

# **Transforming Manufacturing in a Digital Economy Workgroup (Making it in Maryland)**

**January 10, 2022 10:00am-12:00pm**

## **Meeting Minutes**

### **Workgroup Members in Attendance:**

- Delegate Lily Qi, Chair
- Senator Chris West
- Senator Jim Rosapepe
- Todd Sabin, Maryland Commerce
- Erin Roth, Maryland Labor
- Lance Schine, Maryland DOIT
- Mike Galiazzo, RMI
- Lindsay Ryan, USM
- Wynne Briscoe, SBDC
- Suzy Ganz, MMAB
- Kelly Koermer, MACC
- Chris Cosgrove, RAMP MD
- Mike Kelleher, Maryland MEP
- Adam Porter, Fraunhofer USA
- Ken Sanchez, Chesapeake Specialty Products
- Jack Weber, Uptown Press
- April Richardson, Food Opportunity
- Irnande Altema, MICUA
- Marty Rosendale, MTC
- Bob Mather, Stanley Black & Decker
- Donna Edwards, MD-DC ALF-CIO

### **Staff:**

- Heather Gramm, Maryland Commerce
- Michael Siers, Maryland Commerce
- Jennifer LaHatte, Maryland Commerce
- Richard Clinch, Jacob France Institute

### **Public:**

- Katie Hardy, Office of Delegate Qi
- Sarah Kilmon, Office of Delegate Mautz

### **Welcome and Approval of Minutes:**

Delegate Qi gave welcome remarks and presented draft minutes from the December 2021 meeting. There were 2 edits made to include Annie Coble representing MICUA on the attendee list and time of meeting adjournment. With edits, Marty Rosendale made a motion to approve, Erin Roth made the 2<sup>nd</sup>, and the minutes were approved unanimously.

### **National Examples for Facilitating Adoption of Industry 4.0 in Manufacturing:**

Delegate Qi introduced Richard Clinch with the Jacob France Institute. Richard gave a presentation on Identified Best Practices for Facilitating Manufacturing 4.0 Adoption, including national examples of Industry 4.0 planning initiatives, Support for Business Manufacturing 4.0 Investments, and Industry/Manufacturing 4.0 Test Beds.

Richard began with an overview of existing technical support programs in Maryland that, while not currently focused directly on Industry 4.0, could be leveraged in the future for this purpose. The primary programs include MD MEP, Fraunhofer USA CMA and MTech at University of Maryland. Also of note were Johns Hopkins University-Whiting, UMBC's 7 engineering research centers, Morgan State's CAP center and RAMP MD. Lindsay Ryan also noted UMBC's CyMOT initiative.

He then presented on statewide planning initiatives in Iowa and Connecticut; 9 programs in 4 states (CT, MA, IN, IA) as strong examples of Manufacturing 4.0 investments supporting manufacturer adoption of technologies, and the Oregon Factory of Tomorrow as a Manufacturing 4.0 test bed best practice. He concluded with key takeaways from his research, noting that best practices include:

1. Developing Business/Industry Focused Strategic Plans
2. Supporting Manufacturing Company Investment through:
  - a. Direct Financing – Matching Grants (7 State Programs Identified)
  - b. Lending – Connecticut program under development
  - c. Tax Credits – North Dakota has a targeted program
3. 3 of 4 “Best Practice” Cases are Part of a Larger State Manufacturing Effort/Organization – 4th (Iowa) is planning to create such an Organization
  - a. 2 Nonprofit; 1 Public; 1 in State Economic Development Agency
4. Two require MEP or University Partners
5. Manufacturing 4.0 Test Beds
6. Providing Support Services

**Discussion:**

Senator West requested additional information on the new lending program under development in Connecticut, which will be researched and provided to the Workgroup. Senator Rosapepe noted that there are 2 basic problems these programs seem to address - helping manufacturers learn about new technologies, and reducing the cost of implementing technologies. Richard noted a third that included technical assistance/wraparound support services. It was suggested that it would be useful as part of the Workgroup's efforts to evaluate to what extent this expertise exists in Maryland, and that perhaps a similar exercise as the Connecticut asset mapping effort would be useful in identifying this expertise as well as gaps that exist in Maryland. Mike Galiazzo stated he felt that the purpose of this group is not simply to build on what exists, but to create what should be and think innovatively about the possibilities here in Maryland.

Suzy Ganz noted that SME's capacity to implement technology is something to take into consideration, as well as the various degrees of difficulty at implementing different technology solutions, and that a variety of programs may be needed in order to address both capacity and the range of implementation difficulty.

In discussion regarding the capacity and effectiveness of universities to respond to the needs of industry, Delegate Qi asked what it would take for universities to be able to provide the assistance

needed. One suggestion was that new entities within universities were needed with different metrics of success that focus on industry needs and commercial application of technology. It was also noted that community colleges often don't have the infrastructure/facilities and rely on technical high schools which limits usage to evenings and weekends; community colleges need the resources to scale these types of facilities, as well as assistance hiring the technical assistance to oversee the programs. Richard reminded the group that the current focus is on technology adoption and innovation, and that the workforce and training aspect would be addressed separately later in the year. It was also noted that consultant fees to assist with technology and systems integration can be very costly, and the size of some of the programs highlighted in other states doesn't begin to adequately cover the costs.

April Richardson noted that diversity, equity and inclusion is an important aspect to keep top of mind during these discussions, and that it's not just about workforce and access to jobs, but also support for minority and woman-owned manufacturing businesses. She cited statistics on low venture capital access for women-owned businesses as one example of the challenges they face. She asked that the research of best practices and discussion of programs continually include issues of diversity and inclusion. Suzy suggested that TEDCO could be a future resource identified in support of funding in future conversations.

Delegate Qi asked the workgroup for specific legislative ideas for the upcoming 2022 legislative session, which begins on January 12th. Ideas proposed included:

- 1) \$50,000,000 Grant for the purchase of advanced manufacturing equipment. With the following requirements: Need letter to the Governor's office/Would be in supplemental budget.
  - Manufacturer's with annual revenue of less than \$5,000,000.
  - Manufacturer's with five + years in operation.
  - Manufacturer's home corporation in the State of Maryland or headquartered in the State of Maryland.
- 2) Allow a 179 pass through for Maryland tax up to \$200,000; currently Maryland allows \$25,000, and this would recouple it with the federal law. This will encourage additional capital expense for advanced innovative digital equipment that has been completed proven in the field. "Depreciation" includes any deduction allowed under § 179 of the Internal Revenue Code.
- 3) Manufacturing 4.0 Career Corp - students ages 16 and up would be in the Career Corp which would be a combination of classroom and work-based applied learning. The students would be paid for their work, much like an apprenticeship. It would be in concert with the Kirwan initiative where students would take college training courses toward a workforce credential while still in high school.
- 4) Establishing 3 funds to focus on different stages of innovation and technology adoption. Proposal would have funds available for 3 years in order to allow manufacturers to move from one phase to the next:
  - a) Industry 4.0 Infrastructure grants (this will allow for electric and computer hardware/software upgrades) to get ready for implementation. This could be run through MEA or commerce, but would only be available to SME or MBE's with manufacturing SIC codes of 20-39. This would be a one to one matching grant, verified with paid invoices showing the implementation. Funding would be pre-approved based

on proposals. Proposed funding amount of \$20M, with no more than \$250,000 per company.

- b) Industry 4.0 Implementation grants (this will help with the purchase of new technologies and reduce risk associated with implementation). This would be a one to one matching grant, verified with paid invoices showing the implementation. Funding would be pre-approved based on proposals. Proposed funding amount - \$25MM, with no more than \$300,000 per company. Target - SME, MBE manufacturers with manufacturing SIC codes of 20-39
  - c) Training grants and research grants to be used with local universities, community colleges, and MEP/consultants. This would be a flat grant of up to \$50,000 for SME's and MBE's manufacturers with manufacturing SIC codes of 20-39. The training would have to be 4.0 related for training or research.
- 5) Supplemental salary fund - establish a pilot program to supplement wages at small manufacturing operations to help them be more competitive with their salaries and attract top talent.

It was agreed that, with a small window of opportunity for this legislative session, the idea of a fund to assist manufacturers with technology adoption/implementation was the highest priority. The other concepts proposed, as well as new ideas, will continue to be discussed for future recommendation as the Workgroup continues meeting.

**Stanley Black & Decker Virtual Tour:**

Mike Galiazzo discussed plans to organize a virtual tour of the Stanley Black & Decker Manufactory in January for interested members of the Workgroup. Additional information will be forthcoming.

**Closing Remarks:**

Delegate Qi thanked the members for their valuable insights. She asked that the legislative members of the workgroup meet this week to discuss possible legislative proposals. If anyone has additional ideas please email them to Heather Gramm. She noted that the next meeting is scheduled for February 14th 2022 at 10:00am. Meetings will remain virtual.

The meeting adjourned at 11:45am