

Advanced Manufacturing Collaborative

September 8, 2021

1:00pm - 2:30pm

Minutes

Attendees:

Mike Kennealy, EOHED
Mike Tamasi, AccuRounds
Eric Lesser, MA Senate
Jeffrey Roy, MA House of Representatives
Robby Bitting, MassChallenge, Boston
Amy Barad, MassCEC
Robby Bitting, MassChallenge
Allen Brown, General Dynamics
Julie Chen, UMassLowell
David Cruise, MassHire – Hampden County
Leslie Greis, Kinefac
Judy Silva (for John Killiam), MassMEP
Carolyn Kirk, MassTech
Joseph Kunze, Si2
Megan Marszalek, MassTech
Vinit Nijhawan, Mass Technology Transfer Center
Winston Soboyejo, WPI
Ken Warnock, Medtronic
Ryan Mudarwar, MassLife Sciences

Staff:

Damon Cox, EOHED
Scott Martin, EOHED
Farhad Vazehgoo, MassTech
Meghan Abella-Bowen, MassTech
Christine Nolan, MassTech
Brianna Wehrs, MassTech

Absent:

Rosalin Acosta, EOLWD
Mark Fuller, MOBD
Steve Pike, MassCEC
John Regan, AIM
Carlo Canetta, MITRE
Stephen Boyd, Boyd Technologies
Jim Heppelman, PTC
Dan Rivera, MassDevelopment
Emily Reichert, Greentown Labs
Carla Reimold, Mass Life Sci. Center
John Regan, AIM
Israel Soibelman, Lincoln Labs
Kenneth Turner, MLSC

Guest:

Bob Atkins, MIT Lincoln Labs
Laura Teicher, Forge
Susan Feindt, Analog Devices
Liz Storms, Sen. Lesser's Office
Brian Norris, MassHire MVWB
Deborah Meggison, MassHire GNBWB

Introduction, roll call, approval of past minutes

Roll call was taken and the May 13, 2021 minutes were approved unanimously and without abstention.

A motion to approve by Leslie Greis, seconded by Ken Warnock, and approved unanimously

Welcome remarks from Co-Chair Michael Tamasi

Mr. Tamasi opened the meeting and welcomed everyone. He highlighted the Critical Supply Chain Resilience program being discussed at the national level. The program will look at the gaps in capital market provisions to support critical supply chains for manufactures with a focus on strengthening our SMEs. He also highlighted activities and events being planned for October's Manufacturing Month across the state.

Welcome remarks from Secretary Kennealy

Sec. Kennealy welcomed the AMC. It has been a busy summer, in June we celebrated the great work of the MERT program, in July the governor signed the state budget which included \$17.9M for the Career Technical Initiative program to support expanded training programs, and the M2I2 and MMAP programs continue to support manufacturers across the state. In the coming year, reskilling and scaling up training for the workforce will be key priorities.

Manufacturing community update

- A common thread focused on the challenge to hire. Companies are actively recruiting for new employees.
- Finding talented people continues to be our greatest challenge.
- Forge launched its Merrimack Valley location in August.

AMC Working Group Updates Innovation Ecosystem

Ms. Nolan provided an update on the work of the Innovation Working Group.

Innovation:

- The M2I2 program continues to stimulate innovation across the state.
 - \$82M of \$93M invested to date.
 - FY'22 Q1, 6 new grants, ~ 6.3M
 - FY'22, Q2, 14 new applications submitted totaling \$4.8M
 - Over \$100M leveraged from other sources.
 - Example of how M2I2 funds impact a company - Specialty Materials was awarded a \$2.33M M2I2 grant. With these resources they increased their manufacturing capabilities 3X and added approximately 75 employees.
- The MMAP program
 - Program launched in June with applications due by July 29, 2021.
 - Received 51 applications for the program representing manufacturers from across the state.
 - Winners will be announced during October as part of Manufacturing month.

Talent

Ms. Abella-Bowen provided an update on talent and workforce training programs.

- MassBridge has been focused on curriculum development and creation of the Awareness program.
 - Curriculum team – Utilizing the data from the Benchmarking, Roadmapping, and Gap Analysis research, the team has identified five core competencies that will be integrated into existing courses and piloted during the fall 2021 semester. The five core competencies are; 1) Maintenance/Troubleshooting, 2) Communication Skills, 3) Process Control, 4) Quality Control, and 5) Data Analytics.
 - Awareness team - Filming of technician and engineering interview took place in August. Goal is to release the program in late October as part of manufacturing month.

- An update was provided on FY'21 Advanced Manufacturing Training Program outcomes. In FY'21 Forty-nine (49) training programs were offered for both new pipeline and incumbent workers, 522 participants enrolled in training, 403 completed training and as of August 192 participants have secured employment.
- The Virtual Manufacturing Training Program officially launched in July. Ninety (90) participants are enrolled in the program, 63 are currently completing ToolingU training courses, 12 have completed training and 2 have been placed in employment.

Business Environment

- Julie Chen provided an update on the EDA grant. The program focuses on Sustaining and expanding domestic manufacturing based on lessons learned during COVID-19. expand upon the work of MERT
- Susan Feindt from Analog Devices and Bob Atkins from Lincoln Lab provided an update on the Semiconductor Coalition. We have convened key stakeholders from industry, academia, FFRDCs to stay ahead of USICA potential funding to reshore semiconductor manufacturing. Considering a statewide proposal that focuses on strengths of the industry here in the Commonwealth that meet the current needs of the market.
- Christine Nolan highlighted the work being done in the MA Defense Ecosystem. The state is focused on how to expand defense advanced manufacturing in the Commonwealth by building relationships with the services, supporting the primes through workforce and supply chain, and helping SMEs with CapEx and new business opportunities.
 - Hosted a DoD workshop at UML in July with 40+ key decision makers from across DoD services in July.
 - Next steps: AI workshop in partnership with the Innovation Institute in November
- Christine Nolan promoted the Manufacturing Mash-Up event being held on Tuesday, September 28th at Polar Park in Worcester, MA.

Closing Remarks

Materials and Exhibits Used at this Meeting:

1. Draft Minutes – May, 2021 Advanced Manufacturing Collaborative meeting minutes
2. Presentation – Advanced Manufacturing Collaborative, September 8, 2021
3. Presentation – Semiconductor Coalition Update (CHIPS)

Proposed Approach

Element #1 Evolutionary Development

- “Other” microelectronics (RF/Mixed, Power, Integrated Photonics, Imagers, etc.)

Thematic “List” of Near-term Industry Needs

Approach

- New England companies provide individual needs (new infrastructure, facilities, etc.) creating a list of “asks”
- List collated to one or more significant themes containing the specific “asks”

Element #2 Disruptive Development

- “Other” microelectronics (RF/Mixed, Power, Integrated Photonics, Imagers, etc.)
- Mainstream computing substantially beyond or exceeding IRDS Roadmap

Plan for Creation of an Ecosystem to Better Support Disruptive Semiconductor Development

Approach

- Identify impediments to translation of high impact nascent concepts to commercial realization
- Develop a plan for addressing each impediment which better leverages organic New England strengths, and which proposes key investments

