

# **National Institute of Standards and Technology Manufacturing Extension Partnership Advisory Board Minutes of the September 2009 Meeting**

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## **Background**

The National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP) Advisory Board met in an open session from 8:30 a.m. to 3:30 p.m. on September 24, 2009, at the Embassy Suites Dallas – Dallas/Fort Worth Airport North Outdoor World in Grapevine, Texas. Approximately 36 attendees composed of Board members, MEP staff, and MEP Center representatives attended the meeting.

## **Attendees**

### **Board Members**

Edward "Ned" W. Hill, Ph.D., Chair, MEP Advisory Board, and Dean of the Levin College of Urban Affairs, Cleveland State University  
Mark Rice, Vice Chair, MEP Advisory Board, and President, Maritime Applied Physics  
Jim Bean, President and Chief Executive Officer, Preco Electronics, Inc., and Member, Advisory Board, TechHelp  
Lydia Carson, President and Chief Executive Officer, Balm Innovations, LLC  
Cheryl Hill, Owner and Chief Executive Officer, Hill Manufacturing, Inc.  
Jim Jacobs, President, Macomb Community College  
Fred Keller, Chairman and Chief Executive Officer, Cascade Engineering  
Keith Mayeaux, President, A+ Corporation, and Member, Industrial Advisory Board, Manufacturing Extension Partnership of Louisiana

### **MEP Staff**

Aimee Dobrzeniecki, Deputy Director  
Mike Simpson, Director, Systems Operations  
Ronald Gan, Administrative and Financial Management Officer  
Mellissa Ayala, Federal Program Officer  
Alex Folk, Manager, Center Operations  
Karen Lellock, Senior Policy Advisor  
Dan Lilley, Account Manager  
Megan Mercier, Project Manager  
Mark Schmit, Director, National Accounts  
Dave Stieren, Technology Acceleration Manager  
Kari Reidy, Project Manager, National Accounts  
Steve Thompson, Director, Program Development  
Gary Thompson, Account Manager

Mark Troppe, Manager, Strategic Partnerships  
Ken Voytek, Chief Economist  
Bruce "Tab" Wilkins, Account Manager

### **MEP Center Representatives**

Drew Casani, Director, Texas Manufacturing Assistance Center  
Eric Esoda, Director of Operations, Northeastern Pennsylvania Industrial Resource Center  
Alan Gehringer, Managing Director, Regional Office, Pennsylvania Industrial Resource Centers  
Steve Holland, Director, Montana Manufacturing Extension Center  
Michael Klonsinski, Director, Wisconsin Manufacturing Extension Partnership  
Jeff Kohler, Director, Virginia's A. L. Philpott Manufacturing Extension Partnership  
Jack Pfunder, Executive Director, Pennsylvania Manufacturers Resource Center  
Jay Tice, Director, Manufacturing Extension Partnership of Mississippi  
Susan Tully, Texas Manufacturing Assistance Center

### **Facilitators**

Gary Yakimov, Initiative Director, Corporation for a Skilled Workforce  
Lindsey Woolsey, Senior Policy Associate, Corporation for a Skilled Workforce

### **Assisted by**

SciComm, Inc.

### **Welcome, Introductions, and Opening Remarks**

***Moderator: Ned Hill, Ph.D., Chair, MEP Advisory Board, and Vice President, Economic Development, Cleveland State University***

Dr. Hill convened the MEP Advisory Board Meeting and welcomed Advisory Board members, MEP staff, and MEP Center representatives. The Board is in a good position to affect American manufacturing. The goal of the meeting is to discuss and develop an American manufacturing Policy Paper, *Opportunities for Action: U.S. Manufacturing in the 21st Century*.

### ***Speaker: Aimee Dobrzeniecki, Deputy Director, NIST MEP***

NIST MEP is currently developing three documents. The first report is being produced in partnership with the Manufacturing Institute of the National Association of Manufacturers (NAM). This report, *The Modern Facts About Manufacturing*, is to be released in October 2009. The MEP Advisory Board's policy paper, *Opportunities for Action: U.S. Manufacturing in the 21st Century*, will support a strong manufacturing industry. The third report, *Renewing our Commitment to a Strong U.S. Manufacturing Base: Expanding the Impact of the Manufacturing Extension Partnership*, is focused on MEP's business model and recommendations to expand the program's reach and impact to a larger portion of the industry.

In developing the Board's policy paper, other documents of interest include:

- *America COMPETES Act of 2007*, which supports innovation through research and development and to improve the competitiveness of the United States by creating

opportunities to meaningfully promote excellence in technology, education, and science (COMPETES)

- *Public Law 110-69, August 9, 2007, the America COMPETES Act*
- *Investments for Manufacturing Progress and Clean Technology (IMPACT) Act of 2009, which proposes to expand and focus MEP on clean-energy manufacturing*
- Fact sheet on *Green Suppliers Network*, a collaborative effort among industry, U.S. Environmental Protection Agency, and NIST MEP to work with large manufacturers in engaging their small and medium-sized suppliers to employ Lean and Clean methodologies to increase productivity, reduce waste, and boost profitability
- Fact sheet on *National Innovation Marketplace*, where MEP is connecting manufacturers to technology and business opportunities to facilitate suppliers to access a range of product-development and commercialization assistance services to help rapidly move ideas from concept to investment, manufacturing, commercialization, and distribution
- *Apollo Green Manufacturing Action Plan – GreenMAP*, which supports Federal investment in the domestic manufacture of clean-energy equipment and components and in making manufacturing plants more energy efficient.

**Speaker: Dr. Hill, Chair, MEP Advisory Board**

The policy paper, whose audience will be U.S. policymakers, should describe the role of modern manufacturing in the U.S. economy. *Opportunities for Action: U.S. Manufacturing in the 21st Century* should provide a clear picture of the future of American manufacturing – an industry that must move forward with a new model. The policy paper should describe the current state of manufacturing, the role it plays in the U.S. economy, and the challenges faced by American manufacturers in today’s economy and the globalization of manufacturing. The policy paper should be unbiased, not one developed by manufacturing lobbyists, and based on facts to help policymakers formulate effective Federal policies to support the importance of manufacturing in the U.S. economy and not have U.S. manufacturers be seen as the social safety net of last resort.

Other Board-member thoughts on the goals of the policy paper are as follows:

- The policy paper is being targeted to the right audience (policymakers) and should get proper attention; however, need effective sound bites so that audience clearly understands the state of U.S. manufacturing.
- The policy paper should have statements that are resonating and should make some policy recommendations that are close to being actionable.
- Many Americans lack the understanding of what manufacturing is to the country. The paper should establish a positive image of manufacturers and what manufacturers have done to help build America and our role in a strong U.S. economy.
- The endpoint of policy paper is to recommend legislative action/mid-level policy suggestions. However, the current state of manufacturing is not a monolithic problem, but a sector-by-sector problem. Therefore, we should consider looking at manufacturing from a sector-by-sector point of view.
- The paper should be aimed at those in Congress who have influence as well as policymakers. The paper should communicate to the American public what modern manufacturing is today and not what it was at the end of World War II. The paper should not be just for setting legislation, but how to bring American manufacturing to the forefront of the American public

mindset so seen as a viable sector, where people can go to school to learn about manufacturing and have a career in manufacturing.

- The objective of the policy paper should be to put NIST MEP in a position to participate in the policymaking process.
- The tone of the policy paper is important. We want readers to understand that NIST MEP has a sharp-eye view of manufacturing and its role in the U.S. economy and that NIST MEP is engaged with what is important for the economy.

Dr. Hill then introduced the two facilitators, Gary Yakimov and Lindsey Woolsey.

### **Gary Yakimov, Initiative Director, Corporation for a Skilled Workforce**

Mr. Yakimov directs the project and development portfolio for Corporation for a Skilled Workforce's business and industry initiatives to help identify and address the talent-development and management needs of businesses. Mr. Yakimov is seen as a national leader in sector- and cluster-based strategies in helping States and regions develop, implement, maintain, and enhance targeted industry strategies to grow their economies and provide a competitive workforce for their businesses to grow and prosper. His expertise lies in strategic planning, public-private partnerships, industry networks, and aligning workforce development with economic development and education.

### **Lindsey Woolsey, Senior Policy Associate, Corporation for a Skilled Workforce**

Ms. Woolsey advises States and local areas on workforce- and economic-development policies and practices. Her work focuses on industry sector-based and cluster-related workforce- and economic-development models, including strategies to transition low-skilled individuals into education and work. As such, she is well versed in industry-focused training models, including how they are designed, implemented, and evaluated.

## **Facilitated Session - Manufacturing Policy Paper**

*Facilitators: Gary Yakimov, Initiative Director, Corporation for a Skilled Workforce  
Lindsey Woolsey, Senior Policy Associate, Corporation for a Skilled Workforce*

### **Completed Facilitated Activities**

The following activities have been completed:

- The facilitators conducted and documented a brainstorming session at the 2009 Advisory Board Meeting in Orlando, FL
- The facilitators interviewed the Advisory Board on their views and manufacturing priorities
- The facilitators completed a literature search of 60 related articles and reports
- The facilitators categorized the priorities into four Critical Success Factors as follows:
  - Innovation
  - Green, Lean, and Growth
  - Global Supply Chain
  - Workforce.

### **Planned Facilitated Activities**

The goal of today's meeting is to focus the Board's point of view and desired impact. Interview comments will be reviewed and clustered, and additional comments will be solicited. The

meeting will provide the opportunity 1) to review past brainstorming comments, 2) to create additional comments, 3) to expand on existing comments, and 4) to prioritize the comments by broad categories.

The facilitated meeting centered around four areas: 1) the Critical Success Factors, 2) general discussion of the issues, 3) elements of the final Policy Paper, and 4) the role of the National MEP System. The majority of the meeting was spent in rapid brainstorming ideas.

### *Critical Success Factors of Manufacturers*

- **Innovation**
  - Innovation is tightly connected to success.
  - Firms must be innovative to survive.
- **Green, Lean, and Growth**
  - Need to show how Lean and Green leads to growth.
  - With Lean and Green, MEP has developed traction with Congress and the American public.
- **Global Supply Chain**
  - Categories are not mutually exclusive. Globalization is closely aligned with innovation.
  - How are firms connected to global supply chain?
- **Workforce Development**
  - How do we develop and retain a talented workforce?
  - How do you raise the skill level of the American workforce?
  - How do we encourage innovation and education?

### *General Discussion of the Issues that may be explored in the policy paper*

- **Public Awareness**
  - Most Americans do not know what manufacturing is.
  - Policymakers do not fully understand manufacturing.
  - MEP should be the leader in manufacturing.
  - Manufacturing is perceived as dirty smoke stacks.
  - The policy paper should be designed as an information paper for policymakers and the American public.
  - Modern manufacturing is very different than traditional manufacturing.
  - How do we bring manufacturers to the forefront in the American minds?
  - American public is confused about manufacturing.
  - The policy paper needs to define the role of the American manufacturer.
  - Many manufacturers do not balance manufacturing with service; however, manufacturers need to balance the two.
  - The policy paper should define the need for manufacturing in a visceral, clear, and obvious way.
- **What are the Barriers to Manufacturers?**
  - How can we remove barriers and add incentives.
  - We want to help, not hinder, American manufacturers.
- **What are the Incentives to the Manufacturers?**
  - No consideration has been made for social changes, like environment and employment.
- **Small Manufacturers**

- The paper needs to address the needs of the small manufacturer.
- There is a general lack of measurement at local level.
- **Mexico and China**
  - The manufacturing role of China and Mexico needs to be acknowledged.
- **Environmentally Friendly Technology (Green)**
  - Need to provide more details about Green.
  - Green suggests Federal and State regulations and compliance. Manufacturers do not need or want more regulations and compliance.
  - Lean is a means to the end. Green is not a means to an end.
  - Green affects the bottom line in a good way. Using less electricity is good for the bottom line and for the environment.
- **Exporting**
  - An exporting manufacturer is a healthy manufacturer.
- **Taxes, Regulations, and Compliance**
  - Tax and regulation are the ways that governments interact with manufacturers.
  - How can we reduce the adverse impacts of governments on manufacturers?
  - How can regulations be useful to manufacturers?
  - Manufacturers should be receiving tax credits and grants.
  - Big manufacturer have the edge when it comes to tax credits and grants.
- **Lean**
  - Need to show how Lean leads to growth.
  - Lean, Green, and growth equate to bottom line, middle line, and top line.

### *Elements of the Final Policy Paper*

- **What is the Purpose of the Policy Paper?**
  - Need to develop a policy recommendation.
  - Level of details need to be examined. The paper should not include any clichés about manufacturing.
  - Should create a national consensus on manufacturing, not promote MEP.
  - Need to create enthusiasm for manufacturing. People should want to be involved with manufacturing. People should want to invest in manufacturing.
  - Need to consider health-care expenses.
  - Federal regulations impede progress.
  - Bright young people are not excited about manufacturing. People, in general, are not excited about manufacturing.
  - People want to invest in good products. Good products get investors excited.
  - Need to define the fundamentals. Manufacturing is the second largest sector in the U.S. economy and no one is paying attention to manufacturing. The nation's Gross Domestic Product and human aspects are not included in the report.
  - How do we develop enthusiasm about manufacturing? The answer is that we create innovative products.
- **How Should We Define the Problem?**
  - Manufacturing is not a monolithic problem, involving just one sector of the American economy. We need to show how other economic sectors, like exporting and employment, are affected by manufacturing.
  - How do we attract manufacturing back to the U.S.?

- **Who is the Audience?**
  - The primary audience is policymakers. The secondary audience is American public.
  - Need to include effective sound bites.
- **What Should Be Included in the Policy Paper?**
  - Include examples of innovative products.
  - Include success stories.
  - It is all about the products.
  - Need to include effective sound bites.
  - The public believes that the future of economy is service, not manufacturing. Need to change that perception. Need to describe today's modern manufacturer. Need to emphasize how many jobs exist in manufacturing. Include a breakdown of types of jobs and companies and by size of companies. Manufacturing is the future of our economy.
  - The final products should include actionable items.

### ***The Role of the National MEP System***

- MEP should be the leader. How do we bring manufacturing to the forefront in American minds?
- MEP has pushed Lean for years. Lean is now a manufacturing standard. MEP should add Green to Lean. MEP should help firms make the right choices. The next generation of Lean is Green Lean.
- The Federal government alone cannot solve this problem; firms need to play a role in solving the problem.
- Manufacturers need Federal assistance. Need to define what the Federal government can do to help manufacturers.
- Even firms that do well can use help. Manufacturers do not need compliance. Compliance rules are not helpful. Anything that lowers taxes, reduces regulations, and streamlines patent laws will help.
- Need a mechanism to ensure that manufacturing is getting innovation to the product.
- Local deployment for technology is critical.

### **Concluding Comments**

The Policy Paper should be innovative, fresh, and edgy. It should be a call to action. Need to explain why this is important.

### **Announcements**

Ms. Dobrzeniecki announced that the next meeting will be held at the National MEP Conference on May 2. She thanked the Advisory Board for their contribution to the Policy Paper and their many different perspectives.

### **Adjournment**

Dr. Hill thanked the Board and MEP staff and adjourned the meeting.