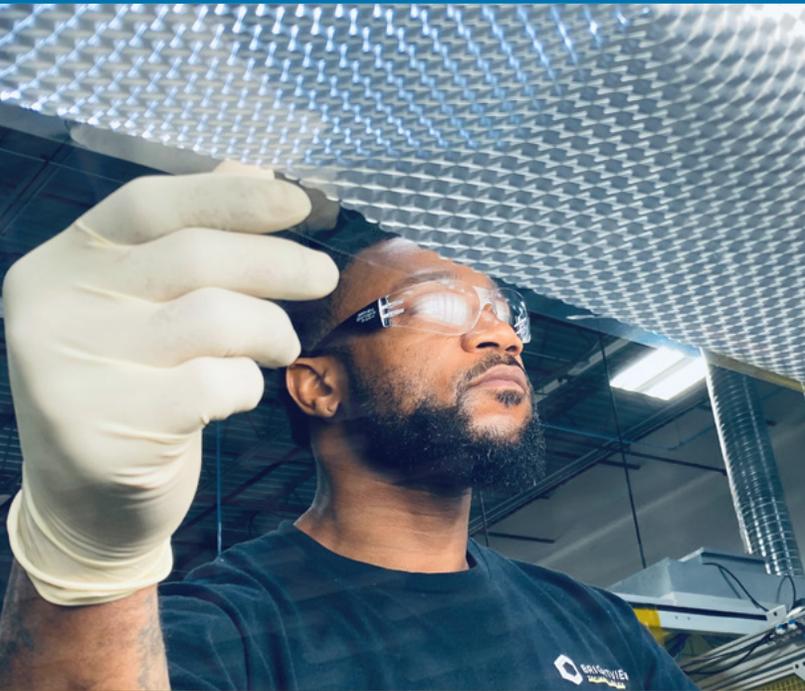




MEP  
National  
Network™

## 2023-2027 STRATEGIC PLAN



# INTRODUCTION BY THE DIRECTOR

The work of manufacturing is life changing and life sustaining. The backbone of manufacturing in America is the thousands of small and medium-sized manufacturers (SMMs) spread across the country. With 98.9% of manufacturers having fewer than 500 employees, they by far make up the largest part of American manufacturing and play a vital role in our nation's economic and social well-being<sup>1</sup>. The unique relationship and work of the MEP National Network™ with those small manufacturers has had enormous impacts. Through our partnerships with SMMs, we have created jobs, saved businesses, secured financial stability, bolstered communities, been a supply chain lifeline to large manufacturers, and sustained a way of life in America. We have set food on tables, put kids in college, provided health care for families. We have made a difference. We are poised to make an even greater difference in the future.

In 2017, the MEP created a strategic plan to guide its work through 2022. That plan evolved as time passed – it was appropriately modified and adapted to economic shifts and emerging trends over the five years of its duration. It served its purpose well and the MEP that exists today is significantly different and stronger than the one that existed in 2017.

***The MEP National Network is now a reality. ... This new plan will provide strategic direction for its members and partners, but the implementation of those strategies will reside with each of the individuals who make up the Network, enabling and empowering them to craft the most effective means of execution for their contexts.***

One of the pillars of the 2017 plan was to complete the transformation of the MEP from a system of 51 individual Centers to a thriving Network of collaborating Centers and partners capable of addressing national issues in addition to serving manufacturers in each of the states and Puerto Rico. That transformation work has been advanced greatly and the MEP National Network (MEPNN) is now a reality.

With the conclusion of the prior plan, a new strategic plan will set the direction for the MEPNN for the next five years. An important distinction between the new plan and the old one is that the new version is a plan for a network of complex entities, not an organizational plan for a solitary agency.

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<sup>1</sup> <https://www.census.gov/programs-surveys/cbp/data/datasets.html>

This new plan will provide strategic direction for its members and partners, but the implementation of those strategies will reside with each of the individuals who make up the Network, enabling and empowering them to craft the most effective means of execution for their contexts. The coordination and progress of those implementation plans will be supported and maintained by the NIST MEP, the National Network Center Leadership Team (NNCLT), the regional nodes, the MEP Center boards and the MEP Advisory Board.

*The implementation of those strategies will evolve through the joint effort of the members of the National Network and will be developed by them as we move into the future.*

To develop the new strategic plan, we reviewed and updated our core values. We conducted wide research on trends and issues that manufacturing will face in the next five years. We consulted over 30 resources and experts working in the field of manufacturing, interviewed every MEP Center Director as well as some of their board members, solicited input from key partners such as the Foundation for Manufacturing Excellence (FORME) and the MEP Advisory Board, and engaged members of the NIST MEP staff. Through that process we identified three critical challenges that manufacturing must address, and which will be the primary focus of our efforts over the next five years. In addition, we identified four supporting goals that were essential to achieving the three primary goals. We then developed a vision of the structure and goals for the MEPNN of 2027. With those targets in mind, we then developed the key strategies that will address the critical challenges and take us to where we want to be in five years.

The implementation of those strategies will evolve through the joint effort of the members of the National Network and will be developed by them as we move into the future.

We are excited about the next five-year strategic plan and how the MEP National Network will support SMMs and U.S. manufacturing to build a strong U.S. economy, creating and retaining a diverse and skilled workforce with real wages, and revitalizing U.S. supply chains to support critical industries.

Sincerely,



Pravina Raghavan  
MEP Director

# MEP NATIONAL NETWORK'S ENDURING VALUES

Any strategic endeavor begins with an articulation of the mission and values of the organization to serve as a foundation for the work to come. These essential aspects of the organization are constants that will not change, even as the organization faces a shifting environment and implements new strategies to grow, adapt and thrive.

The MEP National Network's mission is to strengthen and empower U.S. small and medium-sized manufacturers. The MEP National Network is comprised of NIST MEP, the 51 MEP Centers located in all 50 states and Puerto Rico, the MEP Advisory Board, MEP Center boards, and external organizations such as the Foundation for Manufacturing Excellence (FORME), as well as over 1,400 trusted advisors and experts at approximately 450 MEP service locations, standing ready to provide all U.S. manufacturers with access to resources they need to succeed.

We will not waver in our mission, even as the scope, scale, and focus of our work evolves and changes to meet emerging challenges and opportunities. We also will remain steadfast and true to the following core values and central tenets as they continue to help shape and define the ways in which we accomplish our work in the world.



## MISSION

Strengthen and empower U.S. manufacturers.



## VISION

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



## DRIVING FORCE

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



## ROLE

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

## CORE VALUES

The MEP National Network stands for an unwavering commitment to:



### LEARNING AND INNOVATION:

We maintain cutting-edge knowledge and expertise in manufacturing



### PERSONAL SERVICE:

We work hand-in-hand with individual manufacturers, providing them with the right solutions at the right time



### SEAMLESS COLLABORATION:

We work together sharing knowledge, connections, and resources to benefit manufacturers and meet the nation's manufacturing needs



### STRATEGIC PARTNERSHIPS:

We partner with local, state and federal agencies, associations, academia, and other entities working in manufacturing to make regional and national impacts



### HIGH IMPACT RESULTS:

We drive results and ensure success



### CONTINUOUS IMPROVEMENT:

We measure performance, refine and redesign with an eye to the future, never settling for the status quo



### DEVELOPING PEOPLE:

We strengthen workforce and develop leaders

## CENTRAL TENETS

### **EMPOWER MANUFACTURERS**

We assist U.S. manufacturers in embracing productivity-enhancing innovative manufacturing technologies, navigate advanced technology solutions, and attract and retain a skilled and diverse workforce.

### **CHAMPION MANUFACTURING**

We actively promote the importance of a strong manufacturing base as key to a robust U.S. economy and to the protection of our national security interests by creating awareness of innovations in manufacturing, enabling workforce development partnerships to build a stronger and diverse workforce pipeline, and maximizing market awareness of the MEP National Network.

### **LEVERAGE PARTNERSHIPS**

We leverage national, regional, state and local partnerships to gain a substantial increase in market penetration, identify mission-complementary advocates to help the MEP National Network become a more recognized manufacturing resource brand, and build an expanded service delivery model to support manufacturing technology advances.

### **TRANSFORM THE NETWORK**

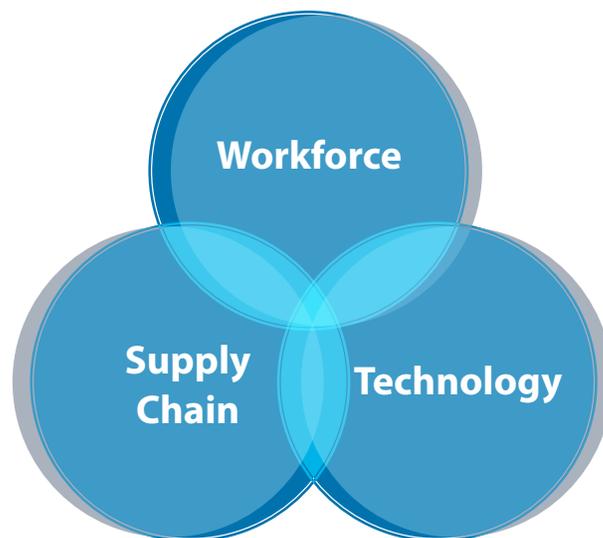
Maximize MEP National Network knowledge and experience by operating as an integrated National Network, increase efficiency and effectiveness by employing a learning organization platform, and create a resilient and adaptive MEP National Network to support a dynamic U.S. manufacturing base.

# THREE CRITICAL CHALLENGES FACING AMERICAN MANUFACTURING

Over the past years, most recently because of the COVID-19 pandemic, three significant challenges for American manufacturing have emerged:

- A national manufacturing workforce crisis that is and will deter economic prosperity
- Supply chain issues that leave the country, its economy, its security and its citizens vulnerable; and
- Technology-related deficiencies and constraints which threaten national security, and impact and escalate the other two challenges

Each of these challenges is complex in its own right, and they become more so as they impact and interact with one another. They are, in fact, overlapping and connected issues as the graphic below indicates.



While no single solution exists for these challenges, one thing is clear. A key link in American manufacturing is the thousands of SMMs that make up the majority of manufacturers in the U.S. They enable the rest of the system to work and thrive, and are integral to overcoming the three current challenges.

The MEP National Network, through its mission to strengthen and empower SMMs, is an essential contributor to the success of American manufacturing. Having served SMMs for over 30 years, the MEPNN understands what it takes to engage with the manufacturing ecosystem in a way that elevates the U.S.'s capability to respond to these national challenges. Its intimate knowledge of SMMs and its relationships with them make the MEPNN a unique and vital player in American manufacturing. Addressing these three critical challenges will be a focus of the MEPNN over the next five years.

## GOALS FOR 2023-2027

In response to the three critical challenges and to reach its desired five-year destination, the MEP National Network 2023-2027 Strategic Plan has three primary goals:

- **Narrow the workforce gap**
- **Mitigate supply chain vulnerabilities**
- **Leverage technology**



# DESTINATION 2027

In addition to meeting the challenges facing manufacturing, the MEPNN must continue to evolve. To build out its strategic plan, the MEPNN crafted a description of where it wanted to be in five years. It identified what must be true of the National Network for it to make the impacts it desires.

By 2027, the MEPNN aspires to have achieved the following:

- The MEPNN has the dual capacity to excel at serving SMMs in individual states, and to function as a powerful, cohesive, collaborative Network capable of impacting complex regional and national issues.
  - The MEPNN, both in the Centers and at NIST MEP, has the talent and expertise in-house and through its connections to solve the cutting-edge challenges that manufacturers and manufacturing face.
  - The MEPNN has a comprehensive and relevant set of services to support manufacturers and manufacturing.
- The MEPNN is established as a recognized national resource and expert authority in American manufacturing; it has a story and is telling it well.
- The MEPNN is a valued partner with other federal agencies, state authorities, associations and other groups working in manufacturing.
- The MEPNN has the knowledge and capacity to support SMMs and manufacturing in anticipating and being prepared for future trends.
  - The MEPNN has the resiliency to adapt to the unexpected and to deliver results in ambiguity.
- The MEPNN enables consistent and cost-effective technology adoption.
- The MEPNN annually increases its market penetration.
- The MEPNN annually increases the economic impacts it creates for U.S. manufacturers.
- The MEPNN enables SMMs access to a skilled workforce.
- The MEPNN helps SMMs become nimbler in pivoting into new markets.
- The MEPNN is engaged in the relevant new directions that the country is going in relation to manufacturing, thereby helping the MEP program remain relevant in a swiftly changing industry.



# STRATEGIES FOR THE 3 PRIMARY GOALS

## NARROW THE WORKFORCE GAP

**Enable SMMs to navigate the current workforce shortage while improving productivity and profitability through:**

Upskilling

Use of technology and productivity enhancements

Partnerships (e.g., connect educational entities to manufacturing needs and jobs/careers)

Improving work conditions, job quality, career paths, etc.

Assessing underserved populations and integrating them into the manufacturing industry

Making the case for integration of underserved populations with SMMs

**Build a pipeline of future employees for the manufacturing sector through:**

Rebranding and marketing the public image of manufacturing nationally and in the states

Broadening partnerships and connections with educational and other entities working in this space

## MITIGATE SUPPLY CHAIN VULNERABILITIES

**Increase supply chain visibility**

End-to-end awareness (supplier's supplier and customer's customer)

Mapping supply chains (key industries, in individual states)

Working with original equipment manufacturers to map out how SMMs fit into their supply chains

**Assess supply chain risk**

Able to identify vulnerabilities

Able to rapidly detect risk as they emerge

Strengthen supplier development

Increase supplier scouting capacity

## LEVERAGE TECHNOLOGY

### **Increasing technology adoption**

Identifying early adopters and leverage their success to motivate the next wave of manufacturers

Defining tech capabilities and business cases for adoption for customers to increase impact (IT and operational technology (OT))

Educating Center staff on the different kinds of technology to increase impact with customers

### **Ensuring wholistic, comprehensive application and use of technology (not just in production but in business operations, etc.)**

Creation of road maps for customers and aligning them to customer's strategic goals

### **Strengthening cybersecurity capabilities**

Communicating the importance of mitigating cybersecurity risks

Ensuring that MEP Centers are adhering to the cybersecurity guidance provided by NIST MEP program.

### **Partner with federal labs to accelerate the use of new technologies**

Co-develop tech capabilities and business cases for adoption to bring new insights to industry

## INTERSECTIONS ACROSS STRATEGIC GOALS

### **Narrowing the workforce gap through engagement in future technologies**

Building a pipeline for the future by exposing the younger generation to the advanced technologies manufacturers will soon deploy

### **Increasing technology adoption across served customers**

Easing pathway to advanced technology adoption by providing manufacturers access to a workforce that is already trained in those advanced technologies

### **Strengthen workforce knowledge of supply chain dependencies to help predict supply chain risks**

Create a resilient workforce that understands new technologies and uses them to increase supply chain resiliency through the prediction of supply chain risks

# STRATEGIES FOR NETWORK PARTNERS

## STRATEGIES FOR CENTERS

Centers are the front-line delivery arm of the MEP National Network. They engage directly with the SMMs, and thus must be attuned to their needs and capable of providing solutions to meet those needs. Below is a set of SMMs' needs ascertained through interviews and research. The ensuing strategies identify areas of focus for Centers as they work to meet those needs and thereby strengthen the Network's capacity to reach the supporting goals.

### IDENTIFIED NEEDS OF SMMS:

- How to improve business practices (business planning, succession planning, sustainability, etc.)
- How to use strategic approaches to transform their manufacturing business
- How to adopt and use technology
- How to navigate state and local workforce challenges
- How to develop supply chain resilience, supplier development, etc.
- How to navigate policies at the state level to increase the awareness and support of manufacturing
- How to recognize and respond to emerging trends that impact manufacturing
- How to have greater adaptability in the face of disruptions
- How to stay abreast of technical expertise (operations, lean, industry specific knowledge, etc.)
- How to identify and build partnerships



## KEY STRATEGIES TO ADDRESS SMMS' NEEDS:

### ■ 1. Embrace future growth

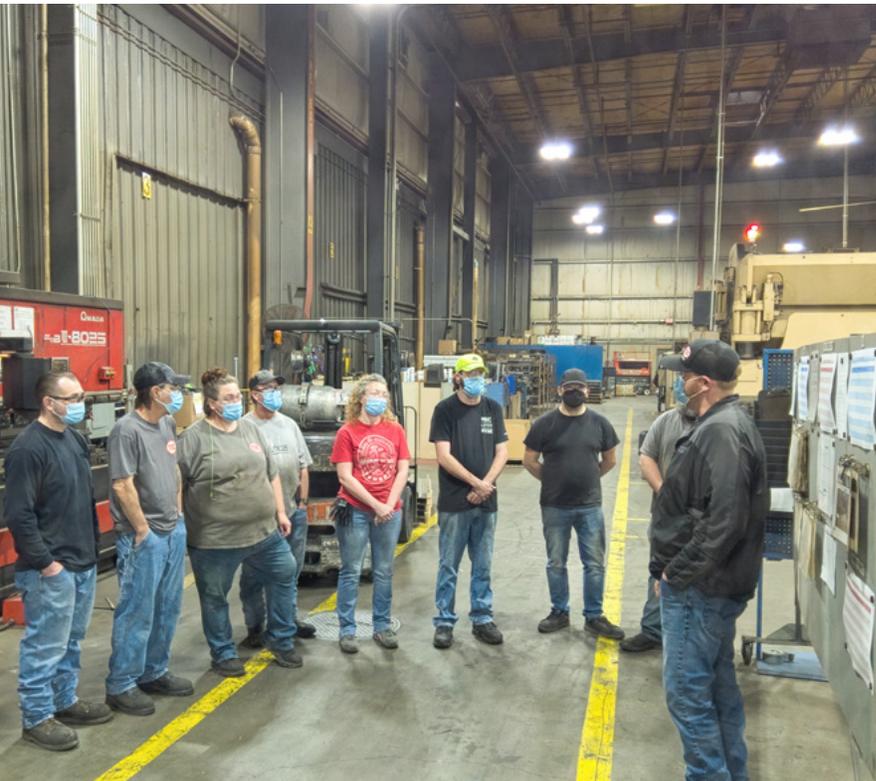
Improve branding and marketing to increase market penetration

Connect marketing to growth strategies

Prepare operational business models and practices to leverage increased funding

Deliver an increased return on investment and maximize impacts

Develop succession planning for key Center personnel to sustain growth



## ■ 2. Broaden and deepen expertise

Centers should focus on broadening and deepening their expertise in:

### Core services

Maintain a strong menu of core services such as quality and continuous improvement to meet SMMs' current and near-term needs and opportunities. These services should be connected to the future growth marketing strategy

### Innovative offerings

Broaden the variety of innovative offerings and services to meet the emerging needs and opportunities of manufacturing and SMMs

Help SMMs to adapt to emerging changes and disruptions, to deal with ambiguity, and to develop the capacity to learn their way to success at the speed of business

### Workforce solutions

Strengthen the Center's capability to help SMMs navigate the current workforce shortage while maintaining productivity and profitability through:

- Upskilling
- Use of technology
- Partnerships (e.g., connect educational entities to manufacturing needs and jobs/careers)
- Improving work conditions, job quality, career paths, etc.
- Assessing underserved populations and integrating them into the manufacturing industry
- Making the case for integration of underserved populations with SMMs

Develop strategies and capabilities to support SMMs' ability to build a pipeline of future employees for the manufacturing sector through:

- Rebranding and marketing the public image of manufacturing nationally and in the states
- Broadening partnerships and connections with educational and other entities working in this space

### Technology solutions

Adopt a comprehensive and sustainable approach to technology offerings and solutions (e.g., tech in business processes, OT, and IT, not just in manufacturing processes)

## ■ 2. Broaden and deepen expertise (continued)

Centers should focus on broadening and deepening their expertise in:

### Technology solutions

Invest in priority areas such as robotics, automation and demonstration labs

Develop services and offerings that encourage SMMs to invest in cybersecurity

Develop a business case and technical road map that enables SMMs to understand the return on investment for technology services

- Use assessments as a means to develop business cases and technical road maps

Establish and maintain technology partnerships

### Business planning and operational practices

Provide services that enable SMMs to develop best business and operational practices, including succession planning and ownership transfer

- Develop the means to ascertain data on small manufacturing firms and the impact that these issues have on them
- Prioritize building and maintaining trust, confidence and teamwork with SMMs
  - This is the foundation for all succession planning efforts. It enables Centers to show that they are valuable enough to help SMMs get to their goals and trusted enough to hold confidential information.
- Provide support to SMMs in the areas of financial resilience and management
  - This will require IT, OT, and process automation that allows people to get their hands on actionable data in a timely manner
- Develop business continuity programs that support the transitions that occur in small businesses
- Provide risk assessments to help buyers understand what they are getting into before they invest

### ■ 3. Strengthen relationships and influence with state authorities and agencies

Continuously identify the individuals and groups, including but not limited to state authorities and agencies, who drive policies that impact manufacturing in the state and cultivate relationships of influence with them

This effort must be continuous due to the constant turnover in the state agency jobs that affects an MEP Center's ability to build strong, long-lasting relationships

Engage with Small Business Development Centers and other partners who receive federal funding to help educate the state on manufacturing as a subset of small business (and other domains) and increase the amount of federal funding

Educate and inform appropriate authorities regarding the importance and impact of manufacturing in their respective states

Centers need to build a compelling story about how manufacturing contributes to gross domestic product, workforce issues, and other priority areas for the state

Develop a process for assisting the state authorities in developing:

A comprehensive picture of their manufacturing ecosystem

A map of the primary supply chains that impact the state

A strategy for manufacturing

Define which parts of the state system you want to influence and create strategies that tailor your storytelling so that it is compelling to your audience

With the support of NIST MEP, become a major voice and thought leader for manufacturing in the state

Stay up-to-date on manufacturing trends within the state

Partner with NIST MEP and other resources to routinely analyze the manufacturing base in the state and present those findings where possible

#### ■ 4. Expand collaboration with other Centers and participation in the MEP National Network through:

Information and knowledge sharing

Consistent communication

Regional and multistate engagements with national clients

Participation in regional nodes

Collaboration in pursuing national opportunities for state, federal or other funding sources

#### ■ 5. Develop and exercise convening power to build strategic partnerships in the state and regionally

Host manufacturing networking events

Provide services and advice to the economic development enterprises



## STRATEGIES FOR THE NIST MEP

Much of the strategic work of the NIST MEP will be an extension of the four pillars referenced earlier:

CHAMPION MANUFACTURING

EMPOWER MANUFACTURERS

LEVERAGE PARTNERSHIPS

TRANSFORM THE NETWORK

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To execute and continue to build on those pillars, NIST MEP will:

### 1. Recast and adapt its operations, policies, processes, practices and structures to:

Accommodate growth, ensuring its capacity to secure and allocate major funding increases

Enable increased support of individual Centers in their work with SMMs and in their states to create alignment and achieve strategic goals of the National Network

Encourage and enable Centers to function as a coherent National Network capable of addressing national issues, not merely as 51 independent organizations

Ensure that measures support intended outcomes and strategies, and incentivize desired behaviors and practices

Promote the recruitment and retention of talent with expertise to support strategic priorities, with a special focus on emerging technologies, cybersecurity, workforce and supply chain

### 2. Expand partnerships and strategic relationships to build greater status, influence, political goodwill and resources for MEP and manufacturing, with a focus enhancing partnerships and relationships with:

NIST

The Department of Commerce

Other federal departments and agencies to promote interagency collaboration

State authorities and agencies

Other strategic partners, such as educational entities and various manufacturing related groups

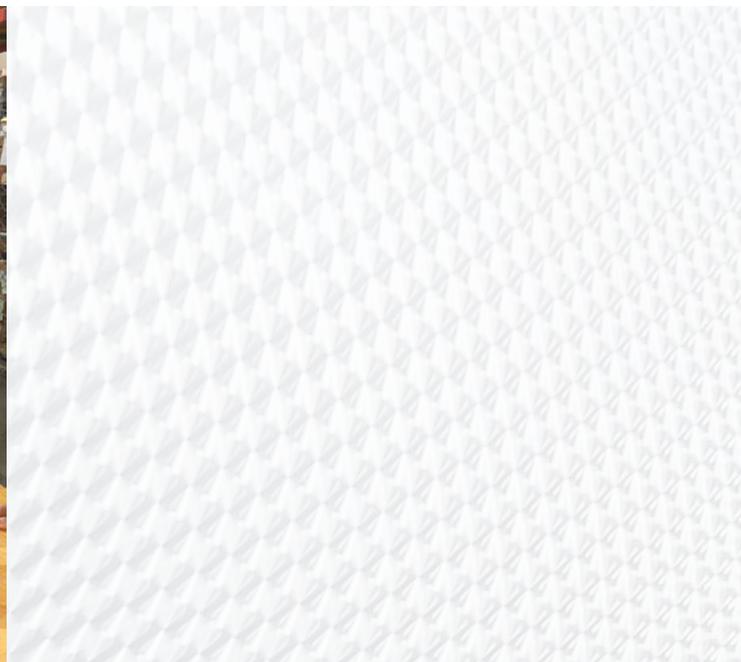
### 3. Develop its knowledge and learning capabilities and leverage its convening power to become a recognized national manufacturing thought leader, convener and authority on major trends impacting manufacturing

### 4. Build the MEP brand, messaging, and marketing reach to champion manufacturing and manufacturers at the state and national levels

Develop a brand that is consistent and keeps the MEP National Network voice present and in front of influential partners

- The messaging needs to be consistent across all Centers and all Centers commit to the approach and actively show that they are part of the MEP National Network.
- The branding should reach beyond collateral materials and be in support of a core identity for the MEPNN
- The branding should have a level of standardization that reaches beyond the tactical aspects. It should be focused on 3-4 key ideas that can be easily ingrained in the behaviors that are executed by all Centers
- Continue publishing materials, video, blogs and other communication methods to showcase the MEP National Network and its impacts on small and medium manufacturers and the U.S. Economy

Continually refresh the brand as needed, holding to the core identity and purpose, but providing a new way of seeing it, appropriate to the emerging contexts



## STRATEGIES FOR VITAL PARTNERS

1. **Strengthen the coordination and collaboration between NIST MEP and the National Network Center Leadership Team to accrue increased political capital, goodwill and financial support**
2. **Access and leverage the knowledge, expertise, experience and political insights of the MEP Advisory Board to promote progress and encourage accountability in executing the MEP National Network strategies and achieving its mission**

