

I&I ROUNDTABLE CONVERSATIONS

BUILDING AN INCLUSIVE MANUFACTURING SECTOR IN NORTHEAST OHIO

By the Urban Manufacturing Alliance and The Century Foundation

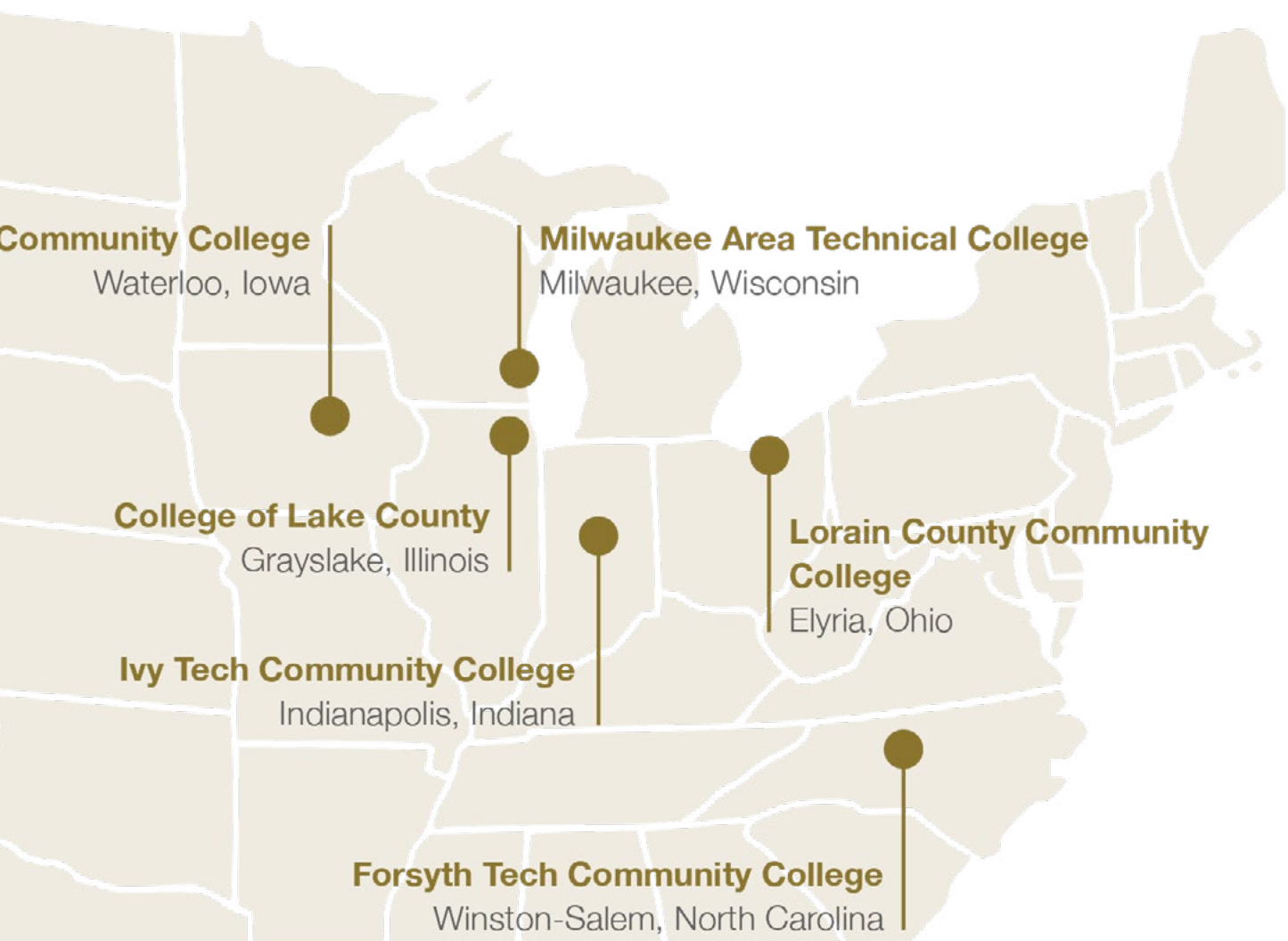
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This report was written by Michelle Burris (TCF), Jeannine Cook, Laura Hatalsky, and Tanu Kumar (UMA). Photography by Natasha Herbert and Lorain County Community College.



Community College
Waterloo, Iowa

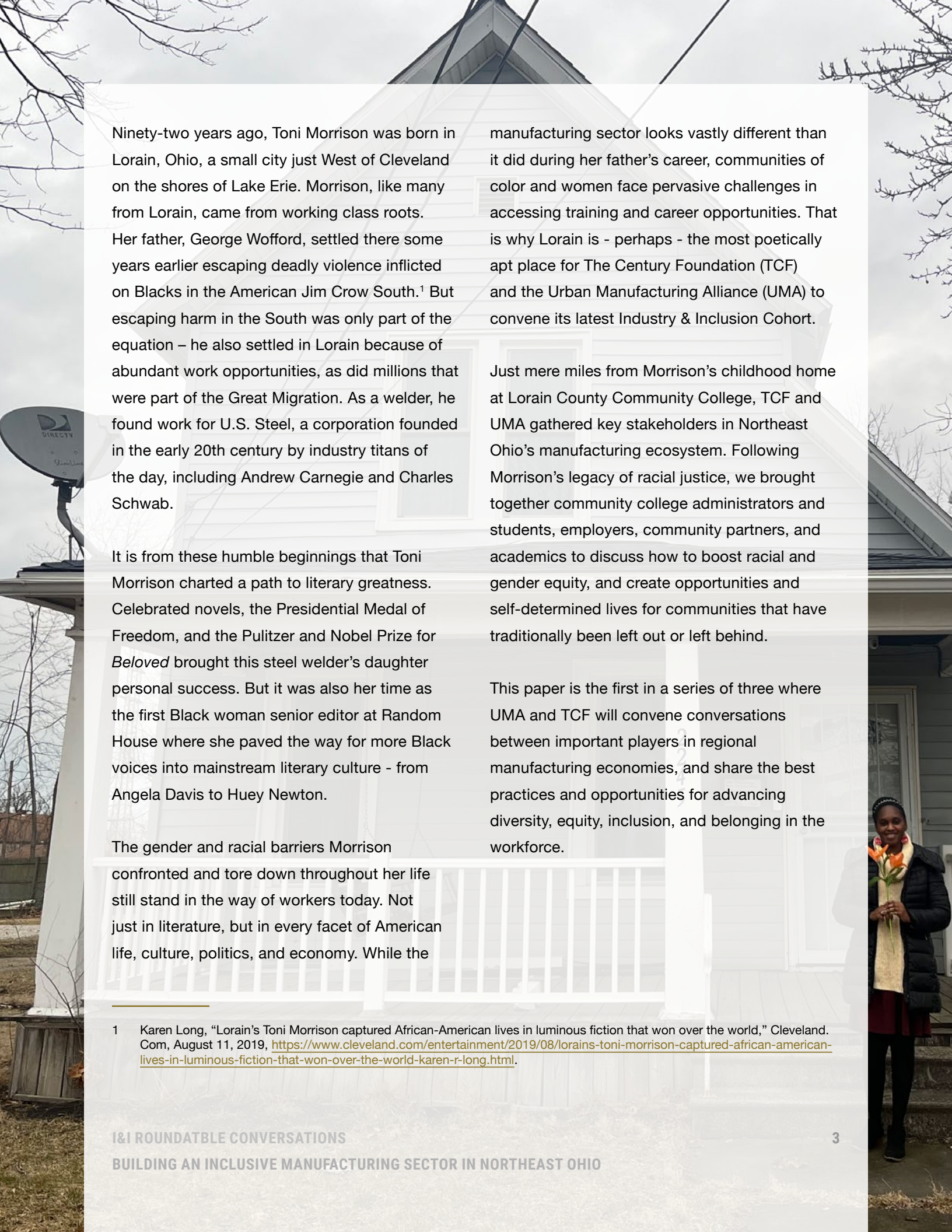
Milwaukee Area Technical College
Milwaukee, Wisconsin

College of Lake County
Grayslake, Illinois

Lorain County Community College
Elyria, Ohio

Ivy Tech Community College
Indianapolis, Indiana

Forsyth Tech Community College
Winston-Salem, North Carolina



Ninety-two years ago, Toni Morrison was born in Lorain, Ohio, a small city just West of Cleveland on the shores of Lake Erie. Morrison, like many from Lorain, came from working class roots. Her father, George Wofford, settled there some years earlier escaping deadly violence inflicted on Blacks in the American Jim Crow South.¹ But escaping harm in the South was only part of the equation – he also settled in Lorain because of abundant work opportunities, as did millions that were part of the Great Migration. As a welder, he found work for U.S. Steel, a corporation founded in the early 20th century by industry titans of the day, including Andrew Carnegie and Charles Schwab.

It is from these humble beginnings that Toni Morrison charted a path to literary greatness. Celebrated novels, the Presidential Medal of Freedom, and the Pulitzer and Nobel Prize for *Beloved* brought this steel welder's daughter personal success. But it was also her time as the first Black woman senior editor at Random House where she paved the way for more Black voices into mainstream literary culture - from Angela Davis to Huey Newton.

The gender and racial barriers Morrison confronted and tore down throughout her life still stand in the way of workers today. Not just in literature, but in every facet of American life, culture, politics, and economy. While the

manufacturing sector looks vastly different than it did during her father's career, communities of color and women face pervasive challenges in accessing training and career opportunities. That is why Lorain is - perhaps - the most poetically apt place for The Century Foundation (TCF) and the Urban Manufacturing Alliance (UMA) to convene its latest Industry & Inclusion Cohort.

Just mere miles from Morrison's childhood home at Lorain County Community College, TCF and UMA gathered key stakeholders in Northeast Ohio's manufacturing ecosystem. Following Morrison's legacy of racial justice, we brought together community college administrators and students, employers, community partners, and academics to discuss how to boost racial and gender equity, and create opportunities and self-determined lives for communities that have traditionally been left out or left behind.

This paper is the first in a series of three where UMA and TCF will convene conversations between important players in regional manufacturing economies, and share the best practices and opportunities for advancing diversity, equity, inclusion, and belonging in the workforce.

1 Karen Long, "Lorain's Toni Morrison captured African-American lives in luminous fiction that won over the world," Cleveland. Com, August 11, 2019, <https://www.cleveland.com/entertainment/2019/08/lorains-toni-morrison-captured-african-american-lives-in-luminous-fiction-that-won-over-the-world-karen-r-long.html>.

INTRODUCTION

Manufacturing is the lifeblood of Ohio's economy, and largely has been at least since the late 19th century when the state's employment shifted away from coal mining to more industrial activities. Generations of Ohioans have worked in manufacturing shops across the state, and the state touts manufacturing as a massive success story.

But what is the story today? By many objective measures (GDP and employment to name a couple²), manufacturing is still the largest sector in Ohio's economy, despite decades of globalization and loss of production jobs. But like all economic pictures, the industry has evolved over time. The nominal number of workers in the sector – and therefore those receiving the middle class earnings it can provide – shows decades of decline.³ The reasons for this are complex, but today's reality is that manufacturing remains a powerhouse in the region and the state. There are still thousands of open, family sustaining careers available. Ohio, in fact, is the third largest state in the nation ranked by the

number of manufacturing jobs and payroll, with nearly 700,000 jobs and an annual payroll of \$44 billion.⁴

That history of earlier dislocation has been one of the challenges to changing people's perceptions about modern manufacturing. The COVID-19 pandemic has helped to shift this outlook. While the enduring economic impact of this deadly global health pandemic is unknown, it brought a renewed focus to supply chain fragility from businesses and policymakers alike. In Ohio, manufacturers responded to urgent needs for personal protective gear needed to help first responders. Individuals and policy makers saw first hand the importance of a robust manufacturing and supply chain system. For industrial policy, we've seen the impact most notably through with the passage of the American Rescue Plan Act, the CHIPS and Science Act, and the Inflation Reduction Act, targeted at place-based strategies and sectoral investments in semiconductors and clean technology.⁵

2 Ohio Manufacturing Association, "2023: Ohio Manufacturing Counts," Accessed April 2023, https://www.ohiomfg.com/wp-content/uploads/OMA_ManufacturingCounts2023.pdf.

3 "All Employees: Manufacturing in Ohio (OHMFG)," U.S. Bureau of Labor Statistics, retrieved from FRED, Federal Reserve Bank of St. Louis, Updated March 2023, <https://fred.stlouisfed.org/series/OHMFG>.

4 Ohio Manufacturing Association, "2023: Ohio Manufacturing Counts," Accessed April 2023, https://www.ohiomfg.com/wp-content/uploads/OMA_ManufacturingCounts2023.pdf.

5 Mark Muro, Robert Maxim, Joseph Parilla, and Xavier de Souza Briggs, "Breaking Down an \$80 Billion Surge in Place-Based Industrial Strategy," Brookings Institution, December 15, 2022, <https://www.brookings.edu/blog/the-avenue/2022/12/15/breaking-down-an-80-billion-surge-in-place-based-industrial-policy/>.

The Need for a More Inclusive Workforce Strategy

With billions of dollars flowing into reshoring of manufacturing, new plants - including semiconductor fabrication and electric vehicle manufacturing - are in development all around the country, Ohio included. Construction costs associated with building our nation's manufacturing capacity have now reached record highs.⁶ As businesses prepare for this growth, they are coming up short in their search for workers, facing a potential shortfall in their workforce estimated at 2.1 million unfilled jobs nationally by 2030.⁷ Concurrently, many businesses are experiencing a wave of retirements, broadening their talent gap.⁸

To meet this shortfall, an intentional and deliberate strategy to close disparity gaps in the manufacturing workforce to engage and retain new talent pools is critical. Participants at the roundtable described the type of structural changes needed in the sector, and shared information on what is happening in Ohio to engage both manufacturers and their educational partners in this work. There is a recognition that,

in order to make the manufacturing sector in the Buckeye state representative of Ohio's workforce overall, the state would need to see almost a 150,000 increase in women in manufacturing as well as a jump in nearly 20,000 manufacturing workers of color.⁹ These shifts will require intentional strategies that support workers from diverse backgrounds in accessing and retaining manufacturing jobs.

Shifting Northeast Ohio's Manufacturing Sector

Lorain County Community College (LCCC) has made a forceful commitment to expanding the talent pool for manufacturing in Northeast Ohio. At the convening in February, Cindy Kushner, LCCC's Director of School and Community Partnerships, talked about their efforts to make sure people can earn the needed skills and credentials to be strong candidates as quickly as possible and at no cost:

"Fast Track certificates [have] been hugely popular with adults. We let the community know

6 "Total Construction Spending: Manufacturing in the United States (TLMFGCONS)," U.S. Census Bureau, retrieved from FRED, Federal Reserve Bank of St. Louis, Updated March 2023, <https://fred.stlouisfed.org/series/TLMFGCONS>.

7 "2.1 Million Manufacturing Jobs Could Go Unfilled by 2030," National Association of Manufacturing, May 4, 2021, <https://www.nam.org/2-1-million-manufacturing-jobs-could-go-unfilled-by-2030-13743/>.

8 "Bringing manufacturers and the community together to solve Cuyahoga's workforce challenge," MAGNET, Accessed April 2023, <https://www.manufacturingsuccess.org/services/talent-development>.

9 Nicole Dunn, "Manufacturing Demographics and Comparisons to Regional Populations," Ohio Manufacturing Workforce Partnership, April 2022, https://docs.google.com/presentation/d/1hakTjICp-_AGOuFuBIZXDxMliXr-7q3F/edit#slide=id.p1.

we have free Fast Track certificates - come and earn a skill in a semester or less, aligned to good paying job. Our financial aid team, behind the scenes figures out what grants and scholarships cover the cost for each individual, whether through the LCCC Foundation, local funding, or state and federal grants. You take that worry off the table for students.”

Through this program individuals can quickly retrain for a new career, earn a short-term certificate, and make important connections with employers looking to hire – all in 16 short weeks or less, and tuition free. For example, from Fall 2018 through Spring 2021, 416 students were funded through a state-funded Short-Term Certificate Grant Program. Of those students, about 40% identify as being non-white, including 21% who identified as Black or African American and 14% who identified as Hispanic or Latino. The vast majority, 81%, picked their program based on the job and career choices it provides; 86% plan to immediately enter the workforce, while 60% plan to continue their educational pathway. For Lorain County Community College, a top priority is to welcome each student with a culture of care and belonging, wrapping whatever supports are needed to help each individual complete their program and succeed in taking the next step towards their goal.

Partnerships are at the heart of this work. The College partners with local manufacturers who stand ready to hire. It also partners with municipalities, workforce leaders,

social service providers and others to provide students with tuition grants and wrap around supports. Successful partnerships include those with OhioMeansJobs (the local workforce board), the LCCC Foundation, Oberlin Social Equity and Skill Development Promise, and Elyria Skill City Promise.

Fast Track programs by design are stackable into pathways to one year certificates and degrees. They often serve as a foot in the door and a way for adults to regain confidence in their ability to successfully navigate college. They also can connect students directly to earn and learn or apprenticeship opportunities. Earn and learn pathways are demonstrating success at reaching new talent in fields such as microelectronics, automation and robotics, and cybersecurity, with plans for expansion into additional applied programs such as machining and welding.

LCCC’s hope is to double enrollment in their Fast Track program, but this is a goal they know they can’t reach alone. The conversation between these stakeholders in Northeast Ohio shared new perspectives and promising areas of focus and growth, outlined below.

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THE EMPLOYERS' SKILLS GAP

Much has been said about the “skills gap” in manufacturing, most commonly used to refer to what businesses describe as the lack of appropriately skilled workers to fill vacant positions. But the conversation in Lorain County revealed another type of skills gap – this time, on the employer side. Participants noted the importance of “corporate readiness”, or familiarity with basic tools and strategies to ensure their incoming employees will stay and be successful.

Rahim Nichols is the Director of Early College Early Career at the Manufacturing Advocacy and Growth Network (**MAGNET**), a non-profit focused on growing Northeast Ohio’s manufacturing industry. In his assessment, the need for soft skills training goes both ways – training is needed both for candidates and for employers to strengthen how they can effectively communicate with one another. This is particularly important with an increasingly diverse workforce. Renita Jefferson, Global Director of Diversity, Equity, Inclusion & Belonging at Avient Corporation, noted “corporate readiness needs to be fully considered” to really make a difference in the workforce and keep diverse workers in jobs. Equally important is carrying these values

outside of the boardroom or C-suite onto the shop floor, reaching managers at all levels of the business.

The group discussed the importance of training frontline supervisors, culturally competent approaches, and ensuring that employees understand their value in the workplace as a precursor to retaining workers from diverse backgrounds.

Psychological Safety in the Workplace

Relatedly, the group discussed the importance of “psychological safety” in classrooms, labs, and workplaces as a critical component for increasing productivity, innovation, and contributions at work. Amy Edmonson, a professor at Harvard Business School who first coined the phrase, defines it as “a shared belief held by members of a team that it’s OK to take risks, to express their ideas and concerns, to speak up with questions, and to admit mistakes – all without fear of negative consequences.”¹⁰ Dr. Ron Williams, Associate Professor of

10 Amy Gallo, “Psychological Safety: Building High-Performing Teams,” Harvard Business Review, February 15, 2023, <https://hbr.org/2023/02/what-is-psychological-safety>.



Management at Coppin State University and Board Chair of the Urban Manufacturing Alliance, connected the dots between this concept and bettering the bottom line for manufacturers and retention. It's a chain effect, that by "lowering that anxiety as quickly as we possibly can, so that people feel psychologically safe. Once you do that, you really accelerate the learning. We can develop competent learners and create spaces where they can learn quickly, we really have put them on a trajectory for success."

In other words, this isn't just a nice thing to do for your employees in the workplace. It's better for your bottom line. During the roundtable, the group shared anecdotes highlighting a correlation between employee disconnection and loss of morale with injury, absenteeism, and turnover. A recent study concluded that \$600 billion a year is lost on employee turnover, while research from Gartner, Gallup, and Harvard Business Review found that the benefits of a

high work psychological safety included 27% reduction in turnover; 50% more productivity; 26% greater skills preparedness because workers learn at a faster rate when they feel psychologically safe; and 67% higher probability that workers will apply a newly learned skill on the job.¹¹

What do psychological safety tactics look like in practice? Adam Artman, the Vice President of Workforce Development at Manufacturing Works based in Cleveland, spoke to the importance of balancing accountability with grace in the workplace, and looking at the whole person and their lived experience for how they show up at work each day. Each workplace or community college is different, but good places to start might include creating open and safe opportunities for communication, encouraging learning, and fostering a collegial work environment.

11 Torin Monet, "Why psychological safety at work matters to business," Accenture, October 28, 2021, <https://www.accenture.com/us-en/blogs/business-functions-blog/work-psychological-safety>.

MODERNIZE RECRUITMENT

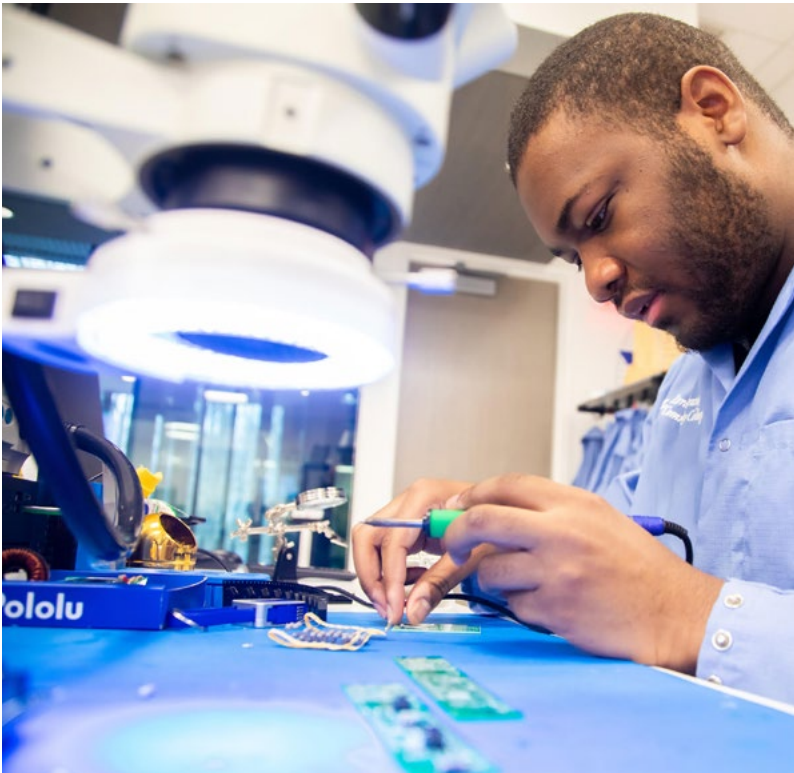
Diverse workplaces don't happen by accident. Leading manufacturers recognize this and are partnering in new ways to close disparity gaps and expand their talent pool. In Ohio that is happening through peer-to-peer collaboration, among both industry and educators, along with their economic development and community-based partners. There is a recognition that this is an all-hands-on-deck effort, requiring high levels of trust, collaboration, and innovation to meet manufacturing workforce needs. Participants in the roundtable provided a number of insights on how manufacturers in particular are upping their game.

Firstly, career fairs alone don't cut it anymore. Renita Jefferson noted that they're mostly "drivebys" or formats for more superficial connections. Instead she's pivoting Avient Corporation towards a type of recruitment used in other sectors, such as law or finance.

"Students are not necessarily going to career fairs anymore. So we had to think of another way to create that relationship. I instituted an opportunity to bring colleges to the facility. We're going to take them on a tour of our manufacturing plant. We're going to take them on a tour of our Innovation Center. We're then going to have a meeting with them and my leaders. My recruiting manager is going to be there. He's going to talk about expectations. I

have two folks from my functional teams. Those folks are going to talk about a day in the life of an employee."

When asked how she became interested in a career in manufacturing, Princess Simpson, a student at Lorain County Community College said it was a video online that piqued her interest, followed by a concerted recruitment effort at her school. "What really got me into the manufacturing field was just seeing videos of it online... Another thing that helped me... was when the advisors [came] into my school."



INNOVATIVE EARN AND LEARN PARTNERSHIPS

In 2016, LCCC piloted its first earn and learn model for program delivery, in its microelectronics program. At the time, there were fewer than 10 declared majors for this associate degree path. Today, over 80 regional employers partner with Lorain County Community College to host students for whom paid work-based learning is now a requirement of their degree, and the program has repeatedly grown and often has waitlists. It also became the foundation for

the first approved applied bachelor's program to be offered by a community college in Ohio – in microelectronics manufacturing. The earn and learn model carries through for the full bachelors degree. What this means is that students have the potential to earn \$18K while working in their field and studying for their applied bachelor's degree, which at LCCC costs approximately \$15k – for all four years!



PROACTIVE WRAPAROUND SERVICES

Cultures of safety and belonging are important for dynamic and thriving classrooms or businesses. But even with these components in place, every single person will have times of stress and strain, and will need help along their journey. When Princess Simpson spoke about her support systems, she noted, “what I see within my own friends, it’s a little harder for some of them to get help. And even personally with me, sometimes I find myself struggling to even reach out with my advisors without getting overwhelmed.”

To ensure the success of students and workers in manufacturing, participants discussed ways to create stronger support systems that increase retention of workers. After all, Renita Jefferson noted that when it came to Princess’s experience and everyone else on a career journey, “you don’t know what you don’t know.” Keeping

Keeping an open door isn’t good enough if those that are struggling the most won’t walk in. Instead, leading schools and workplaces are collaborating to develop systems of support that are proactive, meeting individuals where they are, and piecing together a safety net that will keep them on a path to their personal success.

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At LCCC, the team consists of administrators, business and economic leaders, academics, and advisors focused on students and community. They also bring a vast knowledge of and access to private and government resources which the institution uses to support student success and business engagement. These resources include LCCC Foundation scholarships and wraparound funds (emergency assistance funding and Commodore Cupboard food pantry), as well as institutional funds (Choose Ohio First, workforce investment act funds, Elyria Skill City, CCAMPIS) that the institution is successful in securing to support student success.

BROADER PARTNERSHIPS TO REALIZE COLLECTIVE GOALS

Naturally, filling many of the manufacturing vacancies will require employers to tap into their community networks. However, if you rely on the same people, you'll get the same results. Recruiting a diverse workforce requires more intentionality for employers to break out of their existing silos. Collaboration through initiatives like the Lorain County Manufacturing Sector Partnership aim to help manufacturers work together to reach new audiences. Lorain County Community College has been a member of the Partnership from the beginning, and together they are relentless in their collective outreach to community-based organizations (CBOs) that can recruit and support a manufacturing workforce pathway. Among the partners that Cindy Kushner noted are every school district in the County, Urban League, El Centro, Goodwill, the Department of Corrections, and many others.

To facilitate its partnership with the Department of Corrections, LCCC is a recipient of a Department of Justice grant through the Correctional Adult Reentry Education, Employment, and Recidivism Strategies (CAREERRS) Program. Using these funds, LCCC is poised to reach 180 reentry clients in the

Lorain-Medina Community Based Correctional Facility that will focus specifically on welding, hospitality services, and industrial safety.¹²

A Women in Sustainable Employment (WISE) Pathways program is a partnership with Hard Hatted Women (HHW) Ohio, which offers a career exploration program for career changing women to consider non-traditional industries like manufacturing, supply chain, IT, construction, and more. It has also been adapted to serve young people still in high school. The College is currently partnering with HHW Ohio and a Place to Recover (P2R), which provides support services to individuals in recovery and reentering society after incarceration, to offer WISE Pathways, and recently won a new Department of Labor grant focused on bringing new talent into information technology careers. That effort is a regional collaboration among three community colleges working closely with economic development and community-based organizations.

12 "Lorain County CAREERRS," Department of Justice, October 20, 2022, <https://bja.ojp.gov/funding/awards/2020-rq-bx-0005-0>.



The Positive Contribution of Labor Partners

LCCC noted that they have a long history of also partnering with labor organizations both in manufacturing and construction to support

the instruction within registered apprenticeship programs. These programs offer excellent opportunities for employees to receive additional on the job training plus college credit through the college, so that workers can move up the career ladder and increase their earnings.

ROADMAP FOR INCLUSIVE MANUFACTURING

LCCC and their manufacturing partners are engaging in critical conversations about the future of the manufacturing workforce, and are well-poised to deliver on their goal of increasing the number of people of color obtaining

credentials - and successful careers - in the sector. Other regions can look to this as a model to start building an inclusive manufacturing sector that will pay dividends in the decades to come. Several promising strategies emerged:

1. Employer Leadership

To create inclusive workplaces that attract and retain diverse talent, employers will also need to close a “skills gap” at all levels of the organization - from C-suite leadership to frontline supervisors. Soft skills training, partnering in new ways, and integrating culturally competent recruitment and retention strategies into accountability frameworks were lauded as promising strategies for employers.

2. Expand Innovative Earn and Learn

Direct connection to industry, clear economic value, and strong employment demand, plus ongoing information sessions, tours, and outreach, have led to this program having among the most diverse student body in LCCC’s manufacturing offerings. LCCC is expanding this model to other programs of study and it informs statewide collaboration with partners in the Ohio Manufacturing Workforce Partnership.

3. Building Strong, Diverse Community Partnerships

Employers and training providers in Ohio are demonstrating the power of breaking out of traditional silos to establish broader recruitment partnerships – often with unexpected partners. Looking to faith-based organizations, community-based organizations, and alumni networks are just a few examples of the partners that can support better recruitment and retention outcomes.

4. Prioritizing Psychological Safety

In addition to how we traditionally think about workplace safety, work environments that ensure people feel safe, seen, and heard are crucial to long term worker and business success. Several suggestions for establishing these conditions arose during the discussion, including camaraderie around failure, disappointment, and learning best practices moving forward; and providing a safe space and platform for workers to voice their concerns.

5. Modernizing Recruitment

Manufacturers are partnering with education and community organizations to demonstrate new tactics that convey the true experience of working in manufacturing. Tactile experiences such as factory tours, videos, and interactions with potential colleagues and managers will go further than traditional methods of recruitment such as career fairs.

6. Actively Providing Wraparound Services

Students from diverse backgrounds are better served by coordinated efforts that meet students where they are. These coordinated efforts establish a safety net that help to keep students on a path to personal and career success. For each student, this will be different but common needs are for transportation, child care, technology, and emergency aid (for books, tools, work gear, etc).



Princess Simpson

Renita Jefferson

Princess Simpson
Landon County Community College