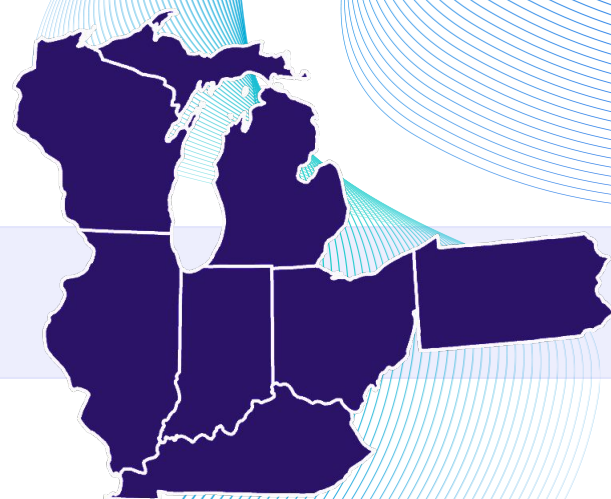


# Welcome

## Midwest NNME Partner Convening



Led by co-lead institutions:



# Today's Agenda



**1) Welcome & Framing**



**2) EXCELERATE-ME Proposal Overview**



**3) Ohio Manufacturing Workforce Blueprint**



**4) Industry Panel: Workforce Perspectives**



**5) What's Next: Closing Q&A**



# Quick Poll

# EXCELERATE-ME

Excellence in **Microelectronics** Learning, Education, Research, and Training Exchange

**Midwest Regional Node Proposal** for the  
National Network of Microelectronics Education (NNME)



**OBJECTIVE #1**

# **Knowledge Sharing as Infrastructure**



**OBJECTIVE #2**

# **Collaboration Where Industry is Already Leading**





**OBJECTIVE #3**

# **Coordination and Readiness for Future Investment**



**No single organization can  
meet this moment alone.**



A QUICK NOTE ON

# Questions

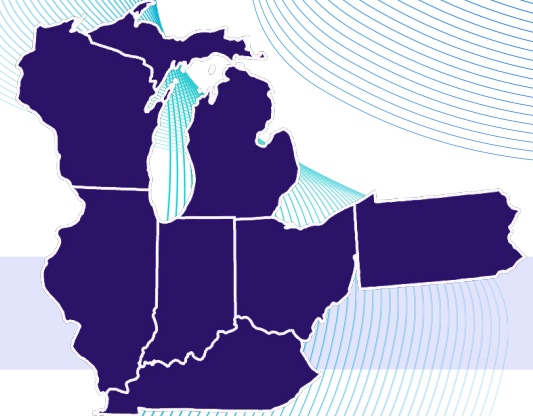
Feel free to drop questions in the chat!

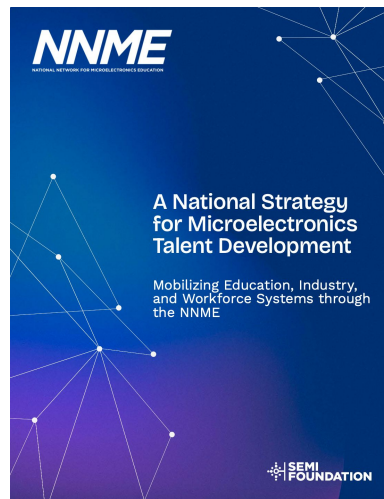
# EXCELERATE-ME

Excellence in **Microelectronics** Learning, Education, Research, and Training Exchange

## Proposal Overview

Led by co-lead institutions:





**NNME**  
NATIONAL NETWORK FOR MICROELECTRONICS EDUCATION

 **SEMI**  
**FOUNDATION**

**Coordination  
Hub**

**Regional  
Node**

**Regional  
Node**

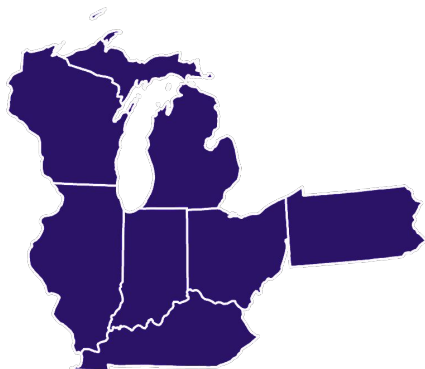
**Regional  
Node**

**Regional  
Node**

Computer & Electronic  
Manufacturing

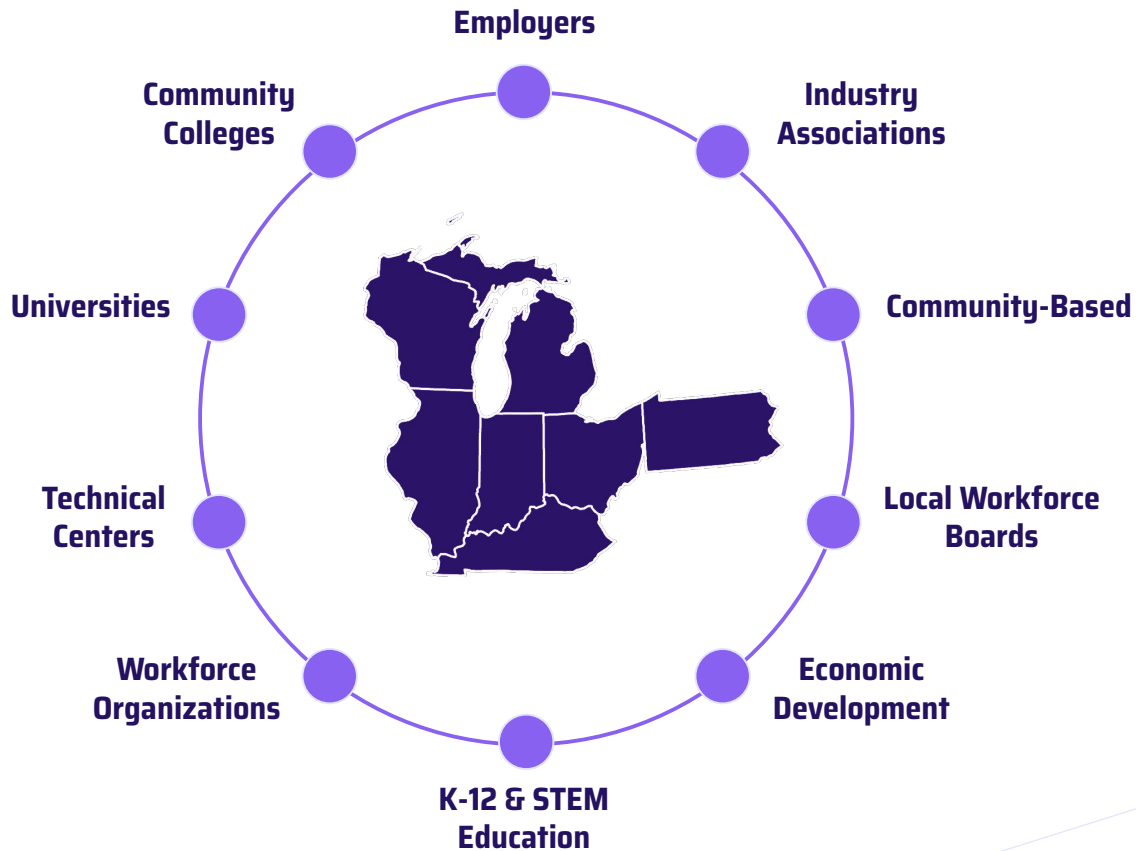
12,000

Unique technical job  
postings in 2025



574,000  
Across all  
Manufacturing sectors

Source: Lightcast, January to November 2025



# 120+ Organizations

## Community Colleges:

Clark State Community College (OH), Columbus State Community College (OH), Lorain County Community College (OH), Marion Technical College (OH), North Central State College (OH), Central Ohio Technical College (OH), Sinclair College (OH), Stark State Community College (OH), 15 Ohio Semiconductor Collaboration Network (OSCN) Colleges (OH), College of DuPage (IL), Elgin Community College (IL), Harper College (IL), Kishwaukee Community College (IL), Triton College (IL), Waubensee Community College (IL), Ivy Tech 19 Community Colleges (IN), Mott Community College (MI), Washtenaw Community College (MI), Madison Area Technical College (WI)

## Universities:

University of Kentucky (KY), University of Louisville (KY), Michigan State University (MI), Oakland University (MI), University of Michigan (MI), Bowling Green State University (OH), Case Western Reserve University (OH), Central State University (OH), Cleveland State University (OH), Miami University (OH), The Ohio State University (OH), Ohio University (OH), University of Cincinnati (OH), University of Dayton (OH), Wright State University (OH), Youngstown State University (OH), Carnegie Mellon University (PA), University of Wisconsin-Madison (WI)

## Industry Employers:

Intel, Palantir, GE Appliances, Rockwell Automation, The Reddix Group, Riverside Research, Smart Microsystems (SPIRIT Electronics), Yaskawa, Materion, QQE, Eaton Research Labs, Western Digital, Charter Next Generation, Air Force Research Laboratories, McGregor Surmount, Integrated Industrial Technologies (I2T), Lincoln Electric, Kurt J. Lesker Co., Lafayette Instrument Company, BOLB, White Horse Labs, FANUC, p-Chip, Synopsys

## Workforce Development:

OWA - Ohio Workforce Association, PWDA - Pennsylvania Workforce Development Association, MichiganWorks!

## Industry Associations:

MMEC - Midwest Microelectronics Consortium, America Makes, ARM Institute, NIMS - National Institute for Metalworking Skills, NCATC - National Coalition of Advanced Technology Centers, OMA - Ohio Manufacturers' Association, OACC - Ohio Association of Community Colleges, COMP-Ohio, SME - Society of Manufacturing Engineers, SMTA - Surface Mount Technology Association

## Economic Development:

JobsOhio, Illinois Department of Economic Opportunity, Pennsylvania State Governor's Office

## K-12 & STEM Education:

NITIC - National Information Technology Innovation Center, NextFlex, Spark Photonics Foundation, TIES - Teaching Institute for Excellence in STEM, FESTO Didactic

## Community-Based & Technical Partners:

Towards Employment, Goodwill Industries; all academic partners have longstanding relationships with area technical centers educating high school students and adults, for example Ohio has 52 Technical Centers

## Local Workforce Investment Boards:

In each state

## Wraparound:

Vets to Drones



**THREE KEY OBJECTIVES:**

- 1. Knowledge sharing**
- 2. Learning in where industry is leading**
- 3. Rapid impact deployment**

## YEAR 1 EXCELERATE-ME GOALS

**5,000+**

industry-recognized  
credentials earned

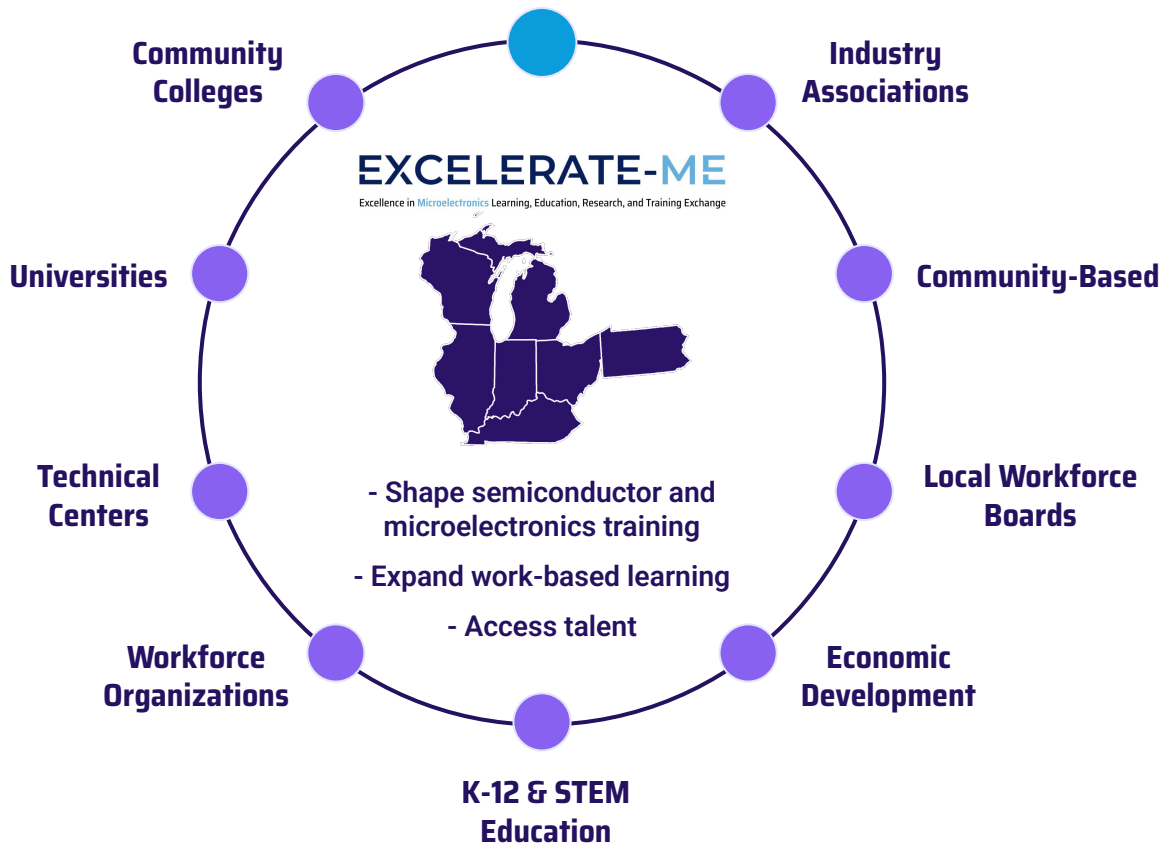
**2,200+**

NNME-supported  
placements

**140+**

outreach events,  
reaching 20,000+  
K-12 students

## Employers



## Co-Leads



## State Liaisons



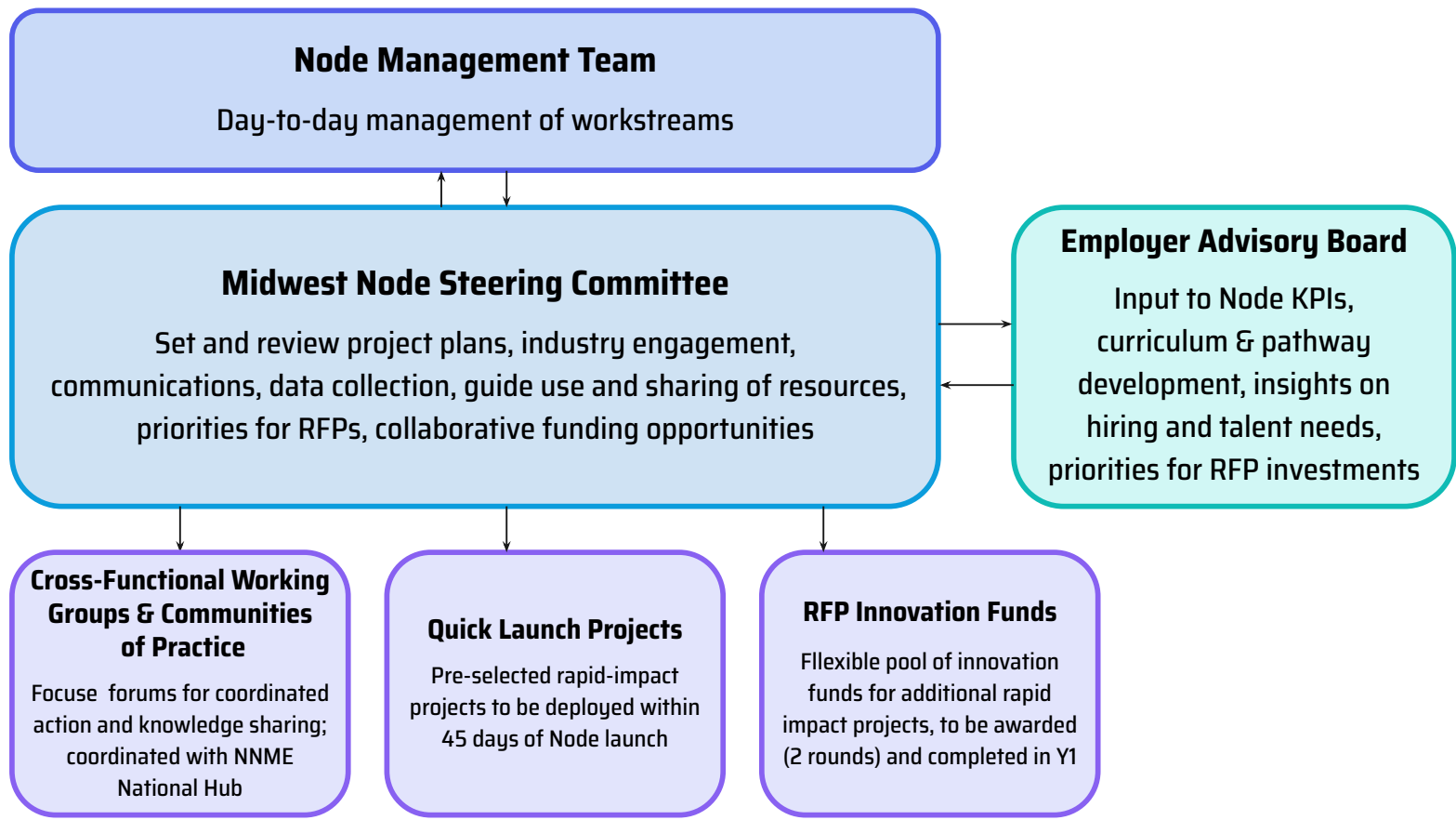
Designated individuals in states without co-leads

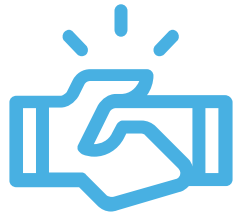
## Ecosystem Partners



## COMMITTED INDUSTRY & ASSOCIATION PARTNERS

## EXISTING INDUSTRY RELATIONSHIPS (NOT EXHAUSTIVE)





# Get involved!

We need your expertise!



The Ohio  
Manufacturers'  
ASSOCIATION

# Building a Connected Manufacturing Workforce System

*The Ohio Manufacturing Blueprint Overview*



# Manufacturing Workforce Blueprint



## A Shared Midwest Challenge

- Talent shortages across states
- Rapid industry investment
- Fragmented systems (education, workforce, economic development), misaligned incentives, and difficulty scaling and sustaining proven solutions across regions

# Ohio manufacturing talent demand is on the rise

**\$38B**

investment across industries and regions

**70%**

of talent will be operators and technicians

**Abbott Labs | 450 Jobs**

Food & Ag.; Consumer Goods

**Trucent | 820 Jobs**

Chemical & Materials

**Joby | 2,000 Jobs**

Aerospace & Defense

**LH Battery | 2,200 Jobs**

Automotive

**Resilience US, Inc. | 440 Jobs**

Bio & Pharma



**Ford | 2,000 Jobs**

Automotive

**Schaeffler | 650 Jobs**

Automotive

**Intel | 3,000 Jobs**

Semiconductor

**Amgen | 350 Jobs**

Healthcare

**Anduril | 4,000 Jobs**

Aerospace & Defense

# Manufacturing Workforce Blueprint

## The Opportunity: Alignment, Not Reinvention

Developed with manufacturers in Ohio, the Manufacturing Workforce Blueprint is a demand-driven framework that aligns workforce efforts around proven strategies.

- Built on shared priorities as defined by manufacturers
- Focused on coordination and alignment
- Designed to complement — not replace — existing strategies
- Created shared accountability

# Manufacturing Workforce Blueprint



## Ohio Manufacturing Talent Partnership: What Alignment Looks Like in Practice

- Industry defines demand
- State partners align systems
- Regional Industry Sector Partnerships implement locally
- Shared accountability



Ohio Manufacturing Workforce Blueprint  
Overview





# Manufacturing Workforce Blueprint Pillars



## **Connect Workforce Systems and Priorities**

Help local and state partners work together more smoothly so everyone is moving toward the same workforce goals.



## **Grow Career Awareness and Interest**

Share the real stories and opportunities behind modern manufacturing to help more people see themselves in these careers



## **Broaden the Talent Pool**

Raise awareness of manufacturing careers and make them more accessible to people who haven't always had a clear path to them.



## **Align and Scale Education and Training**

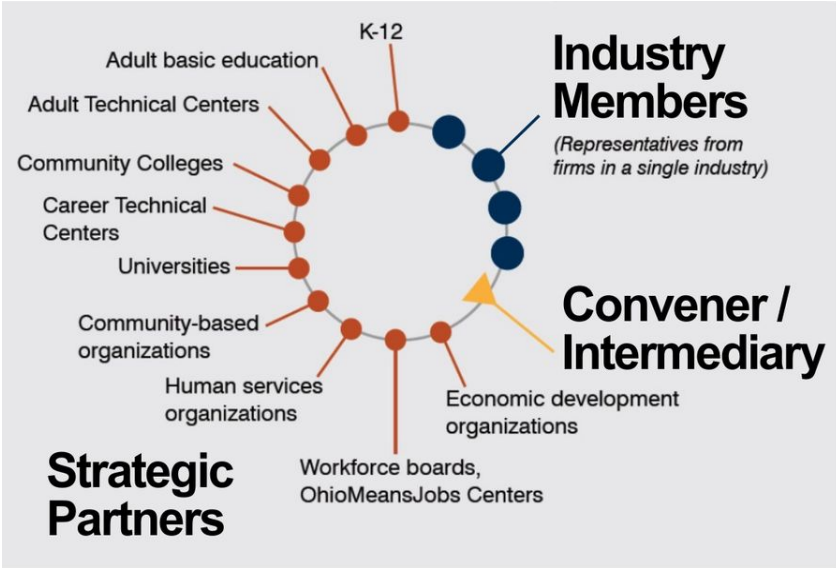
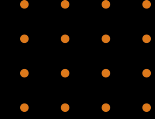
Design training programs statewide around what manufacturers actually need, so learners are better prepared and employers can find the right talent faster.



## **Expand Earn-and-Learn Models**

Grow paid, hands-on training options – like apprenticeships and pre-apprenticeships – that let people earn a paycheck while building their future in manufacturing.

# Pillar 1: Connect Workforce Systems and Priorities



## Where ISPs Fit in the Blueprint

# ISPs Bring Pillar 1 of the Blueprint to Life

The first pillar of Ohio's Manufacturing Workforce Blueprint is to:  
"Connect workforce systems and priorities across Ohio."

ISPs operationalize this connection by:

- Aligning regional workforce and training strategies with employer demand
- Coordinating with education, workforce and economic development partners
- Leading the implementation of statewide initiatives at the local level





# Pillar 2: Grow Career Awareness and Interest

33%

of current operators plan to upskill for technician roles

71%

of high schoolers became more interested in technician careers after they learned about the salary

37%

of the emerging workforce have not heard of manufacturing training but would be interested if they had

42%

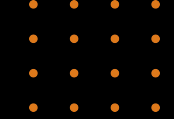
of high school students decide on a career path before 9th grade



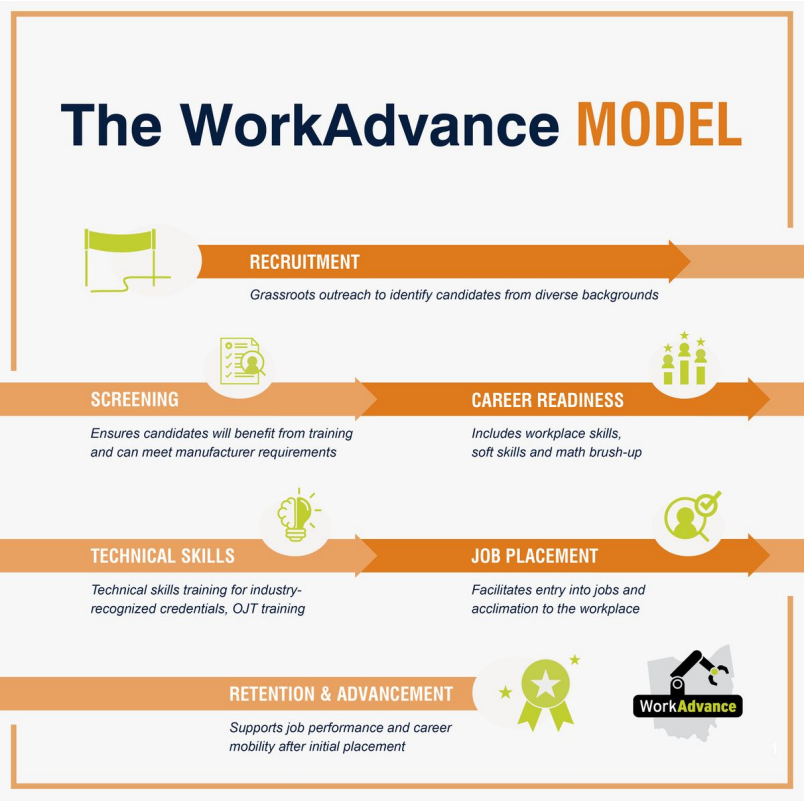
Students' career choices are shaped by people, not ads or brochures. And social media influencers, surprisingly, have the least impact – **parents, teachers, and counselors exert the greatest influence**, but lack clear context on technician career pathways

*\*In 2025, the Talent Team commissioned research that consisted of surveys and focus groups with over 1,700 Ohio students, parents, teachers, counselors, operators, and technicians*





# Pillar 3: Broaden the Talent Pool



## Proven Impact - WorkAdvance

# WorkAdvance: A Scalable Workforce Model

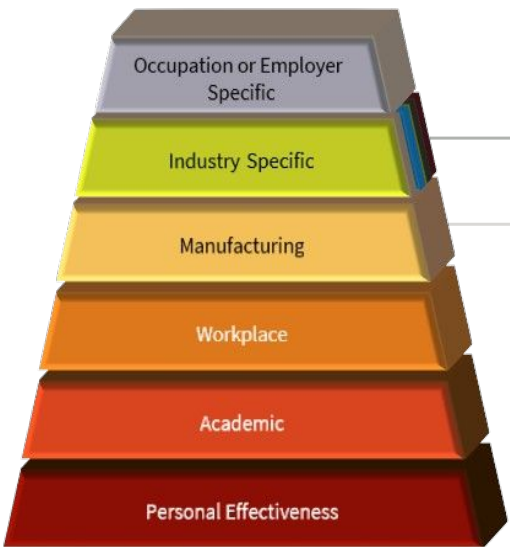
Metrics\* from federally funded **Good Jobs Challenge** (2023-26):

- 4,400+ individuals enrolled
- 3,200+ completed training
- 2,100+ placed in jobs
- \$18.47 average placement wage
- 2,600+ credentials earned
- 700+ participating employers

\*Data as of 03/26/2026

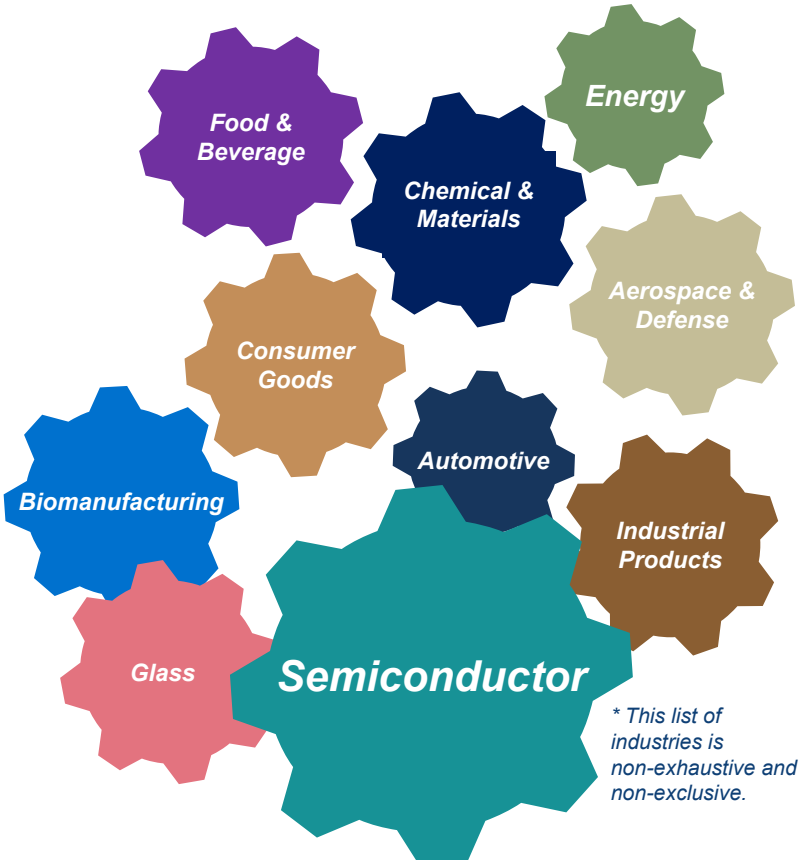
# Pillar 4: Align and Scale Training

## Where Sector-Wide Meets Industry-Specific Needs



**20%** of highly critical operator and technician-level KSA statements sit at the industry layers

**80%** of highly critical operator and technician KSA statements sit at the shared, sector-wide layer



\* This list of industries is non-exhaustive and non-exclusive.

# Pillar 5: Expand Earn and Learn Models



Technician Fast Track is a one-year earn-and-learn model designed by Ohio manufacturers to address persistent technician shortages.

The program combines paid on-the-job training with aligned classroom instruction to produce work-ready talent in under one year.

## Program at-a-Glance

One year.  
Earn while you learn.

140+ validated,  
employer-defined skills

Braided funding reduces  
employer cost

Backed by OMA, workforce  
boards and community  
colleges statewide

Statewide delivery via ISPs,  
colleges, partners

Scalable across regions  
and industries



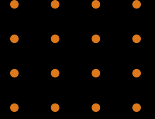


# Manufacturer Workforce Blueprint

## A Manufacturer-Led Workforce Framework: Aligning Midwest Priorities with NNME

Manufacturing Workforce Blueprint Pillars	NNME Pillars
<p><b>Connect Workforce Systems and Priorities</b></p>	<p><b>Network Engagement</b> Aligns with Blueprint #1</p>
<p><b>Grow Career Awareness and Interest</b></p>	<p><b>Increasing Participation</b> Aligns with Blueprint #2 + #3</p>
<p><b>Broaden the Talent Pool</b></p>	
<p><b>Align and Scale Education and Training</b></p>	<p><b>Curriculum &amp; Pathways</b> Aligns with Blueprint #4 + #5</p>
<p><b>Expand Earn-and- Learn Models</b></p>	

**A shared, manufacturer-centered framework** that helps shape regional NNME investments while preserving state and association autonomy.



## Lessons Learned

**Lesson #1 – Importance of being truly demand driven**

**Lesson #2 – Importance of alignment**

**Lesson #3 – Value of using data in decision making**

**Lesson #4 – Using data to shine a light on areas of improvement**

# Questions?



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**The Ohio Manufacturers'  
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# Industry Panel

Perspectives on Workforce Opportunities

**intel**<sup>®</sup>

**Kurt J. Lesker**<sup>®</sup>  
Company





# What's Next?

**Take our post-meeting survey!**

<https://tinyurl.com/midwestconvening>



# Questions?

- **What information did you hope to hear today that you haven't heard?**
- **Where are you most excited to get involved right now?**

# Thank you.

We look forward to continuing the conversation. >>

## EXCELERATE-ME

Excellence in **Microelectronics** Learning, Education, Research, and Training Exchange



Lorain County  
Community College

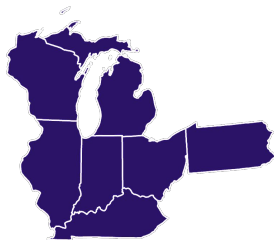
COLUMBUS STATE  
COMMUNITY COLLEGE



IVY TECH  
COMMUNITY COLLEGE



MMEC  
MIDWEST MICROELECTRONICS CONSORTIUM



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