Director, New Jersey MEP

**Dusty Cruise**, Center Director, Missouri Enterprise MEP

**Kathie Mahoney**, Center Director, Massachusetts MEP

**Jessica Herbert**, Center Director, New York MEP

P. Raghavan briefed the Board on the workforce panel discussion and gave the floor to G. Rao who introduced the Center Directors and facilitated the discussion on workforce.

- G. Rao asked how the NJ MEP and Mass MEP deliver programs and trainings that focus on apprenticeships and internships and how other MEP Centers can utilize or leverage what they have done over the years. K. Mahoney replied that Mass MEP has an apprenticeship program called the Frontline Supervisor to train workers who are promoted to supervisor without the necessary skills; it is one of their largest revenue generators. Mass MEP is also working on a DEI assessment for companies. P. Connolly remarked that NJ MEP has had apprenticeship programs with the Department of Labor for many years. They have recently developed the Makers and Creators which aims to visit all 21 counties in New Jersey targeting underserved high schools in order to

expose those students to internships, apprenticeships, and training. P. Connolly observed that females outdo every male walking up to the equipment; they're better welders. P. Connolly also observed that according to discussions with his EDA, it may be too late for high school students, that NJ MEP should start training middle school students for a career in manufacturing, and that industry should educate high school guidance counselors that manufacturing is a viable alternative to four-year university education.

- G. Rao asked how NY MEP and Missouri Enterprise deliver programs and trainings on employee recruitment and retention and how other MEP Centers can utilize or leverage what they have done. D. Cruise replied that Missouri Enterprise uses Lean Six Sigma overall continuous improvement program to implement and train workforce, conduct quality work, and address food safety and open book management. Missouri also has a workforce readiness and career program that profiles communities and job vacancies throughout the state. J. Herbert replied that western New York MEP Center Insyte Consulting partners with Buffalo Manufacturing Works on a program called Shift which helps manufacturers adopt technologies around Industries 4.0 and provide employee training on automation and additive manufacturing. The MTAC Center in the Mid-Hudson works with SUNY New Paltz to take in junior engineering students to work with their manufacturers over their last two years of college. The Center for Economic Growth partners with Hudson Valley Community College on apprenticeship programs around precision metal, composites and plastics. A MEP Center in the Mohawk Valley associated with Mohawk Valley Community College has worked with Wolfspeed, one of the world's largest 200 millimeter silicone chip fabricators, to set up a 10-month certificate program for entry level manufacturing and equipment tech.
- G. Rao asked how the Ohio MEP sub-recipient housed at Columbus State Community College would recommend other centers to approach pipe-line building for the next generation of manufacturing workforce. J. Spain replied that within central Ohio there is need for middle-skill positions such as multi-craft maintenance technicians. The MEP at Columbus State worked with the Ohio State University to convene several regional manufacturers ranging from SMEs to OMEs to large manufacturers like Honda of America, Abbott Labs, and Worthington Steel, and they discovered that these manufacturers were borrowing talent from each other in an unsustainable model; they recognized to bring more people into the workforce at a younger age. Therefore the MEP at Columbus State developed the Modern Manufacturing Work Study Program which starts engaging students in middle schools with age appropriate experiences such as camp, follows them through high school, and then provides an accelerated higher education program around math, engineering and manufacturing skills that allows the student to matriculate into a one year paid work study program with one of the MEP's 21 manufacturing partners. Post-pandemic, manufacturers are saying that they are still facing challenges identifying middle-skill employees as well as securing pipelines to entry level positions. MEP at Columbus State has responded to this challenge by forming even closer relationships with area high schools, career and tech centers, and community colleges, and has started a number of short term manufacturing training programs, often specific to semiconductors, electrification, and auto manufacturers. J. Spain remarked that recruiting is the single hardest part of building and developing workforce programs, and reiterated that forming partnerships is the most important key to securing the workforce pipeline.
- G. Rao asked the panel what untapped or underserved communities they support in their workforce programs. P. Connolly described NJ MEP's program with the Pentagon's Office of Local Defense Communities. The five-year \$5 million program based out of Picatinny Arsenal and Joint Base McGuire-Dix-Lakehurst trains veterans and their

families in Manufacturing Skills Standards Council (MSSC) as they outsource from the military. The program results in two nationwide certifications: certified production technician and certified logistics technician. NJ MEP has also partnered with the County College of Morris, which has an advanced manufacturing center, and developed the New Jersey Defense Community Consortium, which is currently comprised of 65 companies who are willing to hire veterans coming out of the program. D. Cruise remarked that Missouri Enterprise is working with the Goodwill of Western Missouri and Eastern Kansas to train unemployed people through a SME certified manufacturing program. Missouri Enterprise also has a women's reentry program based out of Chillicothe Prison. Called ASPIRE MO, it provides training in MSSC curriculum using Skillboss, a \$40,000 piece of equipment which exposes trainees to control panels, mechanical drives, belts, chains, robotics, mechanic, hydraulic, troubleshooting, maintenance, precision measuring, Lean processes, drives, sensors, and PLCs. There are currently 74 women lined up to matriculate through ASPIRE MO over two years. Mass MEP is also partnering with a corrections facility to do manufacturing basic skills training and is partnering with local organization to provide support and wraparound services, K. Mahoney said. J. Spain described an access program out of MAGNET, Ohio MEP's northeast SRA. It is a short term 120-hour career readiness program open to residents of Cuyahoga County; 60% of participants were justice-impacted. J. Spain mentioned that Ohio's Columbus State MEP is able to matriculate veterans into job positions more easily than justice-impacted individuals, but the state and the nation is in an environment where employers are eager and open to new ways to onboard employees. J. Herbert described the fast-track program at AIM, the NY MEP sub-recipient at Mohawk Valley Community College, which is free for underserved and at-need high-risk community members. AIM has also partnered with Utica Center for Refugees to drive job placement, training, and recruitment. Giotto Enterprises, a manufacturer with a portfolio of seven advanced manufacturing organizations, works with NY MEP to fill gaps in employment.

- G. Rao asked how the NIST MEP team can better support centers offering workforce programs and services. D. Cruise observed that MEP Centers across the 51 jurisdictions have a lot of capabilities, strengths, expertise and experience, and should collaborate to help each other. K. Mahoney mentioned that the Center Leadership Team which advises P. Raghavan helps broadcast stories and share information. J. Spain remarked that centers would benefit from a workforce skills training standard that is consistent across regions, such as employability skills, and access to a common curriculum and database. J. Herbert reiterated the desire for a way to share information nationally.
- G. Rao opened the floor to questions and discussion from the Board. B. Hawes reiterated the importance of workforce over the course of the day's conversations. A. Parker commended the panel for sharing their experiences and observations and discussed its importance to national security. J. Smith asked what kind of follow-up the centers are doing after the training programs. J. Spain replied that follow-up is expensive and requires dedication on the front end. MAGNET, for example, has written into their funding to work with a third party to follow-up with graduates 12 and 18 months later. T. Smith discussed career and college readiness and asked whether guidance counselors or parents are more responsible for driving high school students into four-year universities. P. Connolly replied that it's both. J. Spain discussed Ohio MEP's Modern Manufacturing Mondays for Mom (MMMM) initiative which introduces manufacturing career paths to the person who students listen to most. As a result of this initiative, they saw enrollment increase among females at Columbia State's engineering department. A. Parker discussed her community's 2040 plan and cradle to career

initiative. P. Moulton reiterated the importance of bringing girls into the fold of engineering and manufacturing, referencing a Florida MEP partnership with Citrus Girl Scout Council. Furthermore, retaining women in the field of engineering is directly related to the culture at the workplace.

- B. Hawes thanked the panel and opened the floor to public comment.

## Public Comments and Meeting Wrap Up

### Public Comment

#### **Speakers:**

**Michael Marusic**, AIM/NY MEP

**Jyoti Malhotra**, NIST MEP

- M. Marusic from the MEP Center in Utica, New York, thanked the Board, the staff and the panel for holding the meeting and made remarks about the impact that working with industry in the MEP Centers have had on him.
- J. Malhotra from NIST MEP made remarks about how NIST MEP is going to cross-coordinate among the MEP National Network. As the America Works network is now concluded, NIST MEP is going to revitalize a NIST MEP-led Workforce Working Group.

### MEP Advisory Board Meetings - 2024

- Planning continues – details coming soon
- **Tuesday, March 5 and Wednesday, March 6, 2024**
  - Gaithersburg, MD and Washington, DC
- **Date TBD, June 2024**
  - Virtual
- **Date TBD, September 2024**
  - Location TBD
- Dates are subject to change

### Meeting Wrap Up

B. Hawes invited the Board members to share their final thoughts. P. Raghavan delivered some closing remarks. B. Bobb, Designated Federal Officer, adjourned the Advisory Board Meeting at 5:43 p.m.

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