



**MEP • MANUFACTURING
EXTENSION PARTNERSHIP**



MEP Advisory Board 2014 ANNUAL REPORT

MAKING AN IMPACT ON U.S.
MANUFACTURING

www.nist.gov/mep

LETTER FROM ADVISORY BOARD

The Advisory Board remains committed to working with the MEP program to identify opportunities to improve the competitiveness of U.S. manufacturers.

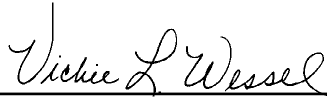
The MEP Advisory Board had yet another productive year in 2014. While the Board had to say goodbye to a number of long-term members they were also able to welcome four new members that are very active in their communities and many also serve as board members for their local MEP center.

The MEP Advisory Board Charter was modified in October 2013 to expand the Board's role in strategy assessment and evaluation, encourage the use of subcommittees and increase the number of annual meetings to three per year. 2014 was the first full year that the Board Charter was in effect and such, the Advisory Board met in January, May and September of 2014.

In addition to the three full Board meetings, a subcommittee was also formed to work with NIST MEP staff on the development of a 5 year strategic plan. At the end of 2014, the Board also created two additional subcommittees focused on topics of importance including Technology Acceleration and Board Governance. The subcommittees are in the early stages of analysis and recommendations but will continue to share findings with the full board during the 2015 meetings.

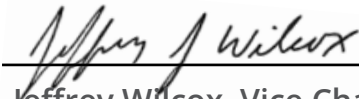
Moving into 2015, the Advisory Board is excited to continue improving the opportunities to better connect research and technologies at NIST and other federal labs with U.S. small and mid-sized manufacturers. In addition, the Board looks forward to providing advice and guidance on best practices in board governance and better connecting with the local MEP Center boards.

The Advisory Board remains committed to working with the MEP program to identify opportunities to improve the competitiveness of U.S. manufacturers.



Vickie Wessel, Chair

President
Spirit Electronics, Inc
Phoenix, Arizona



Jeffrey Wilcox, Vice Chair

VP for Engineering
Lockheed Martin Corporation,
Bethesda, Maryland



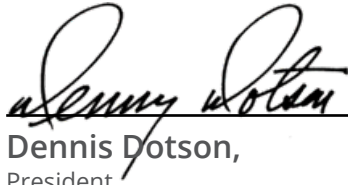
Dr. Carolyn Cason,

Associate Dean for Research, College of Nursing
University of Texas Arlington,
Arlington, Texas



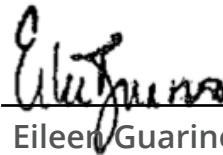
Dr. Roy, A. Church,

President
Lorain County Community College
Elyria, Ohio



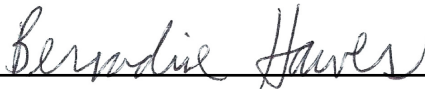
Dennis Dotson,

President
Dotson Iron Castings
Mankato, Minnesota



Eileen Guarino,

President & CEO
Greno Industries
Scotia, New York



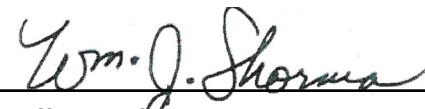
Bernadine Hawes,

Research Analyst
Community Marketing Concepts
Philadelphia, Pennsylvania



Thomas M. Lee,

President
Vulcan, Inc
Foley, Alabama



William Shorma,

President
Rush-Co.
Springfield, South Dakota



Ed Wolbert,

President
Transco Products, Inc.
Chicago, Illinois

ABOUT US

MANUFACTURING EXTENSION PARTNERSHIP



The Omnibus Trade and Competitiveness Act of 1988 created the Manufacturing Extension Partnership program (MEP) to improve the competitiveness of U.S.-based manufacturing by making manufacturing technologies, processes and services available. During the past two decades, MEP has focused on bridging the manufacturing productivity gap, identifying opportunities for growth, and encouraging technology deployment.

Growing from a pilot project of just three centers to a national network of 60 affiliated organizations, MEP provides its manufacturing customers with a wide array of fundamental services in business and process improvements. Today, the MEP Centers and their partners, including community colleges, associations, and private consultants provide manufacturers with the services needed to reduce bottom-line expenses and grow top-line profits, both necessary to thrive in the global marketplace.

NIST MEP BUDGET

Support for the MEP program has remained strong throughout the last few years. In January 2014, the Congress approved FY2014 appropriations for the Federal government, including \$128 million for the MEP program. This was a 6.6% increase over FY2013 funding. Funding for the MEP program increased to \$130 million in FY2015 and \$141 million is requested in FY2016.

FY 2014 - FY 2016

	FY2014 Enacted	FY2015 Enacted	FY2016 Requested
Hollings Manufacturing Extension Partnership	\$128 Million	\$130 Million	\$141 Million

The increases in funding are being used to provide direct support to the MEP centers and their clients. In addition, the funding increases allow MEP to complete the MEP system competition to ensure that all MEP centers receive the appropriate amount of funding proportionate to the number of SMEs in their state. The MEP Advisory Board appreciates the continued support of the Administration and Congress to provide funding for the MEP program.

NATIONAL NETWORK

MEP is built on a nationwide system of centers located throughout the United States and Puerto Rico. Each center is a partnership between the federal government and a variety of public or private entities, including state, university, and nonprofit organizations.



National Network



559 Field Locations



1,200+ MEP Experts



3,200+ Service Providers



Helping nearly

300,000 Manufacturers

ADVISORY BOARD

In August 2007, Congress passed the America Competes Act (P.L. 110-69) establishing the Manufacturing Extension Partnership Advisory Board. The Board Charter was modified in October 2013, which increased the number of times the Board will meet to three per year. The Board meets to provide advice and recommendations on:

- The programs, plans and policies of MEP;
- The soundness of MEP's plans and strategies; and
- Current performance in relation to MEP program plans.

The MEP Advisory Board consists of members broadly representing the interests and needs of the manufacturing sector. The MEP Advisory Board met three times in 2014 and performed its chartered functions. In addition, individual Board members worked directly with the MEP staff and attended relevant meetings to collect information on MEP program status and planning activities.

This report highlights the Advisory Board observations, findings and recommendations. Detailed meeting minutes are available on the MEP website.

BOARD MEMBERS OF 2014



VICKIE WESSEL

Chair

Vickie Wessel is the founder and President of Spirit Electronics, Inc. She has more than 30 years of experience in the electronics industry, including sales, marketing, procurement, operations, contracts, finance and quality systems management. Since its founding in 1979, Spirit has grown to support broad line electronic component distribution, supply chain solutions, and component value-added services. Her commitment to continuous improvement is evidenced by Spirit's ISO9002 and AS9000 certifications and her on-going participation in lean manufacturing and process improvement activities. Vickie's passion for improving the contracting environment for the benefit of small businesses throughout the nation has led to her active affiliation with the National Minority Supplier Development Council, the Grand Canyon Minority Supplier Development Council, the Aerospace Industries Association Supplier Management Council (SMC), the Arizona Minority Business Enterprise Center, and the Women's Business Enterprise National Council. In 2005, she received AIA's "Amelia Earhart Award", recognizing women who achieve excellence in the aerospace and defense industry.



JEFFREY WILCOX

Vice Chair

Jeffrey J. Wilcox is the Vice President for Engineering at the Lockheed Martin Corporation, responsible for leading the development and execution of engineering strategy for the Lockheed Martin Engineering Enterprise and its 60,000 engineers, scientists, and technologists. Throughout his career, Mr. Wilcox has led several critical initiatives for the Lockheed Martin Corporation, including Engineering for Affordability, the Systems and Software Initiative, the Advanced Manufacturing Initiative, and the Energy Solutions Center launch. Prior to joining Lockheed Martin, Mr. Wilcox served as Senior Vice President at Science Applications International Corporation (SAIC) in McLean, Virginia. Mr. Wilcox graduated from Drexel University with a master's degree in Electrical Engineering and Case Western Reserve University, Cleveland, Ohio with a degree in Biomedical Engineering. He serves on the Drexel University Leadership Council, the Stevens Institute of Technology School of Systems and Enterprises Advisory Board, the Aerospace Industries Association (AIA) Technical Operations Council, the MIT Open CourseWare Next Decade Alliance Advisory Council, and the US Manufacturing Competitiveness Initiative (USMCI) Steering Committee. Mr. Wilcox is an American Institute of Aeronautics and Astronautics (AIAA) Associate Fellow and a Senior Member of the Institute of Electrical and Electronics Engineers (IEEE).



CAROLYN CASON

Carolyn L. Cason, PhD, RN, joined The University of Texas at Arlington in January, 1997 as Professor and Associate Dean for Research, College of Nursing. She has over 35 years of teaching experience in schools of nursing and has taught in undergraduate and graduate programs. Throughout her career she has worked to increase diversity in the healthcare workforce. She is co-founder of the Smart Hospital™, a physical virtual hospital, which serves as a teaching and research and development facility. She created the Genomics Translational Research Laboratory within the College of Nursing and in collaboration with colleagues in the College of Engineering, developed Smart Care (a center dedicated to developing technology to enhance independent living).

Dr. Cason earned her BSN in nursing from UT Medical Branch in 1967, her MSN in Nursing from UT System School of Nursing in 1972, and her PhD in Educational Psychology in 1972. In November, 2011 she became Interim Vice President for Research at UT Arlington and in November 2012, she became Vice President for Research at UT Arlington. She has been inducted into the UT Arlington Academy of Distinguished Teachers and has received numerous awards and recognition for her research.



ROY A. CHURCH

Dr. Roy A. Church is President of Lorain County Community College (Elyria, Ohio). He has served thirty-six years as a leader in comprehensive community colleges and has led the transformation of Lorain County Community College as its president since 1987. Dr. Church's hallmark initiatives during his tenure include building collaborative private and public partnerships to support education, workforce and economic development. Among these accomplishments include: establishing a renowned University Partnership Program involving 12 universities delivering over 40 bachelor and graduate degrees; the only Edison Technology Incubator on a college campus in Ohio; a \$14 million pre-seed fund for regional technology start-ups; a 46,000 square foot commercialization center for sensors and microsystems; and a 75,000 square foot Advanced Technology Center supporting advanced manufacturing containing the National Science Foundation Weld-Ed Center and rapid prototyping lab. Dr. Church co-chairs the Ohio Board of Regents Articulation and Transfer Advisory Council, Cooperative Education and Internship Advisory Committee and Complete College Ohio Task Force. He also served on the State Advisory Committee on Adult Career-Technical Programs and the Ohio Board of Regents Technology Transfer and Commercialization Task Force. Regionally, Dr. Church serves on the Northeast Ohio Council on Higher Education, NorTech Board of Directors, Manufacturing Advocacy and Growth Network (MAGNET) and Fund for Our Economic Future.



DENNIS DOTSON

Dennis Dotson is a third generation foundryman serving as Chairman of Dotson Iron Castings in Mankato, Minnesota. The company is in the top tier of foundry suppliers and has been acknowledged by the industry's society as the "Metalcaster of the Year" out of 2,000 North American facilities. Denny has been very active in the industry serving on various boards, past president of the Ductile Iron Society and is the current president of the American Foundry Society. He is also chairman of People Driven Performance, a startup company focused on internal communications. Dennis has a strong commitment to education and is a trustee emeritus of the Minnesota State Colleges and Universities, the governing board for the 35 post-secondary state institutions. He is a U.S. Navy veteran and a graduate of the University of Notre Dame (1967 BBA) and the University of Chicago (1968 MBA). He currently serves on the board of Enterprise Minnesota (a NIST MEP affiliate). The constant in his career has been the involvement in many new community, educational and business startups.



EILEEN GUARINO

Eileen Guarino is currently President and COO of Greno Industries located in Scotia, New York. Ms. Guarino attended the University of South Carolina. Early in her career, Ms. Guarino was a buyer for a clothing company which represented apparel in various resort locations throughout SC, Florida and Georgia. There she developed a woman's clothing line that retailed in nine locations. Her responsibilities ranged from coordination of the annual buys to importing fabrics to be manufactured in the US. In 1988, Ms. Guarino relocated to upstate New York, where she lent her talents to her new career in the manufacturing parts business as what she calls "part of the Greno team". Greno Industries is a family owned business, and is a recognized minority women owned business in New York State. Ms. Guarino has worked to expand the company's clients to now include successful relationships in new markets throughout Europe and Asia, as well as leading the company's strategic planning growth efforts of its 60,000 sq. ft. manufacturing facility. One of her successes in her business career, of which she is most proud, was creating and implementing an in house high school MFG internship training program with local high school students.



BERNADINE HAWES

Bernadine Hawes is an executive level nonprofit professional and economic development specialist working in the areas of project management, strategy development, compliance, and evaluation. Her most recent achievement has been the authorship of a best practices manual for small business and economic development which was funded in part through a grant from the U.S. Small Business Administration to American Cities Foundation. Ms. Hawes began her career at the University City Science Center (Philadelphia) starting as a senior-level project administrator and later Vice President. Currently she is a senior research analyst for Community Marketing Concepts. Ms. Hawes is Chairwoman of the Delaware Valley Industrial Resource Center. She also serves as on the board of the PEC Community Development Corporation which focuses on community development initiatives in Philadelphia, is Chair of the PEC Foundation, and serves on the Advisory Board of the Philadelphia Urban League Entrepreneurship Center. Born and raised in Washington, DC, Ms. Hawes has an MS Degree from the University of Pennsylvania. She is summa cum laud graduate of Lincoln University (Pa). She has been the national co-chair of Penn's Black Alumni Society and former member of Penn's Brister Society for Diversity Inclusion.



THOMAS M. LEE

Thomas M. (Tommy) Lee has been employed by Vulcan, Inc., an aluminum manufacturing company in Foley, Alabama, since 1985. He currently is President and CEO, and also Secretary/Treasurer of Vulcan Scholarships, Inc. Prior to joining Vulcan, Mr. Lee was employed by Alabama Power Company for eight years as a Commercial Sales Engineer.

Mr. Lee moved with his family from Birmingham to Foley in 1968 and has called South Alabama home for 45 years. He graduated from Foley High School in 1974 and received his B.S. degree in Industrial Engineering from Auburn University in 1978. He and his wife, Sandra, live in Gulf Shores and together they have 3 children: David 30, Anna 27 and Marcus 22.

Mr. Lee has been active in the community since graduating from college. He is a former Chairman of the South Baldwin Chamber of Commerce and a past winner of the Walton M. Vines Free Enterprise Person of the Year. He was a member of Class XVIII of Leadership Alabama and has been president of several civic, local school and professional organizations. Currently he serves as the 2nd Vice Chair of the Business Council of Alabama.



WILLIAM SHORMA

William Shorma is currently President and CEO of Rush-Co. in Springfield, SD, which manufactures highly engineered metal and cover systems and designs custom fabric solutions for nearly any problem or industrial application. Previously he served as President of Shur-Co and the Wahpeton Canvas Company. Mr. Shorma serves as a member of several Boards of Directors, including the South Dakota Junior Achievement, the Sioux Corporation, MMI in Montgomery AL, and the South Dakota Youth Business Adventure Camp. He is also a Board Member and Past State Chair of the South Dakota State Chamber of Commerce. He was named South Dakota Businessman of the Year by the University of South Dakota School of Business. Mr. Shorma earned his degree at the North Dakota State College of Science.



ED WOLBERT

Ed Wolbert is the President of Transco Products Inc., a leading U.S. medium-sized manufacturer and contractor dedicated to nuclear power. Mr. Wolbert has been in the nuclear power industry for over 30 years, has been with Transco for the last 28 years, and has served as its president for the last 16 years. Mr. Wolbert oversees the daily strategic direction and tactical operations of the company, including direct guidance of its foreign activities. Mr. Wolbert is a member of the American Nuclear Society, and is also a member of ASTM (serving on the C16 committee). Mr. Wolbert continues in his service on the governing board of the Illinois Manufacturing Extension Center, the Illinois affiliate of the NIST MEP Program. Mr. Wolbert continues to serve on the Department of Commerce's Civil Nuclear Trade Advisory Committee (CINTAC), after previously been both the committee's vice-chairman and chairman, and has been a vocal advocate and champion for small/medium size enterprises in the nuclear power market.

ACTIVITIES IN 2014



The Advisory Board conducted three meetings in 2014.

The January 2014 meeting was held in Charlotte, NC in conjunction with a system-wide MEP Update Meeting. The second meeting was held in May 2014 at NIST in Gaithersburg, MD. This meeting was also done in conjunction with an MEP Update Meeting. These two meetings provided an opportunity for the MEP Board members to interact with the local MEP Center Directors and their staff. Many Center Directors attended the Advisory Board meetings as well to obtain a better understanding of the priorities and strategies of the Board. The final meeting of 2014 was held in September at NIST in Gaithersburg, MD. The September meeting also included a chance for the Board to visit the House and Senate Appropriations Subcommittee members and present the Advisory Board's 2013 Annual Report.

In 2014, the MEP Advisory Board focused on a number of priority items:

- 1** Providing guidance on the development of a new MEP Strategic Plan.
- 2** Reviewing the process to be used for the MEP System competition.
- 3** Providing recommendations on MEP's efforts in technology acceleration.

In 2014, MEP said goodbye to two long-time board members and former Board Chairs, Mark Rice and Edward (Ned) Hill, both of whom had terms that were expiring. But with the turnover in Board members, MEP was able to bring on some new and very active members with a wealth of manufacturing experience. At the May 2014 meeting we welcomed the following new members:

- Bernadine Hawes, a Senior Research Analyst at Community Marketing Concepts, Inc. and also Chair of the Delaware Valley Industrial Resource Center (DVIRC) Board
- Dr. Carolyn Cason, Vice President for Research at the University of Texas-Arlington
- Tommy Lee, President & CEO of Vulcan Inc.
- William Shorma, President & CEO of Rush-Co

Another membership change that took place in 2014 is the appointment of a new Chair and Vice Chair to the Advisory Board. Denny Dotson had been serving as the Chair since 2012 and was coming to the end of his term limit. Effective, October 2014 the Acting NIST Director appointed Vickie Wessel, to serve as the Chair and Jeffrey Wilcox to serve as the Vice Chair. Both of these terms will expire September 30, 2016.

STRATEGIC PLANNING

In 2014, NIST MEP undertook a strategic planning effort focused on identifying programmatic strengths and outlining major strategic goals needed to support the program's mission and increase the competitiveness of U.S. manufacturers. The strategic planning process provided NIST MEP a mechanism for deeper engagement with external stakeholders.

Based on input from the Advisory Board subcommittee, NIST MEP used a number of mechanisms to gather input for the initial development stage of the strategic plan. Those mechanisms, including input sessions with stakeholders included:

- Center Advisory Group meetings
- MEP Advisory Board subcommittee
- National Governor's Association (NGA) meeting
- Association and Federal Agency meetings
- Center Board Chairs
- Environmental Scanning

The Board was engaged in numerous discussions about key stakeholders, measures of success, SWOT analysis, and timeframe. At the May 2014 meeting, the MEP Strategic Plan was presented based on all of the input and recommendations received. An overview of the Strategic Plan is included below:

MISSION

To enhance the productivity and technological performance of U.S. Manufacturing.

ROLE

MEP's state and regional centers facilitate and accelerate the transfer of manufacturing technology in partnership with industry, universities and educational institutions, state government, and NIST and other federal research laboratories and agencies.

SUMMARY OF STRATEGIC GOALS

1 ENHANCE COMPETITIVENESS
Enhance the competitiveness of the U.S. manufacturers, with particular focus on small and medium-sized companies.

3 CHAMPION MANUFACTURING
Serve as a voice to and a voice for manufacturing and manufacturers in engaging policy makers, stakeholders, and clients.

PROGRAMMATIC STRENGTHS

- National Program with at least one center in every state
- Federal/State, public-private partnership with local flexibility
- Cost share policy that matches federal investment with state and private sector investments
- Market Driven program that responds to the needs of private sector manufacture
- Leverage partnering expertise as strategic advantage
- Local knowledge of, focus on, and access to manufacturers

2 SUPPORT PARTNERSHIPS
Support national, state, and regional manufacturing, eco-systems and partnerships.

4 DEVELOP CAPABILITIES
Develop MEP's capabilities as a learning organization and high performance system.

During the May meeting, the MEP Strategic Plan was presented and unanimously approved. At the May and September meeting the implementation of the plan was discussed and a timeline of next steps was provided. The work on the implementation plan will be continued now that a permanent director of the MEP program has been selected.

SYSTEM COMPETITION



In response to Administration direction, Congressional guidance, and recommendations from the Government Accountability Office (GAO), in 2014 NIST MEP initiated a systematic, multi-year, carefully planned re-competition of the national system of MEP Centers. “The President’s Budget for Fiscal Year 2015” (February 2014) provided the following direction:

In FY 2013, MEP began a broad based strategic planning process and developed an operational reform agenda intended to optimize program effectiveness, enhance administrative efficiency, and provide greater financial accountability. In FY2014, NIST management directed MEP to initiate a carefully planned, systematic, multi-year re-competition of the national system of Centers.

Also in 2014, the House and Senate prepared legislation that would reform MEP operational and administrative activities. H.R. 5035, which passed the House by unanimous consent in July 2014, required:

RECOMPETITION – If a recipient of a Center award has received financial assistance for 10 consecutive years, the Director shall conduct a new competition to select an operator for the Center consistent with the plan required in this Act. Incumbent Center operators in good standing shall be eligible to compete for the new award.

In March 2014 the GAO issued a report on MEP program administrative efficiency, “Most Federal Spending Directly Supports Work with Manufacturers but Distribution Could be Improved.” GAO found that:

NIST spending on cooperative agreement awards is based on the historical amount awarded to each Center when it was established... However, because NIST made the awards on an incremental basis to individual Centers serving different areas over a period of more than 15 years, NIST’s awards did not take into account variations in service areas in the demand for program services – a function of the number and characteristics of target firms – or variations across service areas in the cost of providing services.

GAO recommended that:

Commerce spending on cooperative awards be revised to account for variations across service areas in demand for providing services and in center costs of providing services.

In 2014, NIST MEP began a multi-year process of full and open competition of the national system of state based Centers, with the primary objective of optimizing the impact of the Federal investment on U.S. manufacturers. Objectives of the re-competition included: aligning Center activities to the NIST MEP strategic plan that was developed in accordance with the MEP Advisory Board; aligning Center activities with state and local strategies; providing opportunities for new partnering arrangements; restructuring and reinvigorating local Center Boards; revising Center funding levels to more closely reflect the national distribution of manufacturing activity; and doing so without disrupting on-going local service to manufacturing firms or degrading the performance of the national MEP program.

On August 1, 2014 NIST MEP officially released the first Federal Funding Opportunity (FFO) for a 10 state competition. This was open to the public for 75 days in which to respond with proposals.

At the September 2014 MEP Advisory Board meeting the Board was briefed on activities to date including the development of two working groups focused on (1) the creation of the FFO and Standard Operating Procedures and (2) Re-alignment of internal MEP processes. The board was also presented information about the changes in the FFO to better align with the MEP strategic plan including:

- Manufacturers / Workforce
- Top-line / bottom-line growth
- Board Governance
- Metrics
- Engagement with system & Sharing best practices

In an effort to ensure complete transparency of the competition process, MEP put into place a process for the review of proposals including the use of five teams that will review 2 states and be comprised of a one member of the senior leadership team, a mix of other MEP staff members and one external evaluator. The awardees of the first competition will have a start date of July 1, 2015. Future rounds of the competition will continue until December of 2016.

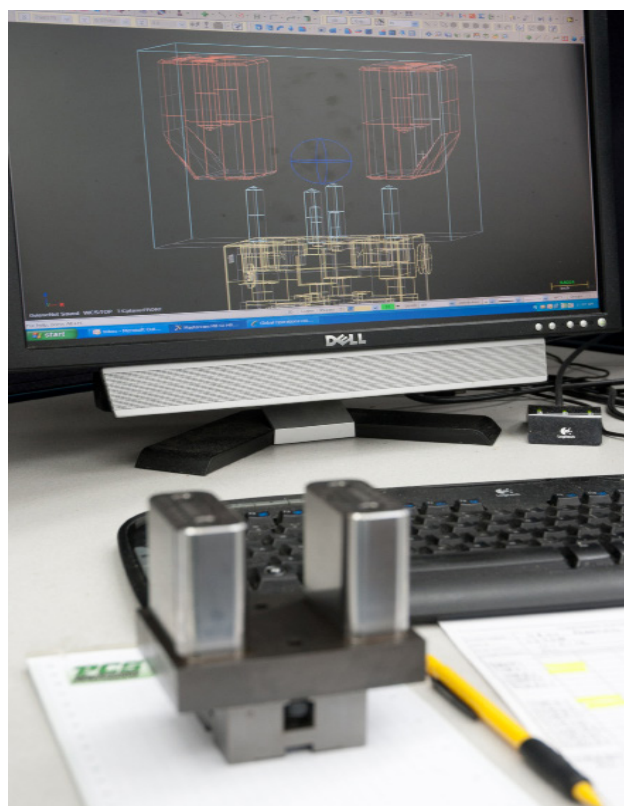
TECHNOLOGY ACCELERATION

At all of the meetings in 2014 The MEP Advisory Board was presented with information about NIST and MEP's technology acceleration activities. At the January meeting the Chief Manufacturing Officer for NIST, Roger Kilmer presented an overview of NIST, the activities happening in the laboratories and a broad discussion of some of the other manufacturing activities occurring at NIST. A number of NIST programs that support manufacturing were covered including: Advanced Manufacturing Technology Consortium (AMTech), National Network for Manufacturing Innovation (NNMI), and Manufacturing Technology Acceleration Centers (M-TACs). The Board agreed that we need to better connect industry needs to the capabilities of the labs and appreciated the opportunity to hear about activities happening across NIST and to engage in those activities.

During the September meeting, the Board heard from a number of NIST MEP staff on the activities that NIST MEP is undertaking related to technology acceleration and asked for their opinion on developing a framework. The goal is to accelerate technology development and commercialization by connecting U.S. manufacturers' capabilities and needs with technology sources. The MEP program is developing tools and mechanisms to assist manufacturers in finding these opportunities. MEP's services and initiatives in technology acceleration include:

- 1 Technology Scouting
- 2 Supplier Scouting
- 3 Business-to-Business (B2B) Network Pilots
- 4 Lean Product Development
- 5 Technology Driven Market Intelligence
- 6 Small Business Innovation Research Assistance
- 7 Access to Capital

One of the recommendations that came out of this meeting was that MEP needed to fine tune the definitions of technology acceleration, technology transfer and technology transition. The board decided to form committees focused on technology acceleration that would report out on activities in 2015.



BOARD COMMENTS

NIST Three-Year Programmatic Plan, FY16 – FY18

The America COMPETES Act (P.L. 110-69), which formally established the Manufacturing Extension Partnership Advisory Board, also charges the MEP Board to “transmit an annual report to the Secretary of Commerce for transmittal to Congress within 30 days after the submission to Congress of the President’s annual budget request each year. Such report shall address the status of the program established pursuant to this section and comment on the relevant sections of the programmatic planning documents and updates thereto transmitted to Congress by the Director under subsections (c) and (d) of section 23.”

The NIST Three-Year Programmatic Plan, FY2016 – FY2018 states as the organization’s mission: **“To promote U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology in ways that enhance economic security and improve the quality of life.”**

One of NIST’s goals is to “Fortify U.S. advanced manufacturing capabilities. The Nation’s long-term competitiveness relies on its global leadership in advanced manufacturing capabilities. NIST will develop and deploy unique tools to support U.S. advanced manufacturing through programs including the Hollings Manufacturing Extension Partnership, the Advanced Manufacturing Technology Consortia Program, and the National Network for Manufacturing Innovation. “

Another goal of NIST is to “Maximize NIST’s impact through effective collaboration and coordination. NIST’s research and development activities have the greatest impact when the knowledge and technology generated is transferred to industry, universities, standards organizations, and other government agencies. NIST will continue to pursue partnership opportunities to better deliver measurement solutions and best leadership and management practices to industry and other government agencies, provide access to unique measurement capabilities through its user facilities, participate in standards-setting organizations, convene consortia, license intellectual property, and attract and train high-quality research associates.

TECHNOLOGY ACCELERATION

During 2014, the MEP Advisory Board met with NIST Acting Director, Dr. Willie May to better understand his charge for the board. Dr. May has expressed his interest in better engagement between the NIST laboratories and small and medium sized manufacturers. This discussion with Dr. May led to the development of the Technology Acceleration subcommittee and to new partnerships that are forming between MEP centers and some of the NIST laboratories.

The MEP Advisory Board is thrilled with NIST’s focus on manufacturing and encourages the opportunity to better engage MEP clients with technologies within the NIST laboratories.

COLLABORATION

During 2014, the MEP Advisory Board began strengthening ties with the NIST Visiting Committee for Advanced Technology (VCAT). The June 2014 VCAT Meeting provided an opportunity for an overview presentation of the MEP program as well as a discussion from a number of MEP Advisory Board members. During this meeting, the Advisory Board members present also had an opportunity to engage with the Secretary of Commerce to share their perspectives on the program.

The MEP Advisory Board encourages continued collaboration between the two boards

RECOMMENDATION REVIEW

Past recommendations were initially addressed at the September 2013 Board meeting, and since that time additional progress has been made. The specific recommendations that the Advisory Board asked for an update on were about the employee exchange program, the center advisory group, and the program evaluation and management process.

- 1.** Recommendation that NIST MEP initiate a personnel exchange program with the MEP Centers so that Federal Staff and MEP Center staff can deepen their understanding of their respective roles in this public private partnership and provide more effective services to U.S. manufacturers
- 2.** Recommendation that MEP create a Center Advisory Group to provide advice on reducing center burden, increasing center flexibility, better articulate program impacts, outputs and outcomes, better inform national policy dialogue, maintain program integrity and credibility and gather center input as part of the decision making process.
- 3.** Recommendation that MEP codify, align and integrate program evaluation with contract management.
- 4.** Recommendation that MEP re-adjust the current cost share structure in order to optimize the federal investment and provide for the long-term sustainability of the program.

EMPLOYEE EXCHANGE PROGRAM

This program was run as a pilot in 2014 with one NIST MEP staff member. In addition, a number of centers have already been identified for future rounds. The intent of these exchanges is to foster better collaboration between NIST MEP and centers and focused on a specific topical area.

Benefits of NIST staff visiting centers include:

- Educating newer NIST MEP staff members
- The NIST MEP employee may visit a set of centers
- There will be a topical focus to the visits
- The employee will share informed learned with other NIST MEP staff members
- The program will give NIST MEP a greater idea of what drives daily center activities

Benefits of MEP Center staff visiting NIST MEP include:

- The program may involve multiple visits to NIST
- The program may use Emerging Leaders as candidates and tie this into the Emerging Leaders' criteria
- There will be a topical focus and may help develop national working groups.
- The program will offer an in-depth understanding of NIST processes and organization.

To date, one NIST MEP staff member has participated in this program, visiting California Manufacturing Technology Consulting (CMTC) and working with their staff on impact data and evaluation. NIST MEP has identified center staff that is interested in participating and will ensure participation in 2015.



CENTER ADVISORY GROUP

The Center Advisory Group was developed as a way to get center input as part of MEP's overall decision-making process. When selecting members for the center advisory group, NIST MEP ensured diversity in geography, business model, size, performance, funding and experience. The group is made up of 2 Center Directors from each of the six MEP regions.

The Center Advisory Group focused on:

- Help with short-term improvements, as well as new approaches to reporting and evaluations
- Expanding the definition of manufacturing
- Changes to MEP's evaluation system - CORE
- Input into project coding
- Reduction of the reporting burden
- Data sharing between centers within MEP's information system
- Input into how and when to measure innovation projects

The group has continued to be used to better inform NIST MEP on decisions affecting the MEP centers.



PROGRAM EVALUATION AND MANAGEMENT

The purpose of this activity was to ensure that MEP had the necessary processes and procedures in place when making decisions about contract management. This process helped to integrate the contract management and program evaluation elements. When programmatically looking at either existing or future investments at the highest level, NIST MEP needed to be cognizant of a few factors outlined below:

- **Foundational Review Factors**
 - Fit
 - Value Proposition
 - Complexity
- **Extension of existing work**
 - Take into account historical experience with contractor
 - Assess the proposed period of performance
 - Budget
 - Transition Strategy and / or Glide Path to transition the investment to system sustainability

NIST MEP reviewed all existing contracts and developed processes for approving contracts as well as integrated a performance evaluation mechanism into the system.



COST SHARE

On October 18, 2013 the MEP Advisory Board transmitted to the NIST Director their official recommendations regarding the cost share structure. The Board specifically recommended:

- Readjusting the cost share requirement to 1:1
- Demonstrating an appropriate and balanced industry investment.
- Allowing local flexibility in providing in-kind cost share (not to exceed one-half of the Recipient's annual cost share) with:
 - Clearly defined, well understood, and achievable criteria.
 - Direct and measurable impacts consistent with program performance and evaluation.
- Maximizing program performance through a balanced application of evaluation mechanisms that appropriately include but are not limited to cost share (e.g. center performance metrics.)
- Implementing the cost share recommendations in conjunction with an inclusive strategic planning process and a comprehensive review of system and center performance.



During 2014, MEP received strong support from both the House and Senate with legislation that included language about the permanent readjustment of cost share to a 1:1 ratio. On July 22, 2014 the House of Representatives passed H.R. 5035 - NIST Reauthorization Act of 2014 and on July 31, 2014 the Senate introduced S. 2757 – America COMPETES Reauthorization Act of 2014 both of these included, among other items the permanent readjustment of MEP cost share to 1:1. While these bills were not enacted, the program continues to receive strong support from Congress and we are hopeful that legislation will be passed that adjusts the cost share ratio.



MEP • MANUFACTURING
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