The Center to Advance Manufacturing Monthly News

August 2025

In mid-August, the Center convened nearly 70 leaders from manufacturing, higher education, economic development, and government for *Manufacturing Matters: a Legislative Roundtable*. The discussion provided a valuable platform to elevate manufacturers' voices, share challenges and opportunities with legislators, and strengthen collaboration across Northwest Ohio.

This year's discussion centered heavily on workforce needs and talent pipelines. Manufacturers highlighted the importance of early exposure to manufacturing careers, sharing how plant tours for students and even for teachers and parents have helped dispel outdated perceptions and spark interest in advanced technologies. Apprenticeships, internships, and partnerships were all raised as key strategies for building a stronger pipeline, and legislators noted new efforts like the JobsOhio Relocation Incentive and internship grants as tools available to help address the issue. Still, participants underscored the looming labor shortage facing the region. Employers emphasized that Northwest Ohio not only needs to attract new workers, but must also focus on keeping talent here, showing young people and professionals that rewarding, well-paying opportunities exist locally. Retention was identified as just as critical as recruitment in sustaining a strong workforce.

The group also examined how automation is reshaping the industry. While new technologies are boosting productivity and creating exciting opportunities, many manufacturers expressed concern about the growing gap in mid- and advanced-skill positions needed to manage these systems. Leaders from Bowling Green State University, Owens Community College, and the University of Findlay emphasized their readiness to partner with employers to design flexible, responsive training programs that meet these evolving needs.

Importantly, the conversation did not shy away from difficult policy issues. Several manufacturers spoke candidly about temporary protected status and workforce permit instability, calling them "third-rail" issues that are nonetheless critical to workforce stability in Northwest Ohio. Legislators urged employers to keep sharing real-world examples of how these challenges impact operations, noting that such stories are essential to informing state and federal decision-making.

Other topics raised included the importance of addressing housing availability, childcare and transportation barriers, and ensuring that benefits cliffs do not discourage individuals from advancing in their careers. Throughout, participants emphasized the need for consistent communication and collaboration, not just between employers and legislators, but also among manufacturers themselves, who increasingly recognize the value of working together on shared workforce challenges.

The roundtable reinforced that manufacturing remains at the core of Northwest Ohio's economy, and that open dialogue between industry, education, and policymakers is vital to sustaining growth. The Center is grateful to all who participated in this year's discussion and will continue to build on the insights shared as we shape upcoming programming and advocacy efforts.

For those interested, a full list of resources mentioned during the roundtable is available. Please reach out to the Center if you would like a copy or assistance connecting with any of these opportunities.

YouScience & Manufacturing: Turning Student Talent into Skilled Careers

In August, the Center to Advance Manufacturing hosted a webinar with Matt Baumgartner, Director of Workforce Development at YouScience, to explore how aptitude-based tools can help close the manufacturing talent gap. The session highlighted how YouScience identifies students' natural strengths through "brain games" and connects them with career paths aligned to their aptitudes. The data shared revealed a striking gap between students' abilities and their career interests, especially in manufacturing, where many students have the skills to succeed but lack exposure to the opportunities. This misalignment, combined with declining enrollment in traditional post-secondary pathways, underscores the urgency of building new bridges between education and industry.

For employers, YouScience offers a way to engage with students earlier, showcase real career opportunities, and build stronger pipelines for internships, apprenticeships, and long-term hiring. The webinar also explored how employers can use YouScience data to identify local talent pools, diversify their workforce, and strengthen partnerships with schools. If you missed the event or would like to revisit the discussion, the full recording is available **here**.

Collaborating for Regional Strength: Connecting with Northwest Ohio Economic Development Leaders

Throughout the summer, Center staff met with economic development directors and their teams across Northwest Ohio to explore collaborative opportunities to strengthen the region's workforce and manufacturing ecosystem. These conversations focused on understanding the unique needs of each county, sharing the Center's workforce and training initiatives, and identifying new ways to work together for greater regional impact.

A few common themes emerged. A key area of interest is Ohio TechCred support, as many manufacturers and logistics employers continue to need guidance navigating the program. In response, the Center is offering personalized, one-on-one assistance, from application to reimbursement. Workforce Training Coordinator Jeri Steinbrook is available to meet directly with companies and walk staff through each step of the process.

Leaders also expressed strong interest in leveraging higher education connections, particularly in engaging faculty and classrooms for applied research, regional data analysis, and potential student capstone projects. These opportunities not only strengthen ties between universities and industry but also give students meaningful, real-world experiences tied to regional needs.

Finally, there was broad support for promoting regional workforce resources, especially in incumbent worker training, on-the-job training, and talent retention strategies.

As the Center continues to build relationships and deepen partnerships, our mission remains clear: to work side by side with local leaders, employers, and educators to ensure Northwest Ohio remains a hub of innovation, talent, and manufacturing strength.

Manufacturers today are facing challenges on multiple fronts. They must evaluate and implement new technologies such as Artificial Intelligence and Machine Learning, while at the same time upskilling current workers to manage automated processes and fill vacancies created by retirements. Meanwhile, they are also hiring to backfill entry- and lower-level positions, all against a backdrop of shifting policies on immigration, trade, and automotive technology. It's no wonder manufacturers feel like they are navigating "everything, everywhere, all at once."

On the talent side, the labor market is extremely tight and projected to tighten further. According to Lightcast, 19% of all manufacturing workers in the United States are foreign-born. Low birthrates, current immigration policy, and competition from other high-demand sectors such as healthcare and construction will intensify the pressure on manufacturers to attract and retain talent.

The demand picture reinforces this reality: the same skilled positions that were in short supply during the 2020–21 "Covid Era" remain in high demand today. Welders, PLC operators, quality assurance professionals, maintenance and repair technicians, and electricians are at the top of the list, alongside cross-cutting skills like leadership, problem solving, and communication. Add in the new need to understand and deploy AI and Machine Learning, and it becomes clear that manufacturers must adapt quickly to remain globally competitive.

Organizations that fail to institutionalize talent development strategies, immediate, short-term, and long-term, will struggle to sustain operations. Most companies prefer to promote from within, but without intentional workforce planning they risk losing their best employees to businesses that do invest in training. They will also lack the infrastructure to deliver the programs needed as retirements and labor shortages accelerate. The message is clear: talent development can no longer be a "nice to have," it is essential for growth and survival in today's manufacturing economy.

At the Center, we recognize that manufacturers cannot meet these challenges alone. That's why we're focused on providing practical support, whether through training programs, applied research, or workforce partnerships with our three partner institutions. If your company is ready to take the next step in building a resilient talent pipeline, let us know - we're here to help.

Are you prepared for the Ohio TechCred September application period?

Ohio's TechCred Program gives employers the chance to upskill current and future employees in today's tech-infused economy. Businesses of all sizes, from any industry, are eligible for up to $30,000 per round. Employers who submit successful applications will be reimbursed up to $2,000 per credential when current or prospective employees complete eligible technology-focused credentials. The next TechCred application period is September 1 through September 30. Training must be completed within 12 months from the award date.

Need assistance applying?
Contact our Workforce Training Coordinator, Jeri Steinbrook!

Ohio TechCred

For full program details, visit techcred.ohio.gov.

Human-Centered Innovation through Design Thinking

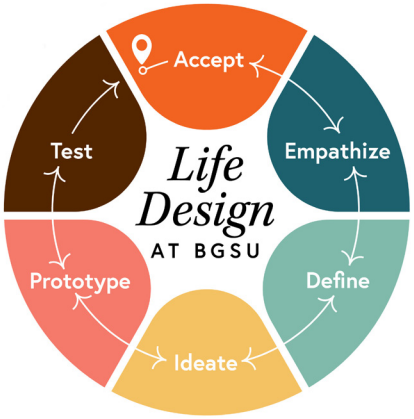
Design thinking is a creative problem-solving framework that has developed as a structured way to solve complex problems that are hard to define, and even more challenging to solve. While its roots are in design and engineering, the methodology gained mainstream recognition in the late 20th and early 21st centuries, largely popularized by the design and innovation consultancy IDEO and institutions like Stanford University's Hasso Plattner Institute of Design. Today, design thinking has evolved from being a niche approach for product development to a strategic framework for business innovation and transformation across many different industries. Through the Life Design program at Bowling Green State University, students are taught design thinking as a foundational problem-solving skill for career readiness, then they apply those same mindsets and principles to design their college and career journey.

This flexible and practical approach can be used to navigate any number of complex challenges, especially those that don't have one "right" answer. The key to design thinking is its human-centered focus – whether that means focusing on your employees, your direct customers, or the end users of a product or system. In manufacturing and logistics, this same approach can be applied to rethinking workflows, addressing workforce challenges, and creating more efficient systems that keep people, both employees and end users – at the center of innovation.

Try It! Consider a challenge you are facing in your own work and ask yourself the following questions.

ACCEPT: Acknowledge where you are starting when you begin.
Ask:

- What are the circumstances?
- Are there any constraints?
- What barriers or challenges are we seeking to overcome?



EMPATHIZE: Set aside your own assumptions and focus on understanding the needs, hopes, and challenges of the people you're designing for.
Ask:

- What can we learn by observing, engaging, and listening?
- What are their needs?
- What are their goals?

DEFINE: Identify an actionable problem that you want to address.
Ask:

- What are we trying to solve?
- Is it within our sphere of influence?
- Are we fixated on a particular solution that isn't working and is preventing us from moving forward?

IDEATE: Generate and explore multiple ideas that could help gather new insights.
Ask:

- What are some possible solutions?
- Brainstorm as many ideas as possible.
- Don't hesitate to include wild ideas; there are no wrong answers at this stage.

PROTOTYPE: Choose an idea and develop a working model or framework that could be implemented.
Ask:

- How might we try this idea in a way that's feasible with existing resources?

TEST: Implement your prototype, compile information, and summarize knowledge.
Ask:

- What have we learned? What might we try next?

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Remember: Focus on what you have learned, then adjust as needed. Design thinking is an iterative process, and learning what doesn't work is just as important as learning what does work. For industries like manufacturing and logistics, this iterative cycle mirrors continuous improvement efforts on the plant floor and in supply chains, making design thinking a natural fit for tackling today's complex operational challenges.

This fall, the Center to Advance Manufacturing will be putting these principles into practice at our Advanced Manufacturing Summit on October 7 *(see details below)*. One of the breakout sessions will invite participants to actively apply design thinking to a real-world manufacturing challenge, collaborating to generate solutions that are both innovative and practical. It's a chance to experience firsthand how this framework can strengthen problem-solving in manufacturing and logistics.

Want to Learn More?

This month's Knowledge Hub feature was authored by Adrienne Ausdenmoore, Assistant Vice President and Executive Director of the Geoffrey H. Radbill Center for College and Life Design at Bowling Green State University. Within the Life Design program, BGSU students learn to maximize their academic experience, prioritize their well-being, make connections and jump-start their careers – all with a sense of intention and forward momentum. Adrienne's work over the last decade has focused on education innovation, design thinking, cross-disciplinary collaboration and vocational wayfinding. She is part of the global community of Life Design educators that originated at Stanford University.

Upcoming Events

Data

Top Industry Employment Concentration

Data included on this page details information for the 17 counties in the Regional Growth Partnership territory and was pulled from labor market data source, Lightcast.

Industry	2019 Jobs	2024 Jobs	Change in Jobs	% Change in Jobs	2024 Employment Concentration	2024 Earnings Per Worker	2024 GRP
Manufacturing	113,208	106,837	-6,371	-6%	2.38	$91,719	$24.81B
Transportation and Warehousing	25,353	31,269	5,916	+23%	1.21	$68,627	$4.27B
Accommodation and Food Services	51,925	51,814	-111	0%	1.04	$23,824	$2.20B
Retail Trade	59,683	57,726	-1,957	-3%	1.04	$41,771	$5.67B
Health Care and Social Assistance	83,397	81,970	-1,427	-2%	1.02	$72,646	$7.23B
Agriculture, Forestry, Fishing and Hunting	7,594	6,965	-629	-8%	1.01	$59,842	$1.71B

Manufacturing remains the largest employment sector in Northwest Ohio, with over 106,000 jobs in 2024, more than double the next closest industry, though it has seen a 6% decline since 2019. By contrast, transportation and warehousing has grown rapidly, adding nearly 6,000 jobs for a 23% increase, reflecting the region's critical role in logistics and supply chain. Other industries such as accommodation, health care, and retail remain stable, but the data underscores both the continued strength of manufacturing and the need to address shifting workforce demands.

Contact Us

Ford Weber
Program Manager of Econ. Dev. Partnerships
fweber@bgsu.edu

Kassie Cooper
Marketing Projects Manager
kassiec@bgsu.edu

Jeri Steinbrook
Workforce Training Coordinator
jeris@bgsu.edu

Danielle Sidebottom
Assistant to the Executive Director
dsidebo@bgsu.edu