

AMEP ANNUAL MEETING 2021

November 16, 2021

AN EYE TO THE FUTURE OF MANUFACTURING 2022



AGENDA

Thank you for
joining us today

WELCOME - Ron Angelo

AMEP History and Highlights – Lynn Raicik /Charles Daniels

AMEP Working Teams – Charles Daniels, Susan White, Amanda Wiriya

AMEP - Paula Gilberto Tribute – Charles, Glenn, Ron, Lynn

An Eye to the Future of Manufacturing 2022 – Colin Cooper

State Manufacturing Technology Working Group - Dr. Jackie Garofano

Diversity, Equity & Inclusion - Tracy Ariel, Director, MCC/MXCC

Closing Remarks - Charles /Ron

Technical Education Programs in 2021 (so far)

TECHNOLOGY FOCUS AREAS:



Additive Manufacturing



Big Data & Analytics



Digital Technologies



IoT Technologies



Robotics & Automation

Leading With Technology to Upskill Today & Tomorrow's Workforce

- Held over **60** Introductory Workshops, Demonstrations, Trainings in 2021



- Over **650** attendees including over **200** participants from CT small/medium sized companies
- CCAT's Engineers partnered with over **14** global technology experts



Manufacturing Month 2021

Manufacturing Mania –
Community Open Houses

ACM Fair

CT MFG Summit for Educators

Inspiring the Next Generation into Manufacturing & STEM careers



- Governor Lamont proclaimed October as CT Manufacturing Month with activities planned all Fall long
- Over **1,000** students & educators attended events to showcase modern manufacturing
- **CTMFGMonth.com** website provided links to events, updated videos and resources for students, educators, & companies
- Connections with Industry Ambassadors planned all school year



AMEP HISTORY

2011- 2021

- The Advanced Manufacturing Employer Partnership (AMEP) is a Workforce Solutions employer-led sector partnership, supported Workforce Solutions Collaborative Metro Hartford since 2011.
- AMEP is convened by CCAT, a technology leader, as the manufacturing intermediary.

VISION: *Every manufacturing position is filled with a qualified employee.*



AMEP HIGHLIGHTS

2020-2021

- Employed over 150 unemployed/underemployed people - over 65% from low-income households.
- Assisted over 75 small/medium sized companies with wage subsidies.
- Led National Job Quality Initiative.
- **Helped to build regional economies through collaborative strategies in business development.**



AMEP WORKING GROUPS

2022

2022 - AMEP structure will shift from regional groups to working groups focused on the 3 areas employers need the most information on.

- **Training Pathways** - [Susan White](#), CEO Atlas Stamping
- **Job Quality** – [Amanda Wiriya](#), Director of Manufacturing Support, Wepco Plastics
- **Business Development** - TBD

Paula Gilberto

AMEP/CCAT celebrates your
support of workforce
innovation in Advanced
Manufacturing

Sector Partnerships

Workforce Solutions Collaborative Metro Hartford

CT Apprenticeship Program

Young Adult Champions

Gates Foundation - Job Quality

Deloitte Foundation – Women in Manufacturing

Prudential Foundation – Financial Literacy

Working Cities Challenge – Boston Federal Reserve

Building networks for Community Based Organizations



State Workforce Updates

COLIN COOPER

The Importance of Manufacturing for Connecticut

Connecticut's Manufacturing Landscape

The Critical Need for Workforce Development

Emerging Industries

Additional Priorities for 2021 & Beyond

Trends for 2022

The Importance of Manufacturing

- CT Manufacturers produce >\$27 billion worth of product and export worldwide
- Manufacturing is one of the top 4 employment sectors in the State
- Each manufacturing job supports >3 others
- Manufacturing wages are significantly above average
- Manufacturing not only provides good jobs, but it also provides great career opportunities

Connecticut Manufacturing Landscape

- Approx. 160,000 people employed in Manufacturing
- 4,000+ Manufacturers in the State
 - ~60,000 employed by 25 Largest Manufacturers
 - Remaining ~100,000 employed by the other 4,000 Manufacturers
 - Average ~ 25 Employees
- The health of Small/Mid-sized Manufacturers is key to the health of the manufacturing ecosystem

Connecticut Manufacturing Landscape

- CT has been at the forefront of precision manufacturing in the United States since the dawn of the Industrial Revolution in North America (200+ years)
- Strong History of Innovation (products & processes)
- CT Manufacturers are very strong in High Complexity Products
- World leader in jet engines, helicopters, submarines
- Also: Medical devices, advanced production systems, engineered components, automotive
- CT competes based on the skills, knowledge and abilities of our workforce

Critical Need: Workforce

- CT Manufacturing competes based on the skills, knowledge and abilities of our workforce
- If Connecticut were a country, it would be the sixth-most productive in the world—even higher than the U.S., itself
- However, 35% of our Manufacturing Workforce is 55 years old or more
- Open Manufacturing Positions are at a 5-year high, above Pre-Pandemic levels
- CT needs 6,000 – 8,000 new entrants into the Manufacturing Workforce annually for the foreseeable future highlighting the need for manufacturing training
- The retirement of our most experienced workers along with the advent of new digital technologies highlights the need for Incumbent Worker Training

Critical Need: Workforce

- Significant resources have been invested over the past 10 years to build out capacity and capabilities to support workforce training
- Significant Additional Resources (state and federal) are budgeted for Workforce Development for the next several years
- The Workforce Strategic Plan provides a framework for these investments and facilitates coordination amongst the various stakeholders in our talent training ecosystem
- The initiatives outlined in the Workforce Strategic Plan are key to the development of Connecticut's workforce and arguably the most important Economic Development Activity underway in the State.

Emerging Technologies

- Batteries – automotive and storage
- Fuel Cells
- Biofuels
- Electronic Vehicle charging stations
- Drones
- Offshore Wind Power

BEYOND 2021

- Legislative
 - Support Workforce Strategic Plan, Funding for Manufacturing Innovation Fund (MIF), CT Transfer Act, Unemployment Insurance Reform
- Renew Legacy and Implement New MIF Programs
 - IWT, Apprenticeship, Voucher programs;
 - Internships, Matchmaking, Digital Roadmaps, Hearts & Minds, Manufacturing Website, Career Fairs
- Technology Adoption
 - Connecticut Defense Manufacturing Community Consortium - Digital Model Initiative, Additive, Industry 4.0, Strategic Plan for Digital Transformation, Incumbent Worker Training
- Support Emerging Industries
 - Off-shore Wind, Electric Vehicles (incl. infrastructure), Life Sciences, etc.

2022 TRENDS

- Manufacturing Leaders Become More Proactive in Recruiting and Retaining Talent
- Continued Shortening of Supply Chains
- Increased communication, cooperation, collaboration and coordination in the Connecticut manufacturing ecosystem
- Accelerated Adoption of Digital Technologies in Manufacturing
- Increased Focus on Cybersecurity
- Clean Energy



Industry 4.0 Working Group

Senate Bill No. 1021
Special Act No 21-24

1 Oct 2022 *

Small and mid-sized mfg

Strategic plan

* Kicked off WG on Aug 25. Co-chaired by
CCAT and CONNSTEP.



i4.0 Manufacturing Technology Working Group



Deliverables:

- Comprehensive profiles of provider resources relative to i4.0 (state v fed \$)
- Conduct value stream mapping (VSM) to access the flow of services

Workstreams:

VSM

Resources

Outreach

Ecosystem



DEI and Manufacturing

Tracy Ariel, Director of
Manufacturing, MCC/MXCC

Manchester Community College

Promoting Diversity, Equity, & Inclusion:
Building a Diverse Manufacturing Pipeline' Webinar

SAVE THE DATE
Wednesday, February 23, 2022
11:00 a.m. to 1:30 p.m.

DEI and Manufacturing

Tracy Ariel, Director of Manufacturing, MCC/MXCC

Who Should Attend:

Manufacturing professionals who are responsible for and involved in examining institutional culture, creating pipelines for recruitment, and developing a strategic workforce investment plan.

Reasons to Attend:

- Hear a keynote speech and discuss partnering with entities to create pathways for a diverse workforce
- Help inform the development of a Strategic Investment Plan to attract and fill position vacancies
- Explore cultural and environmental factors that support an inclusive, diverse work environment

AMEP ANNUAL MEETING 2021



*Wishing All a Happy Holiday and Looking
Forward to a New Year!*

...MORE TO COME IN 2022