NIST
National Institute of Standards and Technology
U.S. Department of Commerce

# MEP Advisory Board Meeting

Wednesday, March 7, 2018

part 2 - afternoon

Welcome Back

| 1:30 – 1:35 p.m.	**Welcome Back/Afternoon Overview**
1:35 – 1:55 p.m.	**Working Group Update:** • Supply Chain Development Working Group • *Board Feedback & Discussion*
1:55 – 2:45 p.m.	**Presentation** • U.S. Defense Industrial Base, E. Chewning, DOD • *Board Feedback & Discussion*
2:45 – 3:00 p.m.	**Break**
3:00 – 3:20 p.m.	**Working Group Update:** • Performance/Research Development Working Group • *Board Feedback & Discussion*
3:20 – 4:00 p.m.	**Board Governance & Board Assessment Discussion:** • Executive Committee Working Group • Board Structures within the MEP Network • BoardSource Review – Assessment Process, L. Stewart, Eisner Amper
4:00 – 4:30 p.m.	**Wrap-up/Public Comments**

Switch
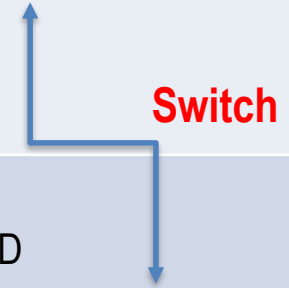
U.S. Department of Defense – Defense Industrial Base

Eric D. Chewning
U.S. Department of Defense
Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy

Supply Chain Development Working Group
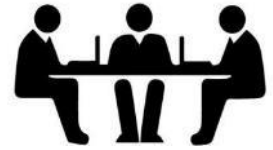
- Committee Members
  - Board Leadership
    - Matthew Newman
  - Board Members
    - LaDon Byars, Bernadine Hawes, Mary Isbister, Chris Weiser, Jeff Wilcox
  - NIST MEP Support
    - Dave Stieren, Phil Singerman, Mark Schmit

- Deliverable

  Guidance and perspectives on the MEP National Network support and development of manufacturing supply chains with an emphasis on defense suppliers regarding Defense Industrial Base gaps; and expertise on who should be brought into the discussion to provide insight on defense supplier gaps.

Discussion Topics for the Board

REALIZING THAT

The MEP National Network has decades of extensive experience in Supply Chain Development, including routinely supporting Defense Manufacturing Supply Chains

NIST MEP is seeking Board perspectives on the MEP priorities for 2018 that focus on supporting the DoD Industrial Base:

- Cybersecurity for Manufacturing
- Embedding MEP in Manufacturing USA Institutes
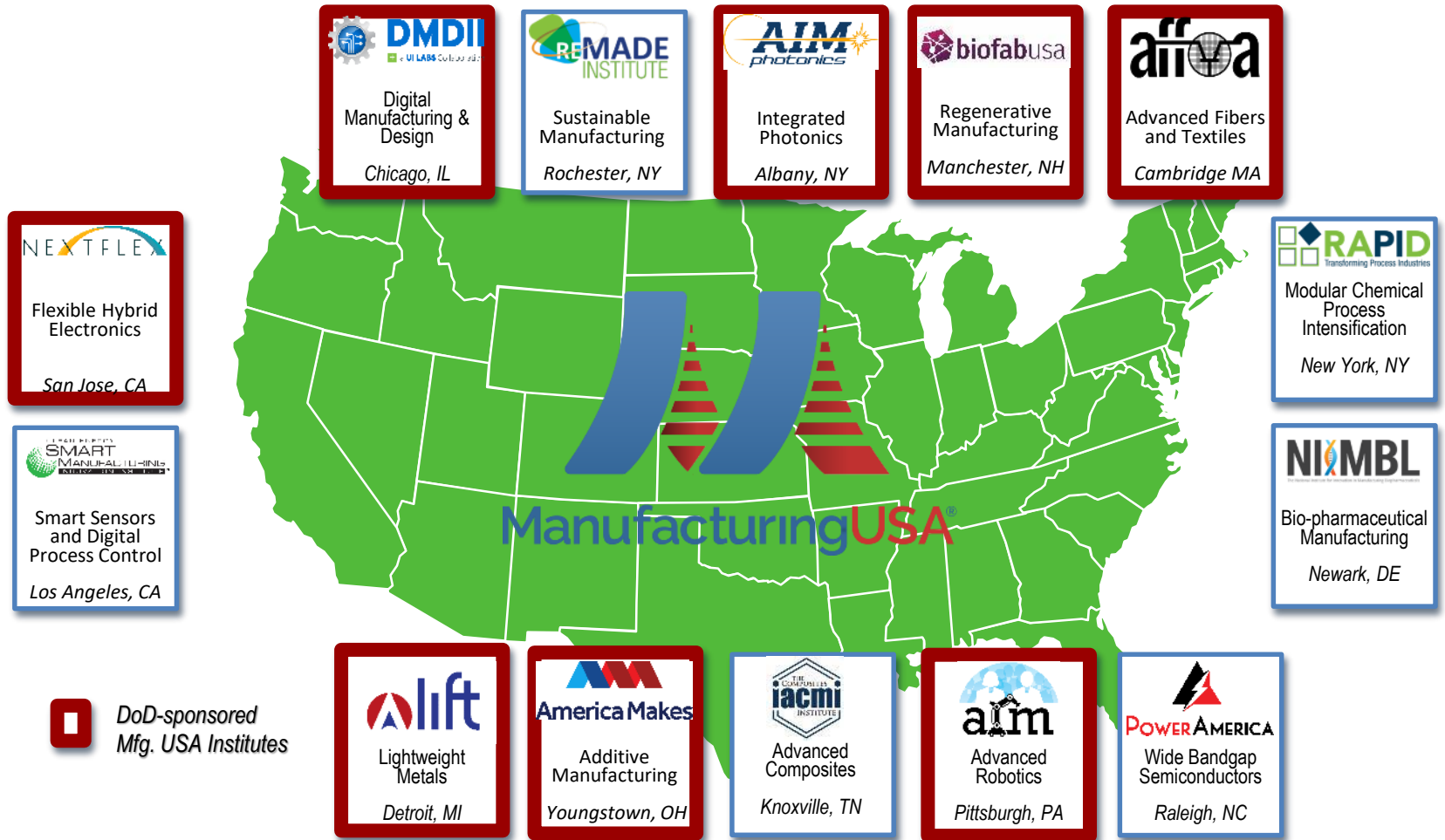
DOD Manufacturing Supply Chain Support
MEP National Network Cybersecurity For Defense Industrial Base

- Providing assistance to defense manufacturers to comply with DFARS Cybersecurity requirement for manufacturing supply chains – clause 252.204-7012
  - *Ensure adequate security to protect controlled unclassified information (CUI) in defense manufacturing supply chains by implementing security requirements in NIST Special Pub 800-171 rev 1, "Protecting Controlled Unclassified Information in Nonfederal Information Systems and Organizations."*
  - *Low initial compliance, especially among lower tiers of defense manufacturing supply chains*

- NIST MEP-funded CAP Cybersecurity Project, MEP National Network Cybersecurity WG leading national effort to develop replicable Cybersecurity assistance practice that MEP Centers can deploy to small U.S. manufacturers on nationwide basis

- NIST Handbook 162, NIST MEP Cybersecurity Self-Assessment Handbook
  - *Published by NIST MEP to assist small manufacturers with NIST SP 800-171 implementation and DFARS compliance*

- MEP National Network will continue to support aspects of DoD industrial base assessment relating to Cybersecurity for Manufacturing

DOD Manufacturing Supply Chain Support
Embedding MEP into Manufacturing USA Institutes Projects

DMDII • UI LABS Collaboration
Digital Manufacturing & Design
Chicago, IL

ReMADE INSTITUTE
Sustainable Manufacturing
Rochester, NY

AIM Photonics
Integrated Photonics
Albany, NY

biofabusa
Regenerative Manufacturing
Manchester, NH

affoa
Advanced Fibers and Textiles
Cambridge MA

NEXTFLEX
Flexible Hybrid Electronics
San Jose, CA

RAPID Transforming Process Industries
Modular Chemical Process Intensification
New York, NY

SMART MANUFACTURING
Smart Sensors and Digital Process Control
Los Angeles, CA

NIIMBL
Bio-pharmaceutical Manufacturing
Newark, DE

ManufacturingUSA®

■ *DoD-sponsored Mfg. USA Institutes*

lift
Lightweight Metals
Detroit, MI

America Makes
Additive Manufacturing
Youngstown, OH

iacmi THE COMPOSITES INSTITUTE
Advanced Composites
Knoxville, TN

arm
Advanced Robotics
Pittsburgh, PA

PowerAmerica
Wide Bandgap Semiconductors
Raleigh, NC

DOD Manufacturing Supply Chain Support

Embedding MEP into Manufacturing USA Institutes Projects

- Create approaches to engage small manufacturers in technology focus areas of Mfg USA Institutes via hands-on assistance mechanisms and services offered by MEP Centers

- Develop and test business models by which small U.S. manufacturers can be served in Institute technology areas – business models that are viable to the small manufacturers, to the MEP Centers, and to the Institutes

- Develop expert national resources within the MEP National Network in the Institute technical focus areas

…and doing this will

- Transfer technology from Institutes to small U.S. manufacturers

- Facilitate knowledge, best practice sharing among Institutes and MEP Centers

- Cultivate enhanced nationwide network of partnerships among Institutes and MEP Centers for benefit of small U.S. manufacturers

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Performance & Research Development Working Group

- ## Committee Members
  - Board Leadership
    - Leslie Taito
  - Board Members
    - Jose Anaya, Carolyn Cason, Joe Eddy, Kathay Rennels, Jim Wright, Bernadine Hawes, Jeff Wilcox
  - NIST MEP Support
    - Ken Voytek, Chancy Lyford

- ## Deliverable

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

Updated Performance-based Panel Review

Panel Review Structure:

- Panel Chair (NIST MEP Staff)
- Panel:
    - 3 MEP Center Directors
    - Opportunities for other senior level Center staff to observe = future panelist
  - Regional Manager (Program Resource)
  - Federal Program Officer (Program Resource)

Panel Review Objectives:

- Assess
    - Data provided and the extent it accurately reflects the work being done (Center)
    - Data and measures that can best reflect the services, impacts, and operations of a Center (MEP)
- Learn
    - Effectiveness and benchmarking for reaching clients, generating impacts, and remaining sustainable (Center)
    - Metrics and practices that are most transferable across the network (MEP)
- Implement
    - Strategies and activities to build upon strengths, and address challenges (Center)
    - To inform NIST MEP in its support of the Centers and to communicate findings and best practices across the Network (MEP)

Discussion Topics for the Board

With uneven Center performance across the Network; the number of clients and projects relatively flat; new initiatives taking shape and the creation of an integrated National Network,

Seeking Board input and guidance:

- What factors are most important in explaining Center performance variation across the National Network?
- How can we improve Network efficiency and effectiveness with limited resources?
- Would it be worth the Program's investment to engage outside resources to capture lessons learned from Center's new initiative engagements; perhaps developing a manufacturing research agenda?
- How can we accurately capture multi-center delivery of client impacts to ensure proactive collaboration by Centers involved and not be a roadblock to collaboration?

Board Governance
## Executive Committee Working Group Members

- Board Leadership
  - Jeffery Wilcox, Chair of MEP Advisory Board
  - Bernadine Hawes, Vice-Chair of MEP Advisory Board
- Board Members
  - Carolyn Cason
  - Mitch Magee
  - George Spottswood
- NIST MEP Support
  - Carroll Thomas, NIST MEP Director
  - Cheryl Gendron, Event and Board Specialist
  - Gary Thompson, Wiza Lequin – Center Board Focus

Board Governance

Executive Committee Working Group Deliverables

- Guidance on future Advisory Board leadership and insights from the Board Assessment; Board membership; Board role in regards to MEP Center Boards
- Governing Documents
    - Statute
    - Charter
    - Bylaws
  - Succession
    - Diversity
    - Leadership Roles
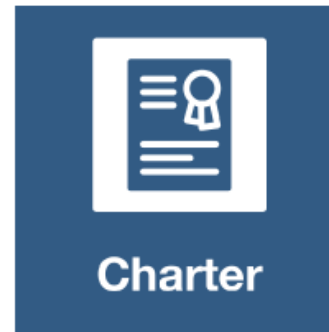
Board Governance

2018 MEP Advisory Board	
Mr. Jeff Wilcox, Chair - MD (2nd term – May 2019)	
Ms. Bernadine Hawes, Vice Chair - PA (2nd term – May 2020)	
Members	
Mr. Jose Anaya, CA (1st term – July 2020)	Mr. Matthew Newman, OK (1st term – March 2020)
Ms. LaDon Byars, TN (1st term – February 2020)	Ms. Kathay Rennels, CO (1st term – March 2019)
Dr. Carolyn Cason, PhD, TX (2nd term – May 2020)	Mr. George Spottswood, AL (1st term – May 2020)
Mr. Joe Eddy, WV (1st term – March 2020)	Ms. Leslie Taito, RI (1st term – July 2020)
Ms. Mary Isbister, WI (1st term – March 2020)	Mr. Chris Weiser, AR (1st term – March 2020)
Mr. Mitch Magee, DE (1st term – March 2020)	Mr. Jim Wright, MT (1st term – March 2020)

Next Board Member Rolling Off – May 2019, Chair of the Board

Discussion Topics for the Board

Bylaw Modifications/Additions: Board Succession and Composition

- Statute Requirements: 1 Community College, 2 Center Board Members, 5 Small Manufacturers

- **Add other categories to the Bylaws?**
    - Categories for Board leadership specific
        - Chair and Vice Chair

Board Governance

Board Structures within the MEP Network

Dave Cranmer, NIST MEP, Deputy Executive Director

IMPLEMENTATION OF THESE STANDARDS IS BEING HELD UNTIL PRA CLEARANCE FOR COLLECTING THE CENTER BOARD BY-LAWS HAS BEEN RECEIVED.

Hollings Manufacturing Extension Partnership

Oversight Board Standards

July 2017

1

Board Governance

BoardSource Review – Assessment Process

Lisë Stewart, Eisner Amper

Stone and Associates, NIST
MEP Board Development
Project

Project Report

January 31, 2018
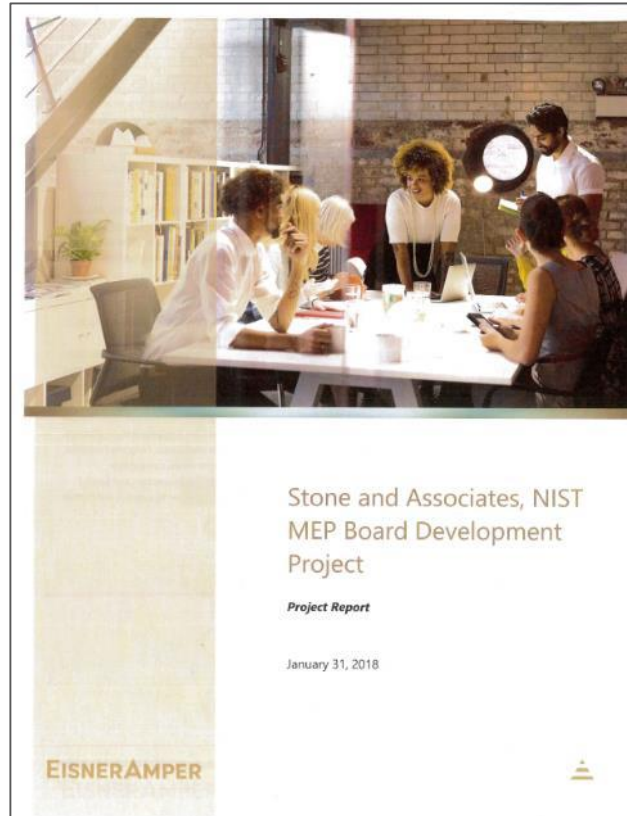
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Board Training and Survey Discussion

Lisë Stewart – Facilitator
EisnerAmper LLP

CFBE
CENTER FOR FAMILY
BUSINESS EXCELLENCE

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Today's Purpose

- Review results of the Board Source Survey

- Identify key trends for discussion

- Discuss recommendations

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BoardSource Survey Results

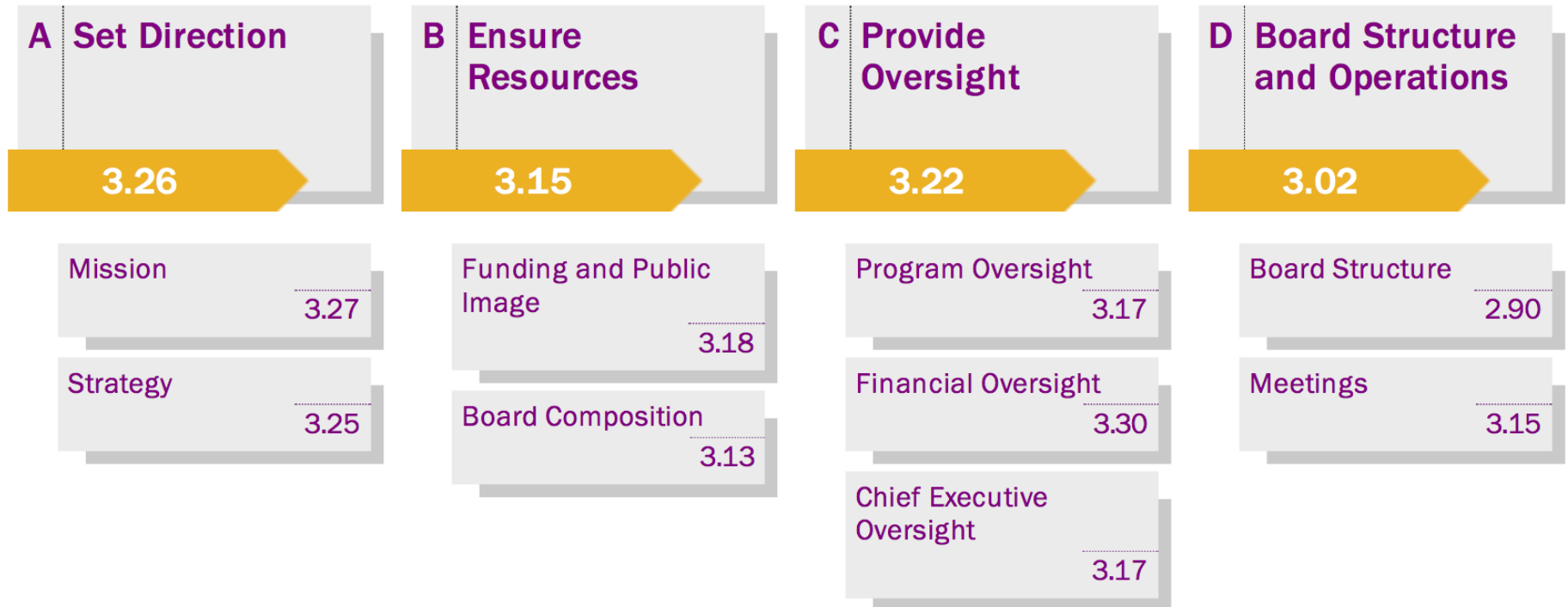- Participation statistics for 17 centers: 235 surveys distributed / 206 surveys completed / 88.7% response rate

- The scores are based on this answer scale: 0 = Poor; 1 = Fair; 2 = OK; 3 = Good; 4 = Excellent

High Level Results – 4 Areas of Board Responsibility

A Set Direction

3.26

Mission	3.27
Strategy	3.25

B Ensure Resources

3.15

Funding and Public Image	3.18
Board Composition	3.13

C Provide Oversight

3.22

Program Oversight	3.17
Financial Oversight	3.30
Chief Executive Oversight	3.17

D Board Structure and Operations

3.02

Board Structure	2.90
Meetings	3.15

This is an example of what each center board saw when they received their results. These are not actual or aggregated numbers.

Average Scores in Each Area Across the Country

	Board Responsibilities	Average
A	Set Direction	2.96
1	Mission	3.04
2	Strategy	2.92
B	Ensure Resources	2.76
3	Funding and Public Image	2.83
4	Board Composition	2.79
C	Provide Oversight	3.06
5	Program Oversight	2.96
6	Financial Oversight	3.13
7	Chief Executive Oversight	3.13
D	Board Structure and Operations	3.05
8	Board Structure	2.90
9	Meetings	3.28

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What is working well:
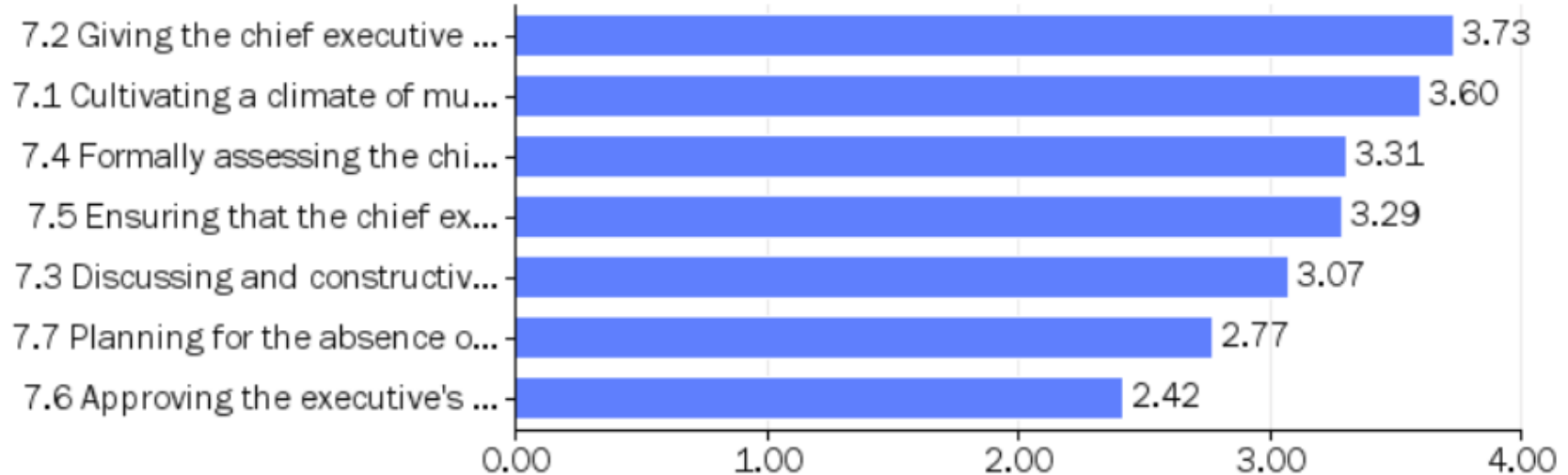**The 3 areas with highest average and median scores**

What is working? – Board Meetings 3.28

Conduct Productive Board Meetings: Boards carry out much of their work in meetings. Meetings that are carefully structured and efficiently conducted will help board members feel that their time is well spent and that the board adds value to the organization. Effective boards have meeting agendas that focus on important issues, allow for discussion, and lead to action. To ensure efficiency, board members receive and review agendas and background materials prior to the meetings. To tap into the collective wisdom of the board, boards pay careful attention to boardroom culture, group dynamics, and decision-making processes.

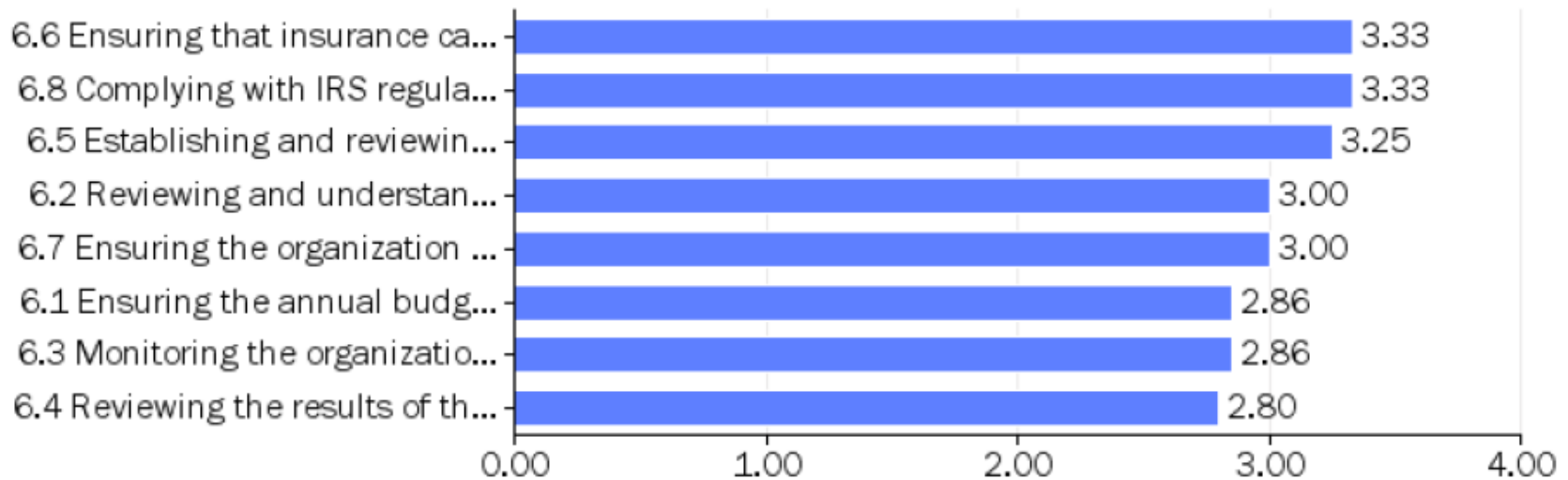| Item	Score
9.4 Using effective meeting pr...	3.64
9.6 Efficiently making decisio...	3.55
9.1 Fostering an environment ...	3.55
9.5 Allowing adequate time fo...	3.45
9.7 Engaging all board memb...	3.09
9.3 Preparing for board meeti...	3.00
9.2 Establishing and enforcing...	2.40

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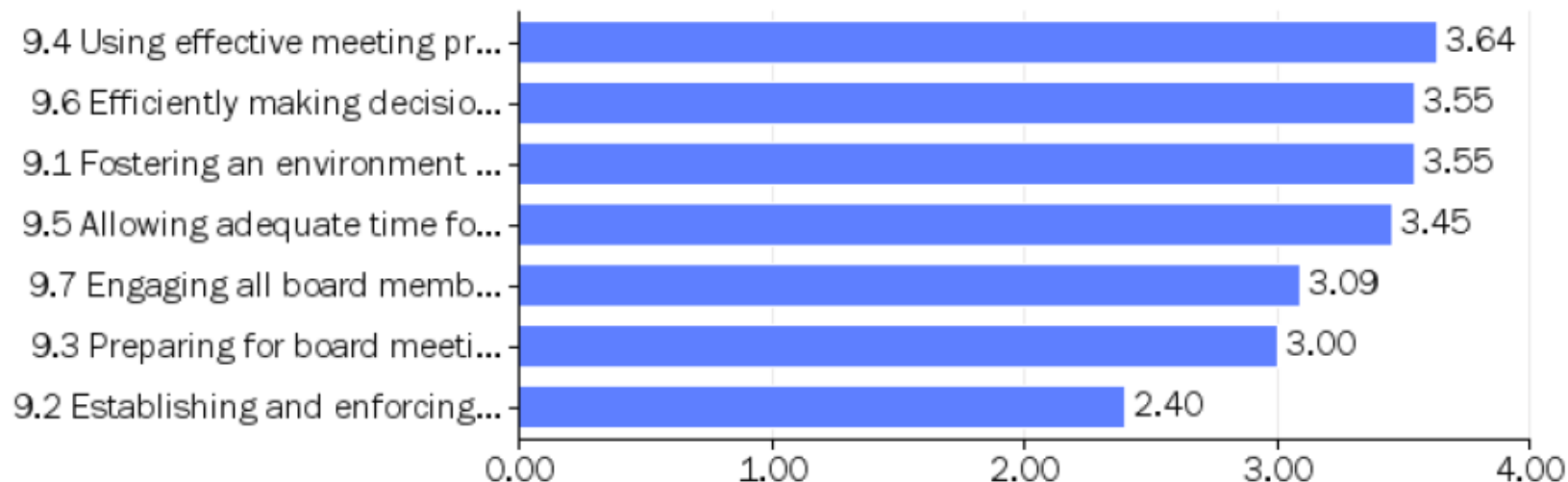
What is working? –
Chief Executive Oversight 3.13

Support and Evaluate the Chief Executive: The primary board--staff relationship is between the board and the chief executive, and the quality of this relationship is of the utmost importance. To be effective, the board and chief executive need a close working relationship based on mutual trust and an appreciation of their respective roles in leading the organization. As part of its responsibility for supervising the chief executive, the board ensures that a job description outlines his or her duties, then evaluates the chief executive annually and determines appropriate executive compensation.

Category	Value
7.2 Giving the chief executive ...	3.73
7.1 Cultivating a climate of mu...	3.60
7.4 Formally assessing the chi...	3.31
7.5 Ensuring that the chief ex...	3.29
7.3 Discussing and constructiv...	3.07
7.7 Planning for the absence o...	2.77
7.6 Approving the executive's ...	2.42

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What is working? –
Financial Oversight 3.13

Protect Assets and Provide Financial Oversight: Boards are responsible for preserving an organization's resources, protecting its assets, and maintaining its legal and ethical integrity. Ensuring that income is managed wisely is especially important for a nonprofit because it operates in the public trust. The board approves the annual budget and then monitors performance against the budget throughout the year. The board also oversees the annual audit to verify for itself and the public that the organization is accurately reporting the sources and uses of its funds. To safeguard the organization's future, the board establishes appropriate investment and risk management policies.

	Value
6.6 Ensuring that insurance ca…	3.33
6.8 Complying with IRS regula…	3.33
6.5 Establishing and reviewin…	3.25
6.2 Reviewing and understan…	3.00
6.7 Ensuring the organization …	3.00
6.1 Ensuring the annual budg…	2.86
6.3 Monitoring the organizatio…	2.86
6.4 Reviewing the results of th…	2.80

Axis: 0.00 1.00 2.00 3.00 4.00

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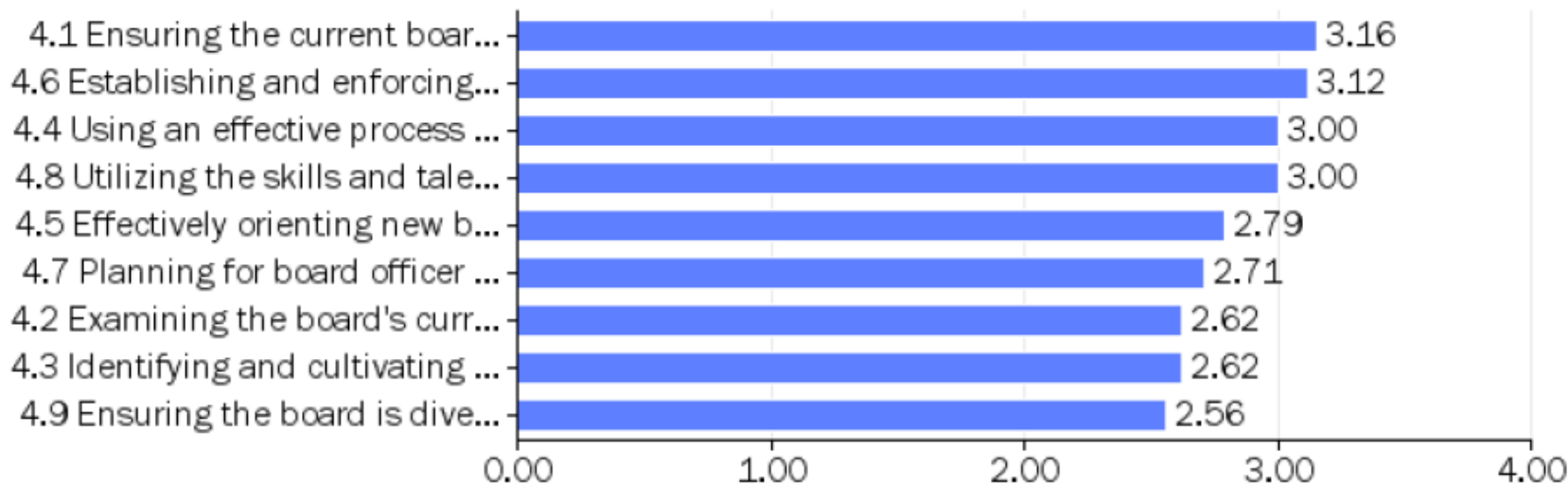
Key Areas for Improvement

The 3 areas with
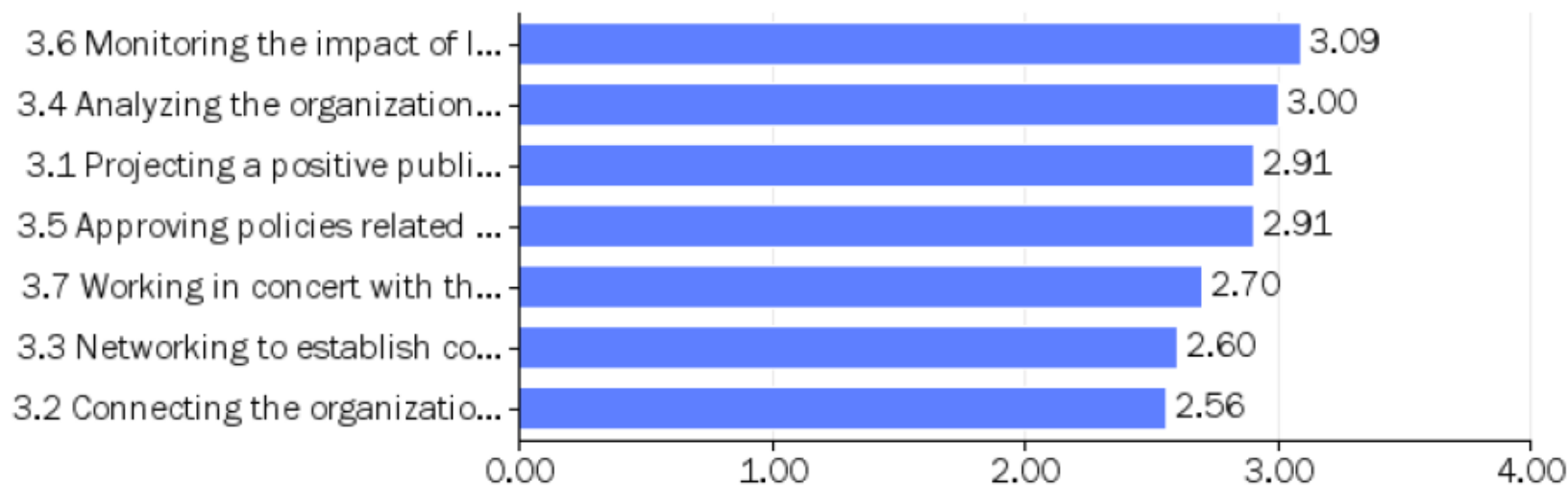lowest average
and median scores

What needs improvement? –
Board Composition 2.79

Build a Competent Board: An organization's board is a critical resource, and the board is responsible for its own composition and leadership. A good board is composed of individuals who contribute critically needed skills, experience, perspective, wisdom, contacts, time, and other resources to the organization. A well-conceived board-building plan helps the board to identify and recruit members and cultivate officers. New members are oriented to the board's responsibilities and the organization's activities. Board member rotation ensures that the board is infused with new ideas yet remains a manageable size.

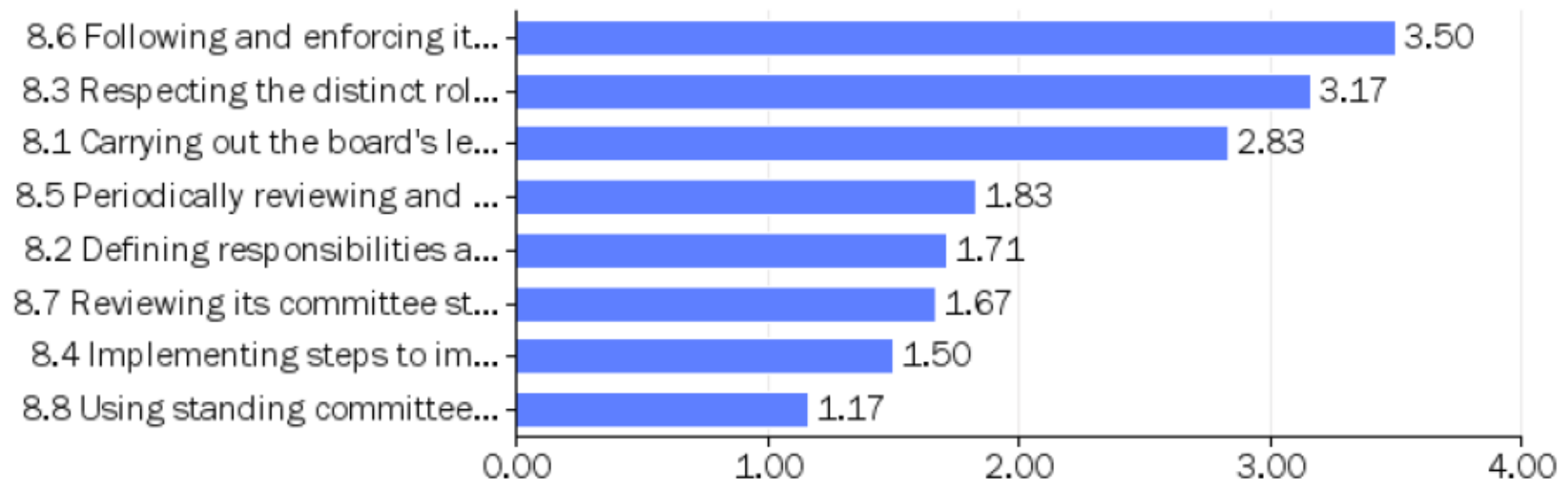| Item	Score
4.1 Ensuring the current boar...	3.16
4.6 Establishing and enforcing...	3.12
4.4 Using an effective process ...	3.00
4.8 Utilizing the skills and tale...	3.00
4.5 Effectively orienting new b...	2.79
4.7 Planning for board officer ...	2.71
4.2 Examining the board's curr...	2.62
4.3 Identifying and cultivating ...	2.62
4.9 Ensuring the board is dive...	2.56

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What needs improvement? – Funding and Public Image 2.83

Enhance the Organization's Public Standing and Ensure Adequate Financial Resources: An organization's resources include a strong reputation and adequate funding to carry out its mission. The board is responsible for building, protecting, and promoting the organization's public standing. Board members serve as ambassadors to the community and are an essential element of an organization's marketing, communications, and outreach efforts. The board is also responsible for the organization's financial sustainability. The board makes sure that the organization has an appropriate mix of income. While the fundraising strategy is developed and executed by the chief executive and other staff in partnership with the board, board members should be active in fundraising in a number of ways, including making personal contributions, connecting staff to potential donors (individuals, foundations, and corporations), and soliciting friends and colleagues.

Item	Score
3.6 Monitoring the impact of l...	3.09
3.4 Analyzing the organization...	3.00
3.1 Projecting a positive publi...	2.91
3.5 Approving policies related ...	2.91
3.7 Working in concert with th...	2.70
3.3 Networking to establish co...	2.60
3.2 Connecting the organizatio...	2.56

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What needs improvement? – Board Structure 2.90

Maintain Sound Board Policies and Structures: The board is responsible for making sure its own practices are appropriate and up-to-date. This requires that the board has a clear understanding of its roles vis-à-vis staff and an awareness of how these respective responsibilities may change as the organization evolves. The board also ensures that it is operating in accordance with the bylaws and other major organizational policies, which are reviewed periodically and revised as necessary. Finally, the board organizes itself efficiently using committees and task forces that have written charters and capable leadership.

Category	Value
8.6 Following and enforcing it...	3.50
8.3 Respecting the distinct rol...	3.17
8.1 Carrying out the board's le...	2.83
8.5 Periodically reviewing and ...	1.83
8.2 Defining responsibilities a...	1.71
8.7 Reviewing its committee st...	1.67
8.4 Implementing steps to im...	1.50
8.8 Using standing committee...	1.17

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Observations

- These are trends observed in both the survey results and during training and action planning with the various Center Boards.

Doing a better job…

- How can board members be better external advocates? What does this mean and what does it entail?

- Want to understand the needs of manufacturers – trends, global changes, technology and specific challenges.

- Need to better understand the programs and services and what projects both entail and achieve.

- Need to understand expectations in regard to securing funding.

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Being a better board...

- Need more attention paid to orientation and on-going development.

- Would like to be more knowledgeable and involved in Strategic Planning.

- Need to improve the level of engagement of ALL board members, including managing expectations.

- Need to undertake more self-evaluation and review.

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Being a better resource...

- Need to understand role in regard to providing performance feedback to the Center Director/CEO.

- Need to play an active role in raising the profile, brand image of the Center.

- Need more diversity on the board, to bring a wider perspective and experience.

- Need to ensure that boards are paying attention to BOTH the financial management of the program AND the strategic needs, while avoiding operational issues.

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• What are the most powerful leverage points?

Recommendations

- Continue to support the **orientation process**, provide opportunities for new board members to **learn about the program and about other centers.**

- **Provide examples** of effective materials for orientation, self-evaluation, meeting management and other best practices.

- Encourage Centers to provide **more opportunities for staff** (internal and field staff) **to engage with the boards.**

- Explore ways to **provide** board members **with research, access to subject matter experts and shared institutional knowledge** to inform strategy development and support the Learning Organization concept.

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Director, Center for Family Business Excellence
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Lise.Stewart@eisneramper.com

American Innovation & Competitiveness Act (AICA):
Required report and what is the GAO

- AICA requires the Government Accountability Office (GAO) to produce a report in consultation with the MEP Advisory Board:
  - analyzing cost share effectiveness, engagement in services/characteristics including volume and type of services
  - whether cost-share ratio change effects services provided by Centers
  - GAO to deliver report to Congress no later than January 6, 2019

- What is the GAO
  - GAO is an independent, nonpartisan agency that works for Congress
  - Often referred to as "the congressional watchdog"
  - GAO investigates how the federal government spends taxpayer dollars

- When you will be contacted and what to expect

Future Meeting Schedule

2018

- June 13, 2018 – Arlington, TX
  - Includes tour of the University of Texas - Arlington's Campus and Lockheed Martin Aeronautics Facility

- September 12, 2018 – TBD*
  - Co-located with MEP National Network Update & Foundation for Manufacturing Excellence (FORME's) Best Practice Conference

2019 (dates subject to change)

- February 26, 2019 – Location TBD*

- June 18, 2019 – Location TBD*

- September 11, 2019 – Possible Post-Summit*

*Calendar invites sent once confirmed

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- Make a **right** out of doors
- Follow hallway around to the Exit
- Best exit for catching cabs is the **Pennsylvania Street Exit**