2021 WORKFORCE ROADMAP:
Manufacturers’ Priorities in Workforce Development
ACKNOWLEDGEMENTS
We would like to recognize our partners at Ohio TechNet and the Manufacturing Institute, who contribute significantly to The Ohio Manufacturers’ Association’s (OMA) workforce strategies. We would also like to express our appreciation to the manufacturers, educators, and stakeholders who helped to identify the priorities and goals discussed in this document.

This work was funded in part by grants from the U.S. Department of Labor’s (USDOL) Employment and Training Administration and the U.S. Department of Defense (USDOD) via the Ohio Development Services Agency. The product was created by the grant recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the OMA.

RECOGNITION OF SUPPORT
We thank these organizations that provided leadership-level financial support for OMA’s workforce services:

PLATINUM LEVEL
• American Honda Motor Company
• JobsOhio
• The Ohio Manufacturing Extension Partnership (Ohio MEP)
• Pharmaceutical Research and Manufacturers of America (PhRMA)

GOLD LEVEL
• Dupont
• Ohio TechNet

SILVER LEVEL
• AMG Vanadium LLC
• Buckeye Educational Systems | Smart Automation Certification Alliance (SACA)
• Elite Biomedical Solutions
• FESTO
• Health Management Solutions, Inc.
• Integrated Systems Technologies
PURPOSE OF THIS ROADMAP

The roadmap is intended to document OMA’s 2021 workforce development strategies and action steps to facilitate skill development and talent acquisition among Ohio manufacturers.

OMA uses this roadmap to help communicate its strategies and plans with stakeholders in order to facilitate collaboration, learning, and execution.
Manufacturing is the second leading private employment sector in Ohio, following only health care and social assistance employment. As such, it has a tremendous need for talent. Since the launch of the OMA’s workforce services in 2016, the biggest constraint to industry growth has been a significant disparity between the number of available jobs in manufacturing and the number of qualified applicants for them. Despite the unemployment rate spikes that followed the onset of the COVID-19 pandemic, manufacturers continue to report difficulty filling available jobs. Root causes include:

- **Ongoing baby boomer retirements** and decreasing population
- **Rapid industrial technology advancements** leading to mismatches in curriculum, instructor capacity, and equipment within the education system
- **Lingering misperceptions** about the industry as well as competitive recruitment from other sectors
- **Ripple effects of COVID-19**, which are disrupting normal job seeking and hiring practices, as well as new and ongoing employment barriers (e.g., lack of available childcare and transportation)

---

3 Source: Ohio Department of Job and Family Services, Office of Workforce Development, Ohio Labor Market Information, [http://ohiolmi.com/ces/lmr.htm](http://ohiolmi.com/ces/lmr.htm)
THE SOLUTION

OMA has embraced Industry Sector Partnerships (sector partnerships) as a model for addressing workforce development challenges through community collaboration. Sector partnerships put employers in the driver’s seat and have demonstrated effectiveness across the country. At least 29 states have adopted state policies in support of sector partnerships. Manufacturers within a regional labor market work together to influence alignment around common solutions with education and training, economic and workforce development, and community organizations. For more information on Industry Sector Partnerships, refer to:

- Industry Sector Partnerships: What They Are and Why They Work
- OMA’s Sector Partnership Endorsement Criteria

Since 2016, OMA has worked with manufacturers and their partners across the state to create a network of sector partnerships and to help establish partnerships where none exists. Through OMA’s efforts, the network of sector partnerships is a collective voice for – and system of – the manufacturing industry’s workforce development priorities and solutions. At the time of writing, the OMA has endorsed 13 sector partnerships and is working with emerging sector partnerships in several communities with a vision to make sector partnership membership available to manufacturers in all 88 Ohio counties.

The sector partnership endorsement process was instituted by the OMA Workforce Leadership Committee to spotlight and communicate the best practices of those partnerships that are making the greatest strides towards meaningful systems change in workforce development problem solving.

In 2020, sector partnerships’ collaborative infrastructure led to the ability to seize opportunities, including:

- Creating the Ohio Manufacturing Alliance to Fight COVID-19, a collaboration of the manufacturing and health care sectors to respond to the shortage of PPE and other critical products;
- Earning Ohio’s designation as a Defense Manufacturing Community by the U.S. Department of Defense, which will flow resources to defense manufacturers and sector partnerships;
- Together with Lorain County Community College/Ohio TechNet (a collaboration known as the Ohio Manufacturing Workforce Partnership), being invited to showcase the sector partnership network as a promising practice among U. S. Department of Labor grantees.

Through regional meetings, webinars, and an annual statewide summit, OMA fosters a learning community committed to sharing best practices and resources. The community is working toward a coordinated talent system that helps ensure that Ohio manufacturers have access to the skilled workforce they need today and tomorrow.

To this end, the OMA manages three workforce committees:

- **WORKFORCE LEADERSHIP COMMITTEE**, made up of OMA board member company representatives and invited industry leaders, charged with driving the OMA workforce agenda.
- **INTERMEDIARY COMMITTEE**, which includes a representative (“intermediary”) from each manufacturing sector partnership in Ohio.
- **STATEWIDE WORKFORCE ALIGNMENT COMMITTEE** (formerly State Agency Committee), which includes representatives from workforce development, economic development, education, and support services agencies, as well as community-based partners.

Through these committees, OMA has fostered stronger alignment with state partners, influenced state-funded programs, and driven regions to be more responsive to manufacturing’s requirements.

For more information about the workforce committees, see Appendix B.
Heading into 2021, which brings a social and economic environment unlike anything we’ve experienced, OMA workforce services will focus on the following:

Fostering manufacturer leadership and regional collaboration
Focusing on statewide alignment and building relationships with state partners
Locating, engaging, and hiring the un- and under-employed with an emphasis on career switchers, minorities, women, veterans, and formerly incarcerated people as well as recent high school graduates
Promoting credentials/career pathways and earn-and-learn models

Our experience working with sector partnerships, manufacturers, and workforce development and education professionals has indicated that competencies (knowledge, skills, and abilities) provide the language around which stakeholders can align.

Identifying and communicating competencies ensures programs and initiatives meet manufacturers’ needs.
Building on what we’ve learned in prior years, we have identified three workforce priorities and five strategic goals to drive action. They are:

**PRIORITY ONE: INDUSTRY LEADERSHIP**
Ensure that – regionally and at the state level – manufacturers are in the driver’s seat. Efforts to fill the workforce gap are futile without manufacturers’ buy-in, validation, and participation. The OMA Workforce Leadership Committee represents the voice of industry in the following priority areas:

**PRIORITY TWO: REGIONAL COLLABORATION**
Industry sector partnerships are the sum of many parts: manufacturers, education providers, social service agencies, community-based organizations, workforce and economic development partners. Our strategies will not reach scale without collaboration among these groups at a local/regional level. Through our Intermediary Committee, we will continue to share best practices, lessons learned, and challenges across regions and use this network to disseminate information locally.
PRIORITY THREE: STATEWIDE ALIGNMENT

We will work to bring funding, policy, and stakeholder efforts into alignment with business priorities and with each other. Eliminating silos where possible and encouraging braiding of funds, co-enrollment, and streamlining of initiatives, the Statewide Workforce Alignment Committee will lead efforts to coordinate these initiatives:
1. Increase the number of counties served by manufacturing sector partnerships.

2. Implement statewide earn-and-learn model to address the entry-level production worker gap in alignment with the Scaling Apprenticeship performance requirements. (Scaling Apprenticeship refers to a USDOL grant awarded to the Ohio Manufacturing Workforce Partnership for the purpose of growing Ohio manufacturing earn-and-learn (apprenticeship) programs.)

3. Build sector partnership capacity to increase outreach, enrollment, and job placement by creating tools and programs that support them (e.g. Ohio TechNet, Making Ohio, and Ohio to Work):
   - Launch regional Making Ohio campaigns with lead-generation support and technical assistance;
   - Build talent pipeline using career pathways and credentials;
   - Develop a career coaching toolkit and provide professional development for coaches; and
   - Connect job seekers with support that facilitates and sustains their ability to work including training, transportation, and other basic services.

4. Increase participation by manufacturers in federal Workforce Innovation and Opportunity Act (WIOA) funded programs while increasing investment from workforce development boards in manufacturing-related programs.

5. Establish a clear, statewide manufacturing workforce development alignment system to ensure that grants, public, and private investments are being used in ways that maximize outcomes (jobs filled, employees upskilled and retained) without duplicating efforts.
   - Document and measure progress through KPIs, intermediary survey, and grant-related performance data.

For a more detailed discussion of these goals, contact workforce@ohiomfg.com.
Below is a summary of activities and gains related to 2020 priorities. See also KPI discussion in Appendix A.

**LEADERSHIP/SECTOR PARTNERSHIP CAPACITY BUILDING**
- Provided ad-hoc support based on regional needs during the COVID-19 pandemic.
- Offered grant writing webinars for endorsed sector partnerships pursuing Ohio’s Industry Sector Partnership funding.
- Workforce Leadership Committee members have requested more frequent meetings/communications, indicating value of workforce services.
- Shared sector partnership endorsement criteria at state and national workforce development webinars and conferences.
- Developed tools and methodology for credential adoption and competency identification.

**POLICY DEVELOPMENT**
- Encouraged manufacturer participation in Ohio’s TechCred program, leading to more manufacturing credentials approved for funding than any other industry.
- Supported the legislative passage of Ohio’s Manufacturing Mentorship program, expanding access for 16 and 17-year-olds to manufacturing work experience.
- Represented industry on Ohio TechCred and Ohio Department of Education credential review committees.
- Initiated collaboration with public workforce system and provided braided-funding guidance to sector partnerships.

**MARKETING AND OUTREACH**
- Convened task force on Diversity and Inclusion to develop outreach strategy for people of color, women, veterans, and formerly incarcerated people.
- Partnered with the Manufacturing Institute to encourage Ohio’s manufacturers to take tangible actions toward more diverse and inclusive workplaces.
- Collaborated with JobsOhio and industry sector partnerships to launch regional Making Ohio campaigns; developing tools and templates for easier utilization of Making Ohio.
- Worked with state partners to ensure Making Ohio career pathways are incorporated into career exploration tools and websites statewide.

**EDUCATION INNOVATION**
- Through Scaling Apprenticeship technical assistance, helped sector partnerships, education partners, and manufacturers understand the value of credentials.
- Convened, with Lorain County Community College, the Automation and Robotics task force, which completed an asset map, credential list, and career pathway for Industry 4.0.
- Partnered with Ohio TechNet to bring Ohio Technical Centers into key conversations about manufacturing career pathways.
- Created tools and methodologies to help manufacturers develop earn-and-learn programs as part of their career pathways.
CALL TO ACTION

While OMA is committed to making Ohio the recognized national leader in manufacturing talent development, there are a number of actions any interested party can take. Please consider doing one or more of the following:

- Email workforce@ohiomfg.com to opt into the OMA Workforce Community to receive ongoing information, including webinar and event announcements.
- Join your local sector partnership.
- Request access to the Making Ohio image assets by visiting makingohio.com/partners.
- Become a sponsor of OMA’s workforce initiatives. Contact Dan Noreen, Managing Director, Development at dnooreen@ohiomfg.com.
- Explore the sector partnership tools available at www.ohiomfg.com/workforce-services.
- Contribute a case study.
- Participate in an upcoming webinar.
## Key Performance Indicators for OMA Workforce Roadmap: Priorities for Manufacturers in Workforce Development (as of December 31, 2020)

<table>
<thead>
<tr>
<th>Leadership/Sector Partnership Capacity Building</th>
<th>Policy Development</th>
<th>Marketing and Communication</th>
<th>Education Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Through technical assistance and best practice sharing, increase industry champions’ and sector partnerships’ abilities to drive systems change.</strong></td>
<td>Amplify the voice of manufacturers with lawmakers and public officials.</td>
<td>Leverage the Making Ohio brand to elevate awareness of and interest in manufacturing careers.</td>
<td>Increase public/private collaborations to train and educate the manufacturing workforce.</td>
</tr>
<tr>
<td>Number of sector partnerships: <strong>17</strong></td>
<td>State sector partnership funds directed to manufacturing: no data at this time</td>
<td>Social media and web analytics: <strong>1,055</strong> new users visited MakingOhio.com</td>
<td>New and expanded apprenticeship programs: <strong>16</strong></td>
</tr>
<tr>
<td>Number of manufacturers involved in sector partnerships: <strong>1,654</strong></td>
<td>State and federal funds used to offset the cost of apprenticeship training (through TechCred and Scaling Apprenticeship): dollar amounts not currently available; however, in the first six rounds of the TechCred program, 966 Ohio employers across all industries were approved for TechCred funding, supporting the earning of 15,105 credentials (valued at up to $2,000 each) by Ohio employees. Manufacturers accounted for more than half of all approved applications.</td>
<td>Number of Scaling Apprenticeship participants enrolled: <strong>190</strong></td>
<td>Number of industry-recognized credentials earned: no data at this time</td>
</tr>
<tr>
<td>Manufacturer investment (as measured through Scaling Apprenticeship matching funds): no data at this time</td>
<td>Development of policy recommendations aligned to manufacturer needs: rules published for Manufacturing Mentorship program which became law in HB 166 (133rd Ohio General Assembly)</td>
<td>Number of manufacturers engaged in Scaling Apprenticeship: <strong>33</strong>(^3)</td>
<td>Employment and wage data: no data available at this time</td>
</tr>
<tr>
<td>County coverage: <strong>65</strong></td>
<td></td>
<td>Number of students/potential job applicants engaged through: • Speaking engagements • Events, tours, and competitions for K-12 and post-secondary students • MFG Day events held See next page*</td>
<td>Automation and Robotics micro credentials recognized by state agencies: <strong>97</strong></td>
</tr>
</tbody>
</table>

\(^3\) Manufacturers are counted as “engaged” in the Scaling Apprenticeship grant when an employee is enrolled as a participant. Many more manufacturers are participating in planning and program development.
**NUMBER OF STUDENTS/JOB SEEKERS ENGAGED THROUGH:**

**SPEAKING ENGAGEMENTS:**
- 5 sector partnerships engaged 200 or more
- 3 sector partnerships engaged 100-150
- 2 sector partnerships engaged 50-100
- 5 sector partnerships engaged 0-50
- 2 sector partnerships did not answer

**TOURS, EVENTS, COMPETITIONS:**
- 6 sector partnerships engaged 200 or more
- 2 sector partnerships engaged 100-150
- 2 sector partnerships engaged 50-100
- 5 sector partnerships engaged 0-50
- 2 sector partnerships did not answer

**MFG DAY:**
- 6 sector partnerships engaged 200 or more
- 1 sector partnership engaged 50-100
- 8 sector partnerships engaged 0-50
- 2 sector partnerships did not answer
APPENDIX B: MORE ABOUT THE OMA WORKFORCE COMMUNITY

None of the work described in this Roadmap would be possible without the dedication and ingenuity of Ohio’s workforce community. In addition to the committees referenced earlier, the OMA would like to recognize the working groups that contribute to solving manufacturing workforce matters.

OMA WORKFORCE LEADERSHIP COMMITTEE
The Workforce Leadership Committee includes OMA board member companies and invited professionals who serve as industry champions in their regions in workforce development initiatives and sector partnerships. The role of the Workforce Leadership Committee is to ensure that the OMA staff and other committees pursue initiatives, policies, and programs that are responsive to manufacturers’ needs. This committee provides peer reviews for sector partnership endorsement applications, offers guidance to the OMA Workforce Services team on letters of support and other requests from partners, and contributes to industry validation efforts regarding career pathways, credential adoption, and more. For a list of Workforce Leadership Committee members, please contact workforce@ohiomfg.com.

OMA INTERMEDIARY COMMITTEE
Each Industry Sector Partnership has a designated individual, an “intermediary,” who serves as a single point of contact for its members. The Intermediary Committee is open to intermediaries of both OMA-endorsed and non-endorsed sector partnerships. The Intermediary Committee is the OMA’s connection to regional activities and a source of best practices. Strategies and needs identified by the Workforce Leadership Committee, as well as opportunities and resources offered by the Statewide Workforce Alignment Committee, are shared with this group to be passed on to sector partnership members across the state. For the duration of the Scaling Apprenticeship grant, Regional Grant Project Managers are also engaged in the Intermediary Committee.

STATEWIDE WORKFORCE ALIGNMENT COMMITTEE
The Statewide Workforce Alignment Committee (formerly the State Agency Committee) is made up of volunteers and invited representatives from a number of partner agencies including the Office of Workforce Transformation, Ohio Department of Higher Education, Ohio Department of Education, Development Services Agency, and Ohio MEPs, among others. Ohio’s private economic development organization, JobsOhio, is also represented on this committee. The original OMA Workforce Services Design Team, which includes individuals from Lorain County Community College/Ohio TechNet and the Ohio Manufacturing Institute, also participate on this committee. In 2021, OMA will expand this group to include community-based organizations that are critical partners in engaging diverse and underserved populations.

OHIO MANUFACTURING WORKFORCE PARTNERSHIP (OMWP) LEAD TEAM
The USDOL Scaling Apprenticeship grant, which funds Ohio’s Innovative Earn-and-Learn strategy, is a critical component of the OMA’s workforce development efforts. The OMWP is a system of 12 regional partners (many of which are also industry sector partnerships) led by Lorain County Community College on behalf of Ohio TechNet. The Lead Team ensures that OMWP performance goals and OMA workforce priorities are aligned.

AUTOMATION AND ROBOTICS TASK FORCE
Made up of OEMs, education partners, and other stakeholders, the Automation and Robotics Task Force was convened in 2019 to provide expertise and guidance as the OMA, Lorain County Community College, and other partners developed a strategy for ensuring small and medium manufacturers – and their education partners – are better positioned to take advantage of Industry 4.0 technologies.

DIVERSITY AND INCLUSION TASK FORCE
Under the requirements of the USDOL Scaling Apprenticeship grant, the OMWP has goals for engaging apprentices from a variety of backgrounds: 1,250 people of color, 1,000 women, 500 veterans, and 100 ex-offenders. In late 2020, the OMA convened a group of volunteers representing manufacturers, state agencies, educators, and community-based organizations to develop strategies to engage diverse populations not traditionally represented in manufacturing.