



The Detroit Region's Jobs That Mobilize: Connecting Workers and Employers in Healthcare and Automotive Manufacturing

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Executive Summary

The Detroit region is undergoing significant economic transition. Historic public investments, technological change, and shifting industry needs are reshaping the labor market and altering the skills employers require. As these forces accelerate, employers across Southeast Michigan face growing difficulty filling critical roles, while workers navigate career pathways that are not always clear or well-aligned with opportunity.

To help the region respond, the Detroit Regional Workforce Partnership engaged the Burning Glass Institute to identify the Jobs That Mobilize – roles that offer strong wages, accessible entry points, and clear potential for economic mobility. By combining labor market analytics with direct employer validation and skills analysis, this project clarifies which jobs are key for Detroit's competitiveness and what workers need to succeed in them.

Key Findings

Detroit has a strong base of high-opportunity jobs across both sectors studied.

The Jobs That Mobilize identified for the automotive manufacturing sector average more than \$72,000 in annual wages and require relatively low levels of formal education. The Jobs That Mobilize identified for the healthcare sector average nearly \$74,000 and offer well-defined, stackable credential pathways. Together, these roles anchor the region's potential for workforce mobility.

Employers prioritized the roles that matter most on the ground.

From the broader set of Jobs That Mobilize, employers highlighted where shortages are most acute and pipelines most constrained. In automotive manufacturing, employers emphasized the following roles as most critical and hardest to fill:

- First-Line Supervisors of Production and Operating Workers
- Transportation and Material Moving Workers
- Electrical and Electronic Technologists
- Machinists, Millwrights, and Maintenance Technicians

Healthcare employers highlighted the following key roles:

- Imaging Technologists in various domains (e.g., MRI, Radiologic, etc.)
- Respiratory Therapists
- Surgical Technologists
- Licensed Practical Nurses

Behavioral and communication skills drive day-one success in key Jobs That Mobilize, but certifications drive mobility in healthcare by necessity.

Across both sectors, employers emphasized communication, reliability, accountability, and teamwork as must-have skills. Most technical competencies can be developed with structured training and onboarding.

In healthcare, however, formal certifications such as BLS, ARRT, CRT, etc. are not optional. They are strict, non-negotiable requirements for clinical safety and practice. Any strategy to strengthen healthcare pipelines must directly address these credentialing pathways.

Pathways into Jobs That Mobilize exist but are not always visible to workers.

Automotive pathways draw talent from logistics, customer service, retail supervisors, CNC roles, and production support. Healthcare pathways show strong progression from Nursing Assistants, Medical Assistants, Surgical Assistants, and Radiologic Technicians into higher-skilled clinical roles. However, employers noted that workers in these entry-level patient care roles often lack clear, accessible information about how to advance or which credential to pursue, leading many to change jobs or health systems for higher wages rather than move up a defined pathway.

Why This Matters

These findings give the Detroit region a validated roadmap for strengthening training pipelines, improving hiring alignment, and supporting upward mobility into the region's highest-opportunity occupations. The analysis not only identifies the job most critical for employers but also highlights the roles that create the greatest opportunity for workers, underscoring how employer needs and worker mobility can be advanced together to support regional prosperity.

The Jobs That Mobilize framework will directly inform DRWP's upcoming work to shape durable skills strategies for manufacturing, expand micro-credentialing pathways in healthcare, and active employers, educators, and community partners around a shared understanding of the region's priority roles. The analysis provides the foundation for targeted investments and coordinated action in the years ahead.

Introduction and Context

The Detroit region stands at a pivotal moment. Historic federal and state investments are reshaping Southeast Michigan's economy and positioning the region for renewed growth across key industries, from advanced manufacturing to healthcare, logistics, and energy. These investments present an opportunity not only to expand economic activity but to ensure that prosperity is broadly shared across the region's diverse communities.

At the same time, the region faces a dual challenge. Employers are contending with persistent hiring difficulties, high turnover, and rapidly changing skill demands, while workers are navigating pathways that are often fragmented or misaligned with available opportunities. To sustain this momentum, the Detroit region must build a resilient workforce equipped with durable and transferable skills that enable workers to move between roles and sectors as the economy evolves.

The Detroit Regional Workforce Partnership (DRWP) is working to bridge this gap by aligning economic development goals with workforce priorities. Led by the Burning Glass Institute (BGI), this project is designed to support that alignment through data-driven insights that connect employer needs, career pathways, and worker skills. Using BGI's Jobs That Mobilize (JTM) framework, the project defines and validates quality jobs that offer economic mobility, identifies the skills that make those jobs attainable, and demonstrates how local stakeholders can use this information to strengthen metro Detroit's workforce ecosystem.

The analysis focuses on two of the region's most critical sectors – healthcare and automotive manufacturing.¹ Healthcare and manufacturing at large together represent nearly 40% of all regional job postings in 2025. These sectors not only anchor the regional economy but also reveal complementary dynamics: healthcare offers steady demand and strong upward mobility, while manufacturing faces acute hiring challenges and rapid technological transformation. By grounding this work in real, local employer input, the Detroit Jobs That Mobilize project establishes a scalable model for linking economic development and workforce strategy, ensuring that the region's growth is both inclusive and sustainable.

About Jobs That Mobilize

Jobs That Mobilize (JTM) are roles that drive economic mobility for workers and meet priority needs for employers within a region's strategic sectors. These are the jobs that offer more than immediate employment – they often serve as stepping-stones towards lasting stability and advancement. The JTM framework identifies these roles through a combination of data analysis and employer validation, ensuring that the jobs prioritized are both opportunity-rich and locally relevant.²

At its core, the framework is built around four interdependent forces that shape a healthy workforce ecosystem: employers, workers, strategy, and equity.

- Worker Opportunity: The individuals building skills, experience, and stability through their careers.
- Employer Talent Needs: The organizations defining demand and shaping how skills translate into opportunity.
- Economic Development Strategies: The coordination of policy, investment, and practice that aligns regional industry priorities.
- Equity Imperatives: The commitment to ensure that pathways are open and accessible to all workers.

Each of these four pillars informs and strengthens the others. This framework is designed to guide decisions and investments in local communities. As markets evolve, the JTM framework can adapt by keeping pathways aligned with changing workforce demands. Together, these four forces ensure that workforce development efforts are both inclusive and actionable, grounded in data, guided by employers, and designed to produce measurable results for communities.

ORIGIN OF THE JOBS THAT MOBILIZE FRAMEWORK

The JTM model was first developed through work in partnership with the Greater Houston Partnership, where BGI and regional partners used data and employer input to identify pathways into quality jobs that drive upward mobility. The approach has since been refined and scaled nationally, and this project represents its localization for the Detroit region – tailored to the industries, workforce dynamics, and economic strategies that define Southeast Michigan. For more information on the framework, please visit [BGI's website](#).

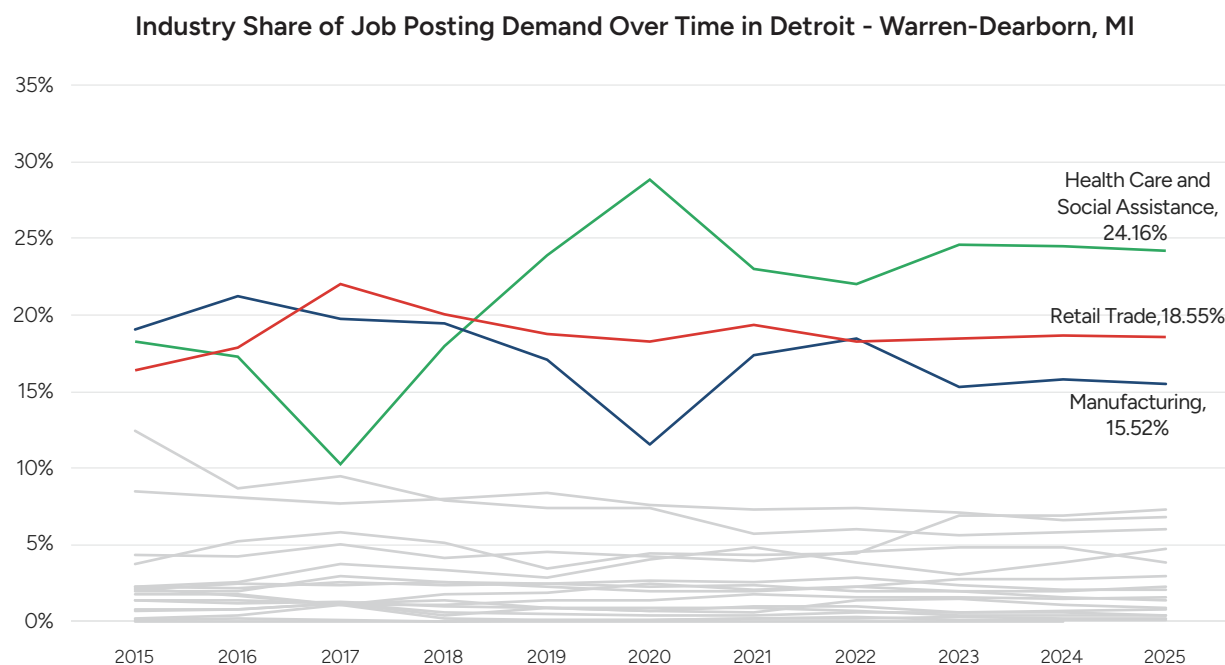
Why Metro Detroit?

The Detroit region provides a uniquely powerful setting to apply and advance the Jobs That Mobilize approach. It is a region defined by deep industrial heritage and innovation, now poised for renewed growth through investments in infrastructure, advanced manufacturing, and healthcare. At the same time, global competition, technological change, and persistent hiring challenges threaten the region's ability to keep pace. Detroit risks falling behind as work becomes more technology-intensive and as talent shortages

intensify across both manufacturing and healthcare. Without coordinated action to develop and retain skilled workers, the region could lose ground in the industries that have long anchored its economic identity.

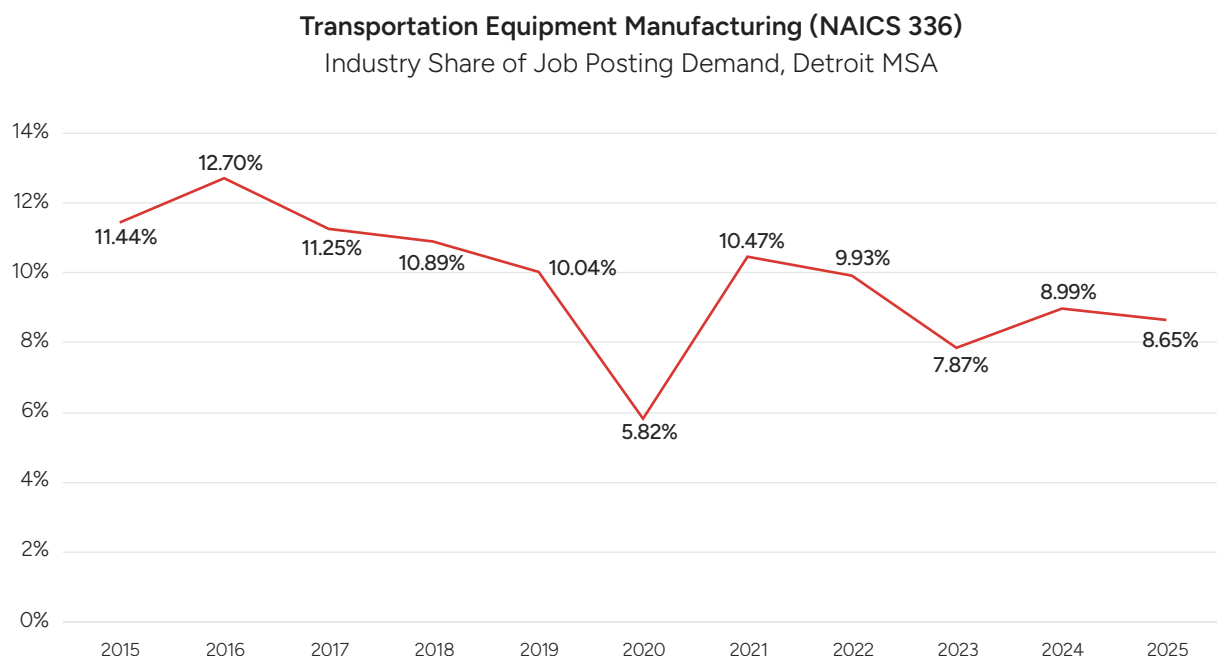
Healthcare and automotive manufacturing were chosen as the focus sectors for this project due to their scale, equity impact, and mobility potential. The broad healthcare sector accounts for nearly 25% of regional job posting demand, with the manufacturing super sector claiming over 15% of regional demand. Specifically, the automotive manufacturing sub-sector represents almost 9% of demand – larger than many other broad sectors in metro Detroit.

Figure 1: Industry Share of Job Posting Demand Over Time



Source: Lightcast

Figure 2: Transportation Equipment Manufacturing Industry Share of Job Posting Demand



Source: Lightcast

Both healthcare and automotive manufacturing include a high concentration of middle-skill jobs that offer strong wages and mobility without requiring a four-year degree. Each sector provides opportunities for workers to advance into higher-skill roles. At the same time, the two sectors diverge in ways that meaningfully shape workforce strategy. Healthcare mobility is governed by formal licensure and tightly regulated clinical training requirements, while automotive manufacturing mobility depends more on hands-on experience, durable skills, and employer-supported upskilling. These differences underscore why healthcare strategies must emphasize credentialing pipelines, whereas manufacturing strategies can lean more heavily on skills-based hiring and internal promotion.

Focusing on these two industries also directly supports the Detroit Regional Workforce Partnership's strategy to align economic development and workforce priorities across the region. By beginning with healthcare and automotive manufacturing, this project demonstrates a model that can be expanded to additional sectors, such as logistics, construction, or energy, to create a cohesive, skills-based workforce system for the Detroit region.

Approach and Methodology

Analytical Framework

The Jobs That Mobilize framework combines quantitative rigor with qualitative employer insight to identify the roles, skills, and pathways that drive economic mobility in the Detroit region's workforce.

This process unfolds in three core phases:

1. Analyze local and national data on job demand, wages, and mobility to identify roles with strong opportunity signals – those that combine high employer demand, strong wages, and clear advancement potential.
2. Engage employers across targeted sectors to validate those findings, refine role priorities, and identify where the data aligns or diverges from real hiring needs on the ground.
3. Validate key skills for success in each role, distinguishing between competencies that are necessary on day one, trainable with support, or nice to have.

This approach creates a structured, evidence-based model for identifying quality jobs that are important to employers and lead to long-term worker success. It blends the scale and objectivity of labor market analytics with the local expertise of employers, resulting in insights that are both data-driven and actionable.

Data Sources

This analysis integrates multiple datasets to ensure both depth and local relevance. Key sources include:

- Lightcast job postings data, capturing local and national employer demand by occupation, industry, and required skills.
- BGI Career Histories, a proprietary dataset that tracks millions of individual career transitions to understand how workers move between roles, industries, and wage levels.
- U.S. Bureau of Labor Statistics (BLS) data, including Occupational Employment and Wage Statistics (OEWS) to benchmark wages, growth projections, and education requirements.

To ensure consistency and representativeness, only company website postings were included to minimize duplication and focus on verified employer demand. The analysis reflects Detroit-Warren-Dearborn Metropolitan Statistical Area job postings from recent years, providing a comprehensive view of near-term and emerging labor market needs. Together, these sources provide a robust foundation for identifying high-opportunity jobs and understanding how skills translate across occupations in the Detroit region's economy.

Defining JTM in the Detroit Region

Identifying the Detroit region's Jobs That Mobilize began with a comprehensive analysis of labor market data. Each occupation in the Detroit-Warren-Dearborn MSA was evaluated using standardized indicators tied to four core themes: pain point for employers, high access and mobility, opportunity to broaden equity, and strategic importance.³

Pain Point for Employers	• Local Demand Estimate • National Demand Estimate • Estimated National Demand Growth
High Access and Mobility	• Estimated Salary • Salary Growth Estimate
Opportunity to Broaden Diversity	• Typical Education Level Required
Strategic Importance	• Roles Critical to the Healthcare and Automotive Manufacturing Sectors in the Detroit-Warren-Dearborn MSA

Each occupation was assigned a score based on these combined factors, balancing both current conditions and future growth expectations. To ensure comparability across occupations, demand and growth were grouped into three broad categories – low, medium, and high – so that roles could be evaluated on the same scale regardless of differences in posting volume.

The result is a data-driven list of high opportunity occupations that reflect where the Detroit region's labor market needs intersect with workers' potential for advancement.

Automotive Manufacturing

Automotive manufacturing remains one of the Detroit region's most defining and dynamic industries. While automation, electrification, and supply chain restructuring continue to reshape production, the sector still anchors thousands of jobs that provide economic stability and mobility for workers across Southeast Michigan.

Analysis of postings and earnings data shows that automotive manufacturing occupations in the Detroit-Warren-Dearborn MSA that qualify as Job That Mobilize offer strong wages, high demand, and accessible entry points for workers without a four-year degree. The average local salary of these identified Jobs That

Mobilize exceeds \$72,000, with total six-year earnings surpassing \$440,000, reflecting their status as high-skill, high-impact roles within the sector rather than entry-level manufacturing jobs. These roles sit farther up the mobility ladder and are often reached through feeder positions in production, logistics, customer service, or skilled trades. Only about 8% of postings for these occupations require an associate’s degree, underscoring that many of these jobs are accessible to workers with a high school education and relevant technical or on-the-job training.

Roles that emerged as Jobs That Mobilize in the automotive manufacturing sector are those that pair strong employer demand with career advancement potential and cross-functional skill pathways. These include both supervisory and technical roles that connect production, logistics, and engineering functions across the manufacturing process.

Supervisory roles , such as First-Line Supervisors of Production and Operating Workers and First-Line Supervisors of Mechanics, Installers, and Repairers, emerged as critical anchors of workforce mobility.	Skilled trades roles , including Electricians, Millwrights, and Plumbers, Pipefitters, and Steamfitters, provide strong wages and job security, offering viable entry points into long-term manufacturing careers.	Technical and hybrid roles like Electrical and Electronic and broad Engineering Technologists and Technicians reflect the industry’s ongoing shift towards automation, robotics, and process optimization, signaling where future workforce investments should focus.
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Together, these findings highlight how metro Detroit’s automotive sector continues to offer a foundation for economic mobility, anchored in accessible, well-paying, and evolving jobs that are essential to the region’s competitiveness.

Figure 3: Automotive Manufacturing Jobs That Mobilize Identified Through Analysis (Pre-Employer Validation)⁴

Occupation	Education Level Needed	Estimated Salary
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school or GED	\$77,730
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school or GED	\$78,580
First-Line Supervisors of Production and Operating Workers	High school or GED	\$73,210
First-Line Supervisors of Mechanics, Installers, and Repairers	High school or GED	\$80,320
Electricians	High school or GED	\$80,330
Electrical and Electronic Engineering Technologists and Technicians	Associate degree	\$72,650
Plumbers, Pipefitters, and Steamfitters	High school or GED	\$81,480
Control and Valve Installers and Repairers, Except Mechanical Door	High school or GED	\$93,760
Engineering Technologists and Technicians, Except Drafters, All Other	High school or GED	\$74,180
Millwrights	High school or GED	\$83,860
Executive Secretaries and Executive Administrative Assistants	High school or GED	\$72,630
First-Line Supervisors of Non-Retail Sales Workers	High school or GED	\$82,850
Production, Planning, and Expediting Clerks	High school or GED	\$60,260
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	High school or GED	\$60,170
Heavy and Tractor-Trailer Truck Drivers	High school or GED	\$55,830
Machinists	High school or GED	\$57,240
Tool and Die Makers	High school or GED	\$72,300
First-Line Supervisors of Retail Sales Workers	High school or GED	\$47,810
Structural Iron and Steel Workers	High school or GED	\$72,710
Industrial Engineering Technologists and Technicians	High school or GED	\$65,840
Computer User Support Specialists	High school or GED	\$59,520

Source: Lightcast

Healthcare

Healthcare is one of the largest and most consistently growing sectors in the Detroit region, reflecting both the scale of the sector and the rising need for talent across clinical and administrative roles. The sector not only offers a wide range of high-demand positions but also provides stable wages, defined career ladders, and accessible entry points, making it a cornerstone of mobility for the region's workforce.

Analysis of postings and earnings data shows that healthcare Jobs That Mobilize in the Detroit-Warren-Dearborn MSA offer salaries nearing \$74,000 and six-year earnings exceeding \$517,000. More than half of postings require an associate's degree, underscoring the prominence of middle-skill occupations in healthcare that do not require a bachelor's degree but can still provide meaningful advancement potential. Workers typically enter these roles through entry-level clinical or general technician roles that provide the foundational patient care competencies employers rely on before workers pursue stacked credentials and clinical training.

Healthcare JTM's span both patient-facing clinical roles and the administrative or operational roles that keep the broader healthcare system functioning. Employers emphasized a meaningful distinction between these categories: clinical roles have clearly defined credentials and skill requirements, while non-clinical roles rely on broader behavioral and work-ready skills that are often harder for employers to assess and develop. The JTM's in this sector emerged at the intersection of strong employer demand, clear wage and mobility signals, and the ability to serve as durable pathways for workers across both clinical and non-clinical tracks.

Clinical technologist roles, including MRI, Radiologic, Diagnostic Medical Sonographers, Cardiovascular, and Nuclear Medicine, are among the highest-paying middle-skill roles in the region, with strong employer demand and clearly defined training pathways.

Specialized clinical positions such as Respiratory Therapists, Surgical Technologists, and Licensed Practical Nurses emerged as especially impactful roles, combining substantial demand with upward mobility for workers.

Administrative and operational supervisory roles, such as First-Line Supervisors of Office and Administrative Support Workers, provide alternative pathways into healthcare leadership for workers without clinical backgrounds.

Entry-level support roles, including Phlebotomists, Nursing Assistants, and Pharmacy Technicians, serve as foundational on-ramps into the healthcare sector and are essential to daily clinical operations. Though lower-wage, they provide the starting point for mobility into higher-paying allied health pathways.

The identified healthcare JTM's illustrate how the sector functions as an engine of upward mobility, providing accessible, well-compensated roles that align with the evolving needs of employers and the Detroit region's long-term economic development goals.

Figure 4: Healthcare Jobs That Mobilize Identified Through Analysis (Pre-Employer Validation)⁵

Occupation	Education Level Needed	Estimated Salary
Magnetic Resonance Imaging Technologists	Associate degree	\$82,800
Respiratory Therapists	Associate degree	\$78,160
Cardiovascular Technologists and Technicians	Associate degree	\$79,770
Diagnostic Medical Sonographers	Associate degree	\$81,450
Licensed Practical and Licensed Vocational Nurses	Associate degree	\$65,030
Physical Therapist Assistants	Associate degree	\$59,730
Radiologic Technologists and Technicians	Associate degree	\$69,550
Nuclear Medicine Technologists	Associate degree	\$93,430
First-Line Supervisors of Office and Administrative Support Workers	High school or GED	\$66,690
Occupational Therapy Assistants	Associate degree	\$59,960
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High school or GED	\$77,730
Radiation Therapists	Associate degree	\$88,230
Surgical Technologists	High school or GED	\$63,760
First-Line Supervisors of Mechanics, Installers, and Repairers	High school or GED	\$80,320
Logisticians	High school or GED	\$83,270
Transportation, Storage, and Distribution Managers	High school or GED	\$101,470
Production, Planning, and Expediting Clerks	High school or GED	\$60,260
Eligibility Interviewers, Government Programs	High school or GED	\$63,560
Massage Therapists	High school or GED	\$53,370
Stationary Engineers and Boiler Operators	High school or GED	\$82,580
Phlebotomists	High school or GED	\$43,720
Nursing Assistants	High school or GED	\$39,080
Pharmacy Technicians	High school or GED	\$39,610

Source: Lightcast

Employer Validation: Prioritizing Key JTM^s in Metro Detroit

Purpose of Validation

Employer engagement was a critical step in confirming which data-identified Jobs That Mobilize truly reflect hiring needs across the Detroit region. While labor market data highlights demand, wages, and mobility potential, only employers can validate how these roles function in practice, the severity of hiring challenges, and whether certain occupations represent true pain points or simply high posting volume.

These sessions ensured that the final, curated JTM list captured:

- Roles that employers consistently struggle to recruit or retain;
- Occupations essential to maintaining operations and delivering services;
- Jobs with clear mobility potential within a sector; and
- Pathways where upskilling or reskilling could unlock new talent pools.

This validation grounded the analysis in real-world employer experience, strengthening confidence that the resulting JTM^s are not just analytically promising but strategically meaningful for the Detroit region's workforce and industry priorities.

Structure of Employer Engagement

Employer feedback was essential to validating the initial data-driven Jobs That Mobilize findings. To ground the analysis in real hiring needs, BGI and DRWP convened two sector-specific employer sessions – one for automotive manufacturing and one for healthcare. Each session brought together leaders from across the industry, including talent acquisition, operations, workforce strategy, and human resources representatives from major regional employers.

Through these sessions, employers offered candid insight into the roles that are hardest to fill, the positions where consistent talent supply is most critical, and the areas where turnover or burnout most affect operations. Their perspectives revealed where workforce gaps are most acute and where stronger pipelines could have the greatest impact. These discussions surfaced on-the-ground realities that do not appear in job postings or public workforce data, helping clarify high-priority occupations for planning and sustaining an organization.

After a review of the data-identified JTM candidates for each sector, employers participated in a guided discussion using prompting questions such as:

- Which roles are the hardest to staff or retain right now? Which are the most critical to keep filled?
- Where do you see high turnover, burnout, or skill mismatches that slow productivity?

- Which jobs could open pathways to promotion for workers if supported more intentionally?
- Which adjacent roles or industries could supply talent if supported with training?

Employers also had the opportunity to add roles not captured in the data, confirm relevance, or de-prioritize occupations that looked important analytically but did not match on-the-ground experience.

These structured conversations ensured that the final, curated JTM list reflects the true hiring landscape in the Detroit region, aligning economic development strategy with the immediate and emerging needs of employers.

Employer Priorities and Insights

AUTOMOTIVE MANUFACTURING

Employer feedback in the automotive manufacturing working group strongly reinforced the findings from the data analysis: frontline leadership and skilled technical roles are the most critical and most difficult positions to keep filled in the Detroit region. While many occupations within the sector demonstrate high demand, employers consistently elevated a subset of roles as essential to plant operations, workforce stability, and long-term competitiveness.

First-Line Supervisors of Production and Operating Workers emerged as the single most critical role across companies. Employers described this position as a “production coach” – someone responsible not only for coordinating workflows and maintaining quality, but also for leading teams in high-pressure, fast-paced environments. As one employer shared:

“Someone who is responsible for a team of people on the line is one of the critical roles – not only from the standpoint of demand to fill them but more importantly making sure they have the right skillset to lead in that environment.”

This role, along with First-Line Supervisors of Mechanics, Installers, and Repairers, was seen as indispensable, though the exact ranking of importance varied by company size and operational structure. Employers also highlighted persistent shortages in skilled trades and engineering roles, including Electrical and Electronic Technologists, Machinists, Millwrights, and Maintenance Technicians. The demand underscores this, with many of these roles showing high local and national demand and medium to high national growth. Controls engineers and related technical specialists were repeatedly described as challenging positions to fill:

“We struggle with Controls Engineers or people in that skill space. They are in demand, but there is a shortage of supply.”

A clear theme across employers was the sector’s reliance on internal mobility. Many frontline supervisors rise from hourly roles within the plant, creating organic advancement pathways:

“First-Line Supervisors tend to rise from people already in the plant. The vast majority come from the hourly ranks, and plant managers tend to come from operations managers, materials, logistics, and others.”

However, employers also pointed to a pattern of “recycling talent” across companies – workers switching firms horizontally rather than progressing into higher-level roles:

“Folks come from competitors and there are a lot of returners. They think the grass is greener at a competitor but then they come back, generally to the same role. It’s not really a pathway where you leave and come back some levels higher. They may just want to leverage role switches for increased pay, but long term it isn’t strategic when you mess with your tenure and everything you can get when you stay with your company.”

Taken together, employer insights reveal a sector with high demand for leadership, strong need for stable skilled trades talent, and limited external pipelines. These dynamics reinforce the importance of strengthening internal development pathways, improving supervisory training, and advancing skills-based hiring to ensure the Detroit region’s automotive manufacturing sector remains competitive and resilient.

Figure 5: Employer-Validated Automotive Manufacturing Jobs That Mobilize

Occupation	Local Demand	National Demand	National Demand Growth
First-Line Supervisors of Production and Operating Workers	High	High	Medium Growth
First-Line Supervisors of Mechanics, Installers, and Repairers	High	High	Medium Growth
Electrical and Electronic Engineering Technologists and Technicians	High	High	High Growth
Control and Valve Installers and Repairers, Except Mechanical Door	Medium	Low	High Growth
Engineering Technologists and Technicians, Except Drafters, All Other	Medium	Medium	Medium Growth
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	High	High	High Growth
Machinists	High	High	High Growth

Source: Lightcast

HEALTHCARE

Healthcare employers consistently emphasized three interconnected priorities: the need for clinically ready talent, strong patient communication and care competencies, and more robust pipelines from support roles into clinical positions. While demand is high across many allied health roles, employers noted that the most persistent hiring challenges cluster around imaging, respiratory care, and surgical support – roles that require specialized training and hands-on clinical experience.

Imaging roles across domains were universally described as major pain points. Employers attributed these shortages to both program capacity and the difficulty of securing clinical placements for students:

“MRI Technologists and Radiologic Technologists and Technicians are harder roles right now. From talking to collegiate partners, it could have something to do with clinicals and getting students into the programs.”

Another employer summarized the broader challenge:

“We struggle in imaging generally, and particularly with Radiologic Technologists and Technicians. We also struggle a bit with Cardiovascular Technologists and Technicians.”

Surgical Technologists were also raised as a priority occupation. While hiring is challenging, some systems are beginning to stabilize pipelines by investing in apprenticeships and internal advancement models. One employer described a successful internal program⁶ that draws employees from entry-level roles such as patient transport or environmental services and moves them into a structured surgical technologist pathway:

“Previously, it was taking external people, but now it’s focused on internal employee movement. Now, you can tap someone from the services or support group and bring them into the apprenticeship program to support retention.”

These apprentices complete online coursework, hands-on operating room labs, and case-based training, ultimately earning eligibility to sit for the NCCT certification. Early outcomes from the program suggest strong retention among participants.

Employers also noted emerging pathways such as Sterile Processing Technician to Surgical Technologist, emphasizing the importance of clear, stackable skill development. However, employers also expressed concerns about the quality and credibility of third-party clinical training providers, underscoring the need for stronger coordination with education partners.

Demand data reinforces these employer perspectives: the highest-priority roles show high local and national demand as well as high national demand growth. These findings paint a picture of a regional healthcare system that relies heavily on specialized technical roles, strong care competencies, and dependable support staff. While internal mobility pathways can help health systems fill acute shortages in specific occupations, employers emphasized that these movements often shift shortages elsewhere. Given the chronic, systemwide talent constraints in healthcare, internal mobility alone cannot fully solve long-term workforce gaps, highlighting the need for expanded training capacity, stronger external pipelines, and partnerships to grow the overall talent pool.

Figure 6: Employer-Validated Healthcare Jobs That Mobilize

Occupation	Local Demand	National Demand	National Demand Growth
Magnetic Resonance Imaging Technologists	High	High	High Growth
Respiratory Therapists	High	High	High Growth
Cardiovascular Technologists and Technicians	High	High	High Growth
Diagnostic Medical Sonographers	High	High	High Growth
Licensed Practical and Licensed Vocational Nurses	High	High	High Growth
Radiologic Technologists and Technicians	High	High	High Growth
Surgical Technologists	High	High	High Growth

Source: Lightcast

Skills Validation: Defining What Success Looks Like

Purpose and Process

Once employers validated which roles were most critical to their operations, the next step was to understand what success looks like within those roles. If JTM validation established the “what” – the high-opportunity jobs driving mobility in Detroit, the skills validation clarified the “how” – the specific competencies that enable workers to perform and advance in those jobs.

To surface these insights, the same employer working groups were presented with comprehensive skills lists generated from job postings. These lists capture technical, regulatory, interpersonal, and work-ready skills relevant to each occupation.

Employers were asked to categorize each skill into one of these groups:

- **Must Have on Day One:** Skills essential to safe, effective job performance from the start.
- **Trainable with Support:** Competencies that can be developed through targeted onboarding, structured training, or mentorship.
- **Nice to Have:** Skills that are beneficial but not required for hiring or early-stage performance.

Any skills left unselected in the “skill bank” represented competencies that employers did not view as important or relevant for success in the specific roles discussed. This distinction helps clarify which skills truly drive day-one readiness, and which can reasonably be built through development – information critical for training providers, workforce partners, and upskilling strategies.

Sector Skills Priorities

AUTOMOTIVE MANUFACTURING

Employer insights from the automotive sector revealed a clear and consistent message: durable, behavioral, and interpersonal skills are the bedrock of day-one success, even in highly technical environments. While manufacturing work has become increasingly technology-driven, employers emphasized that the most critical competencies for frontline supervisors and technical workers are those that enable effective communication, leadership, safety, and reliability on the plant floor.

Across the three automotive roles validated during the skills exercises (First-Line Supervisors of Production and Operating Workers, First-Line Supervisors of Transportation and Material Moving Workers, and Industrial Machinery Mechanics), employers highlighted the following themes:

- Interpersonal and communication skills
- Reliability, accountability, and a strong work ethic

- Process discipline and a safety mindset
- Customer orientation (internal or external)
- Conflict resolution and problem awareness
- Ability to learn quickly and adapt

These skills, which appeared repeatedly across occupations, highlight the sector's reliance on workers who can lead people, maintain quality, and uphold safety standards in fast-paced operational settings. Employers were clear that technical skills can often be trained, but the foundational behaviors that shape judgment, teamwork, and consistency must be present from the start.

First-Line Supervisors of Production and Operating Workers

Supervisory roles required the strongest emphasis on interpersonal and behavioral competencies. Employers identified communication, reliability, conflict resolution, and safety awareness as essential, while more technical areas, such as process optimization, were viewed as trainable with support. People management and production-specific skills were categorized as nice to have rather than required for initial hiring.

Figure 7: Employer-Validated Skills for First-Line Supervisors of Production and Operating Workers

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	Ability to Learn
		Accountable
		Communication
		Conflict Resolution
		Customer-Oriented
		Process-Driven
		Quality
		Reliability
		Safety Mindset
Nice to Have	Employers	Emotional Intelligence
	Job Postings Data	People Management
		Production and Assembly
Trainable with Support	Employers	Data Analysis
		Quality, Cost, Delivery, People (QCDP)
	Job Postings Data	Process Improvement and Optimization
Not Critical	Job Postings Data	Auditing
		Business Analysis
		Business Intelligence
		Business Solutions
		Business Strategy
		Cost Accounting
		Data Analysis
		Employee Relations
		Employee Training
		General Finance
		General Shipping and Receiving
		Human Resources Management and Planning
		Lean Manufacturing
		Manufacturing Processes
		Manufacturing Standards
		Performance Management
		Plant Operations and Management
		Process Engineering
		Procurement
		Supply Chain Management

Source: Lightcast and DRWP's Automotive Manufacturing Employer Working Group

First-Line Supervisors of Transportation and Material Moving Workers

The skills needed for First-Line Supervisors of Transportation and Material Moving Workers largely mirrored those of First-Line Supervisors of Production and Operating Workers, with the same behavioral competencies prioritized. Inventory and warehousing knowledge were seen as nice to have but not required on day one. Technical process improvement capabilities could be taught over time, while core reliability, communication, and customer orientation remained non-negotiable.

Figure 8: Employer-Validated Skills for First-Line Supervisors of Transportation and Material Moving Workers

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	Ability to Learn
		Accountable
		Communication
		Conflict Resolution
		Customer-Oriented
		Process-Driven
		Quality
		Reliability
		Safety Mindset
Nice to Have	Job Postings Data	Inventory and Warehousing
Trainable with Support	Employers	AI Integration and Mapping
	Job Postings Data	Process Improvement and Optimization
Not Critical	Job Postings Data	Auditing
		Billing and Invoicing
		Business Analysis
		Business Intelligence
		Business Solutions
		Employee Relations
		Food and Beverage
		General Shipping and Receiving
		Groundskeeping and Yard Care
		Heavy Equipment Operation

Validation Status	Identification Source	Key Competencies
Not Critical	Job Postings Data	Human Resources Management and Planning
		Landscaping and Horticulture
		Lean Manufacturing
		Logistics
		Manufacturing Standards
		Material Handling
		Merchandising
		Office and Productivity Equipment and Technology
		People Management
		Performance Management
		Procurement
		Supply Chain Management
		Transportation Operations

Source: Lightcast and DRWP's Automotive Manufacturing Employer Working Group

Industrial Machinery Mechanics

For this technical role, employers emphasized that candidates must arrive with both strong behavioral competencies, such as reliability, communication, and a deep problem-solving mindset, as well as a solid base of mechanical ability. Skills like equipment repair, use of hand and power tools, and general maintenance were consistently viewed as day-one essentials, not areas for on-the-job training. While employers noted that more advanced electrical, automation, or engineering competencies can be developed over time, they made clear that Industrial Machinery Mechanics need to enter the role with substantial technical readiness already in place.

Figure 9: Employer-Validated Skills for Industrial Machinery Mechanics

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	Ability to Learn
		Accountable
		Communication
		Conflict Resolution
		Curiosity
		Customer-Oriented
		Deep Problem Solving
		Process-Driven
		Quality
		Reliability
		Safety Mindset
	Job Postings Data	Equipment Repair and Maintenance
		General Repairs and Maintenance
		Hand Tools
Nice to Have	Job Postings Data	Power Tools
		Heavy Equipment Operation
Not Critical	Job Postings Data	Automation Engineering
		Basic Electrical Systems
		Drafting and Engineering Design
		Electrical and Computer Engineering
		Electrical Power
		Electromechanical Engineering
		Electronic Hardware
		Electronics Engineering
		Engineering, Scientific, and Technical Instruments
		HVAC
		Machinery
		Manufacturing Processes
		Material Handling
		Mechanical Engineering
		Plumbing
		Power Generation
		Production and Assembly
		Vehicle Repair and Maintenance
		Water Supply, Testing, and Treatment
		Welding, Brazing, and Soldering

Source: Lightcast and DRWP's Automotive Manufacturing Employer Working Group

Work-Ready Skills

In addition to role-specific competencies, employers emphasized a set of work-ready skills that cut across all automotive roles. Must have skills in this category included communication, strong social skills, motivation, orientation to customer service, as well as ethical decision-making and “doing the right thing” consistently. These skills form the behavioral foundation for success in nearly all automotive manufacturing roles. Employers also noted that regulation and legal compliance can be trained with structured onboarding, while critical thinking, problem solving, and collaboration were “nice to have” – important but not universally required across all positions.

Figure 10: Employer-Validated Work-Ready Skills for Automotive Manufacturing Jobs That Mobilize

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	Ethical Decision-Making
		Motivation
	Job Postings Data	Communication
		Customer Service
		Social Skills
Nice to Have	Employers	Collaboration
	Job Postings Data	Critical Thinking and Problem Solving
Trainable with Support	Job Postings Data	Regulation and Legal Compliance

Together, these skill insights highlight that the Detroit region’s automotive manufacturing workforce requires more than just technical proficiency. Success in these Jobs That Mobilize depends on consistent behaviors, communication, and process discipline, supported by targeted training to build additional technical or operational expertise over time.

HEALTHCARE

Employers in the healthcare working group emphasized that interpersonal, communication, empathy, and teamwork skills are universally essential across clinical and non-clinical roles. Nearly all soft skills were identified as “must haves” on day one, reflecting the reality that patient-facing roles require not only technical knowledge but also the ability to communicate clearly, support patients and families, and operate effectively within care teams.

Across all validated healthcare occupations (Imaging Technologists, Respiratory Therapists, and Surgical Technologists), employers emphasized that durable behavioral skills form the foundation of clinical readiness. These interpersonal competencies are essential for patient care and safety. However, unlike automotive manufacturing where many clinical skills can be trained over time, healthcare technical skills are bundled into formal certifications that employers deeply trust. Credentials such as ARRT, BLS, and CRT serve as verifiable indicators of technical competency, regulatory compliance, and patient safety, reducing ambiguity in hiring and ensuring a consistent baseline of clinical preparation.

Healthcare’s reliance on trusted, skill-verified credentials also illuminates a broader opportunity: imagine if every industry had equivalently reliable, widely recognized indicators of technical readiness – even in fields with fewer licensing and regulatory requirements. Clear, consistent credentialing could strengthen workforce mobility, improve hiring alignment, and provide workers in sectors like logistics or manufacturing with the same clarity and trust that healthcare credentials provide today.

Imaging Technologists

(Includes MRI, Radiologic, and Diagnostic Medical Sonographer)

For Imaging Technologists of various types, healthcare employers placed a strong emphasis on formal credentials as essential or day-one readiness. Specifically mentioned were American Registry of Radiologic Technologists (ARRT), Basic Life Support (BLS), Certified Respiratory Therapist (CRT), and Nuclear Medicine Technology Certification Board (NMTCB) Certifications. These credentials ensure that technologists in various domains can safely operate imaging equipment, interpret medical procedures, and maintain compliance with regulatory standards. Employers also flagged physical demands, first aid, and foundational medical imaging knowledge as essential skills.

Technical specialization, such as CT experience, was listed as “nice to have,” and broader clinical domains were considered not critical for success in the imaging technologist roles. This reflects the highly specific nature of imaging pathways: depth matters more than breadth.

Figure 11: Employer-Validated Skills for Imaging Technologists

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	ARRT Certification
		BLS Certification
		CRT Certification
		NMTCB Certification
		Physical Demands
	Job Postings Data	First Aid
		General Medical Tests and Procedures
		Medical Imaging
		Nuclear Medicine
Nice to Have	Employers	CT Experience
Not Critical	Job Postings Data	Cardiology
		Education Software and Technology
		Emergency and Intensive Care
		Endocrinology
		General Medicine
		Geriatrics
		Health Care Administration
		Health Care Procedure and Regulation
		Health Information Management and Medical Records
		Home Health Care and Assisted Living
		Infectious Diseases
		Medical Equipment and Technology
		Medical Science and Research
		Medical Support
		Nursing and Patient Care
		Obstetrics and Gynecology (OBGYN)
		Oncology
		Orthopedics
		Patient Education and Support
		Pediatrics
		Photo/Video Production and Technology

Source: Lightcast and DRWP's Healthcare Employer Working Group

Respiratory Therapist

For Respiratory Therapists, employers again require a set of core certifications and educational markers. These included a Basic Life Support (BLS) certification, graduation from an accredited respiratory therapy program, and completion of either the Certified Respiratory Therapist (CRT) or Registered Respiratory Therapist) credential from the National Board for Respiratory Care. These were considered immovable prerequisites for safe patient care. Additional competencies, such as understanding healthcare procedures, medical documentation, patient care protocols, and basic clinical support were categories as must-have or trainable with support.

Like Imaging Technologists, broader clinical specialties were consistently marked as not critical for Respiratory Therapists. This underscores that respiratory therapy is a highly defined clinical pathway, and workers must enter with a precise set of validated skills.

Figure 12: Employer-Validated Skills for Respiratory Therapists

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	BLS Certification
		Graduation from accredited respiratory therapist program, associates at a minimum
		NBRC RRT/CRT Exam
	Job Postings Data	First Aid
		Health Care Procedure and Regulation
		Health Information Management and Medical Records
		Nursing and Patient Care
		Patient Education and Support
Nice to Have	Employers	Years of Experience
Not Critical	Job Postings Data	Alternative Therapy
		Anesthesiology
		Cardiology
		General Medical Tests and Procedures
		General Medicine
		Geriatrics
		Health Care Administration
		Home Health Care and Assisted Living
		Infectious Diseases
		Medical Equipment and Technology
		Medical Support
		Pediatrics
		Physical Therapy
		Pulmonology
		Rehabilitation

Source: Lightcast and DRWP's Healthcare Employer Working Group

Surgical Technologist

Healthcare employers emphasized both behavioral competencies and formal preparation for Surgical Technologists. Must-have skills include adaptability and flexibility, attention to detail, direct communication and conflict resolution, as well as BLS certification and completion of a surgical technology program or specialized military patient care training.

Job postings highlighted first-aid, medical equipment knowledge, and surgical support skills as additional essentials. Employers noted that experience with robotics, trauma neurosurgery, or prior sterile processing work could strengthen candidates but were not required for entry. Most other medical specialties were deemed not critical for day one success.

Figure 13: Employer-Validated Skills for Surgical Technologists

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Employers	Adaptability
		Attention to detail
		BLS Certification
		Conflict resolution
		Direct communication
		Flexibility
		Graduate of a surgical technology program OR six months specialized patient care training in the armed forces
	Job Postings Data	First Aid
		Medical Equipment and Technology
		Surgery
Nice to Have	Employers	Military medic experience
		Neurosurgery
		Non-certified surgical technologist with high school diploma
		Robotics
		Sterile processing tech experience
Not Critical	Job Postings Data	Anesthesiology
		Blood Collection
		Cardiology
		Emergency and Intensive Care
		Gastroenterology
		General Medical Tests and Procedures
		General Medicine
		Geriatrics
		Hazardous Materials Management
		Health Care Procedure and Regulation
		Health Information Management and Medical Records
		Home Health Care and Assisted Living
		Infectious Diseases
		Medical Imaging
		Medical Science and Research
		Medical Support
		Neurology
		Nursing and Patient Care
		Obstetrics and Gynecology (OB/GYN)
		Orthopedics
		Pediatrics
		Urology

Source: Lightcast and DRWP's Healthcare Employer Working Group

Work-Ready Skills

Across all healthcare roles validated during the working group, employers emphasized a consistent set of durable work-ready skills that underpin success. These skills include customer service and a patient-centered mindset, patient care fundamentals, communication, regulation and legal compliance, social skills, and more. These core competencies reflect the dual nature of healthcare work: it combines technical, regulated clinical practice with human-centered service. Employers repeatedly affirmed that while technical skills can be taught within structured training programs, the interpersonal and behavioral traits essential to patient care must be present from the start.

Figure 14: Employer-Validated Work-Ready Skills for Healthcare Jobs That Mobilize

Validation Status	Identification Source	Key Competencies
Must Have on Day One	Job Postings Data	Customer Service
		Communication
		Critical Thinking and Problem Solving
		Nursing and Patient Care
		Personal Attributes
		Regulation and Legal Compliance
		Social Skills
		Writing and Editing

Source: Lightcast and DRWP's Healthcare Employer Working Group

Pathways

Building pathways into high-opportunity roles is essential for strengthening workforce mobility and helping employers fill critical positions. After identifying Jobs That Mobilize and validating the skills required for success, the next step was to determine where talent can come from – both within and outside each sector. Using BGI's career histories and skill similarity analysis, researchers identified source occupations whose underlying skill profiles closely align with the Detroit region's priority roles. These similarity scores illuminate realistic, skills-adjacent transitions that workers can make with targeted training or structured on-the-job development. The resulting pathways provide a clear roadmap for employers, workforce partners, and training providers to design advancement strategies, build bridge programs, and tap into overlooked pools of local talent.

Automotive Manufacturing

The pathways analysis shows that the Detroit region's automotive manufacturing sector has a wide and diverse set of potential source roles into its highest-priority Jobs That Mobilize. While employers often think of talent pipelines as emerging strictly from within manufacturing, the data reveal that workers from logistics, maintenance, customer service, and retail all bring substantial transferable skills that align closely with the demands of frontline leadership and skilled trades roles.

Across all source-target occupation pairs, the strongest transitions reflect three overarching trends:

1. Production-adjacent technical roles feed directly into higher-skill technical jobs.

The clearest example is the pathway from Computer Numerically Controlled Tool Operators to Machinists (our highest-similar pair of occupations in the automotive manufacturing industry), indicating that workers already operating precision machines possess much of the technical foundation needed to advance into more complex machining roles. Similarly, Mechanical Engineering Technicians are well positioned to move into Electrical and Electronic Engineering Technician Roles, highlighting the opportunity to build hybrid technical capacity through targeted electrical training.

2. Strong behavioral and leadership skills enable mobility into frontline supervisory roles, often from outside manufacturing.

A wide range of roles show strong similarity to First-Line Supervisors of Production and Operating Workers, including Shipping, Receiving, and Inventory Clerks; Packaging and Filling Machine Operators; Production, Planning, and Expediting Clerks; Customer Service Representatives; and First-Line Supervisors of Retail Sales Workers. These occupations share competencies that employers repeatedly emphasized during skills validation: communication, reliability, process discipline, customer orientation, and conflict resolution. Workers in these roles may lack specific manufacturing experience, but they bring the behavioral and managerial foundation needed for success in frontline leadership positions.

3. Maintenance pathways reinforce the importance of hands-on experience.

The pathway from Maintenance and Repair Workers to First-Line Supervisors of Mechanics, Installers, and Repairers reflects how general repair experience can serve as a launching point into technical supervisory roles. When combined with additional or structured upskilling, these workers can progress into roles where employers cited persistent shortages.

Figure 15: Pathways from Source Occupation to JTM in Automotive Manufacturing

Source Occupation		Target Occupation (JTM)	Similarity Score ⁷
Computer Numerically Controlled Tool Operators	→	Machinists	0.75
First-Line Supervisors of Production and Operating Workers	→	First-Line Supervisors of Mechanics, Installers, and Repairers	0.72
Shipping, Receiving, and Inventory Clerks	→	First-Line Supervisors of Production and Operating Workers	0.65
Maintenance and Repair Workers, General	→	First-Line Supervisors of Mechanics, Installers, and Repairers	0.63
First-Line Supervisors of Retail Sales Workers	→	First-Line Supervisors of Production and Operating Workers	0.59
Mechanical Engineering Technologists and Technicians	→	Electrical and Electronic Engineering Technologists and Technicians	0.56
Packaging and Filling Machine Operators and Tenders	→	First-Line Supervisors of Production and Operating Workers	0.55
Production, Planning, and Expediting Clerks	→	First-Line Supervisors of Production and Operating Workers	0.54
Customer Service Representatives	→	First-Line Supervisors of Production and Operating Workers	0.53

Source: Lightcast and BGI Career Histories

Healthcare

The pathways analysis in healthcare highlights a clear and encouraging trend: many of the Detroit region's highest-priority clinical and technical roles can be reached from accessible entry points such as Nursing Assistants, Medical Assistants, and generalized health technician roles. Unlike automotive manufacturing, where leadership and behavioral competencies drive mobility, healthcare pathways are shaped by stacked credentials, clinical exposure, and opportunities to build specialized competencies over time.

Despite the existence of these pathways, employer focus groups revealed that many healthcare workers perceive limited opportunities for advancement. Workers in entry-level care roles often lack clear, accessible information about which credentials enable upward mobility, how to balance employment with training requirements, or whether their employer will support their advancement. This disconnect leads many to move laterally across health systems in search of incremental wage gains rather than progressing vertically along defined, higher-value pathways. Strengthening transparency and support around these transitions is essential.

Among the healthcare source-target occupation pathways, several strong patterns emerge:

1. Imaging occupations offer some of the strongest skill-based pathways in the sector.

Radiologic Technologists and Technicians show exceptionally high similarity to both Cardiovascular Technologists and Technicians and MRI Technologists. These transitions demonstrate that workers with a radiologic foundation can advance into more specialized imaging modalities with focused training and clinical experience. Given that imaging roles were consistently cited as the hardest to fill, this represents a critical pipeline opportunity for healthcare employers and training partners.

2. Support roles such as Nursing Assistants provide meaningful entry points into licensed clinical roles.

The pathway from Nursing Assistants to Licensed Practical and Vocational Nurses reflects what employers described during validation: many workers begin in support roles and advance into nursing through on-the-job experience, employer-sponsored programs, or stackable credentials. Nursing Assistants also show strong alignment with Surgical Technologists, highlighting that foundational patient care experience builds many of the interpersonal and clinical readiness skills required in the surgical environment.

3. Surgical support roles create direct pathways into higher-skill surgical careers.

Surgical Assistants moving into Surgical Technologist roles or becoming Licensed Practical and Vocational Nurses have many skills to rely on, indicating that workers in entry-level surgical support roles develop procedural awareness, sterile technique, and teamwork competencies that translate well into advanced surgical or nursing pathways. These transitions align with employer accounts of leveraging internal mobility and apprenticeship models to address surgical technologist shortages.

4. Broad health technician roles can be developed into specialized clinical pathways.

The pathway from Health Technologists and Technicians to Radiologic Technologists shows that workers with generalized clinical or technical exposure can successfully transition into more specialized imaging roles with focused coursework and clinical placements. This highlights the importance of clear, navigable training routes into imaging, which employers identified as a significant bottleneck.

Figure 16: Pathways from Source Occupation to JTM in Healthcare

Source Occupation		Target Occupation (JTM)	Similarity Score ⁸
Radiologic Technologists and Technicians	→	Cardiovascular Technologists and Technicians	0.78
Radiologic Technologists and Technicians	→	Magnetic Resonance Imaging Technologists	0.78
Surgical Assistants	→	Licensed Practical and Licensed Vocational Nurses	0.71
Health Technologists and Technicians, All Other	→	Radiologic Technologists and Technicians	0.69
Nursing Assistants	→	Licensed Practical and Licensed Vocational Nurses	0.68
Surgical Assistants	→	Surgical Technologists	0.68
Nursing Assistants	→	Surgical Technologists	0.64
Medical Assistants	→	Surgical Technologists	0.64

Source: Lightcast and BGI Career Histories

Implications for Workforce Stakeholders

The Detroit region's Jobs That Mobilize analysis provides a shared foundation for employers, education and training providers, workers, and workforce partners to align their efforts around the roles and skills that matter most for local economic mobility. By identifying which jobs drive mobility, which skills define success, and where strong pathways exist, this work provides concrete direction for stakeholders across the workforce ecosystem.

For Employers

Validated JTM's give employers a powerful tool to refine hiring practices, articulate expectations, and strengthen training models. Key implications include:

- Clearer hiring profiles for high-priority roles, grounded in both data and employer consensus
- A data-backed understanding of which skills are realistic to expect on day one versus those better suited for training
- The ability to focus onboarding, mentorship, and supervisory development on skills employers consistently emphasized, especially reliability, process discipline, and safety mindset
- Improved channels to signal hiring expectations to training providers, ensuring that local programs reflect real-world requirements

Together, these shifts can help employers expand their talent pools, strengthen retention, and build internal mobility into roles that are hardest to fill.

For Education and Training Providers

Employer-validated JTM's and skill profiles offer a roadmap to align curricula, credentials, and training pathways with the Detroit region's most in-demand and highest-mobility occupations. Opportunities include:

- Embedding interpersonal skills, such as communication, teamwork, and problem solving, across programs
- Aligning credential pathways to JTM's, especially in healthcare and automotive manufacturing, where the analysis identified clear, stackable pathways into higher wage positions
- Reinforcing work-ready skill development throughout program experience to prepare learners for day-one readiness in priority occupations

These steps can help training providers and educators create clearer routes into high-opportunity roles and ensure their graduates are equipped with the skills that employers value most.

For Workers & Learners

The JTM framework offers workers and learners a transparent view into which jobs support economic mobility, and what skills and credentials are required to advance. Implications include:

- Clear visibility into career pathways that offer advancement potential and competitive wages
- A stronger understanding of which skills and competencies to acquire, from clinical credentials, conflict resolution, and regulatory knowledge, to progress along those pathways

With more accessible information, workers can make informed decisions about training, upskilling, and career planning.

For Workforce Partnerships and Funders

For regional workforce partners, philanthropic funders, and system-level intermediaries, this work provides a replicable, data-driven model for advancing economic mobility across sectors. Key opportunities include:

- Directing resources towards occupations with both strong employer demand and upward mobility potential
- Using the Detroit region's JTM methodology as a repeatable model for other sectors or regions across Michigan
- Leveraging validated JTMs and skill profiles to guide program design, credential alignment, and funding priorities across the workforce ecosystem
- Strengthening coordination between employers and education systems, ensuring that investments reflect real hiring needs

This alignment positions the Detroit region to build a resilient, inclusive workforce capable of meeting the demands of current and emerging industries.

Conclusion

The Detroit region's Jobs That Mobilize analysis demonstrates how data, employer expertise, and skill-based insights can come together to strengthen a regional workforce ecosystem. By grounding the work in robust labor market analytics and validating findings directly with healthcare and automotive manufacturing employers, this project provides a clear and actionable picture of the jobs that drive mobility for the region.

Across both sectors, the analysis surfaced roles that combine strong employer demand, solid wages, and accessible entry points – jobs that offer workers in the Detroit region meaningful opportunities for advancement. Through employer validation sessions, these analytically identified roles were further refined to reflect real hiring challenges and operational priorities, ensuring the final set of JTM's is deeply aligned with on-the-ground experience. The skills validation process added another layer of clarification from employers, highlighting the competencies that define day-one success and distinguishing which skills can be trained, developed, or reinforced through onboarding and mentorship.

Pathways analysis further underscored that mobility is realistic and achievable for many workers already in the region's labor market. Workers in logistics, retail, support, or early-career healthcare roles possess important foundational skills that, with targeted training or structured clinical experience, can position them to move into high-opportunity occupations. These insights reveal not only the highest priority roles, but also the routes workers can realistically take to get there.

Most importantly, this work establishes a replicable model for the region – one that can be extended to additional sectors such as logistics, construction, or energy as metro Detroit's economy continues to evolve. By continuing to pair rigorous data analysis with sustained employer engagement, the Detroit region and other locations across Michigan can build a workforce system that is adaptable, inclusive, and aligned with long-term economic goals.

Workers in the Detroit region have a substantial opportunity to move into roles that are both critically needed and economically meaningful – if the right support is in place to help them get there. The analysis shows that many of the most in-demand jobs in healthcare and automotive manufacturing can be filled by workers already in the region, if employers, training providers, and workforce partners strengthen the pathways and training capacity needed to support those transitions. By clarifying which roles matter most and which skills enable mobility, this work gives metro Detroit a practical foundation for addressing talent gaps and building a more resilient, opportunity-rich workforce.

Appendices

A. Jobs That Mobilize Methodological Detail

Figure A.1: JTM Metric Definitions

Field	Associated Pillar	Definition
JTM Ranking	--	The ranking we compute for an occupation in the Detroit-Warren-Dearborn MSA, based on current and future expected wages, as well as local and national demand.
Typical Education Level Needed	Opportunity to Broaden Diversity	The education level most frequently requested by employers in job postings we observe within the Detroit-Warren-Dearborn MSA. When no education level is specified for a job ad, it is assumed to require the typical required education for the occupation as published by the BLS; all typical requirements below an Associate's degree are counted towards the "High school or GED" level for simplicity.
Local Demand Estimate	Pain Point for Employers	Tercile bins corresponding to the number of job ads we observe for a job in the Detroit-Warren-Dearborn MSA. This is subject to some measurement error, so we use tercile bins.
Estimated Salary	High Access & Mobility	Imputed local salary in the Detroit-Warren-Dearborn MSA, based on survey/ administrative data and job advertisements.
Salary Growth Estimate	High Access & Mobility	Estimated wage growth of the occupation from 2019 to 2022 based on modeling and regression analysis of Employment Cost Index and public and constructed occupational data.
National Demand Estimate	Pain Point for Employers	Tercile bins corresponding to the number of job postings we observe for a job nationally. This is subject to some measurement error, so we use tercile bins.
Estimated National Demand Growth	Pain Point for Employers	Tercile bins corresponding to year-over-year growth in the number of job ads we observe for a job in a given region. This is subject to some measurement error, so we use tercile bins.

Figure A.2: JTM Filter Threshold

Filter	Minimum Requirement
Local Job Postings	≥10
National Job Postings	≥10
National Growth	>-50% (normalized)
Local Growth	>-50% (normalized)
Wage Growth	>-5%
Education Level	Sub-baccalaureate only
Industry	Healthcare (NAICS 62) / Transportation 336
Geography	Detroit MSA only

Figure A.3: JTM Ranking Weights

Metric	Weight	What It Measures
National Postings Rank	1x	US industry job volume
National Growth Rank	1x	US industry demand growth
Local Postings Rank	1x	Detroit industry job volume
Salary Rank	3x	Detroit median salary
Wage Growth Rank	1x	Employment cost index growth
6-Year Earnings Rank	1x	Long-term earning potential
Local Growth Rank	0x	<i>(Excluded from ranking)</i>

Full Lists of Data-Identified JTM

Figure A.4: Automotive Manufacturing JTMs

Occupation	Local Demand	Education Level Needed	Estimated Salary	National Demand	Salary Growth Estimate	National Demand Growth
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	High	High school or GED	\$77,730	High	5.83%	High Growth
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High	High school or GED	\$78,580	High	6.04%	Medium Growth
First-Line Supervisors of Production and Operating Workers	High	High school or GED	\$73,210	High	6.01%	Medium Growth
First-Line Supervisors of Mechanics, Installers, and Repairers	High	High school or GED	\$80,320	High	5.25%	Medium Growth
Electricians	High	High school or GED	\$80,330	High	4.4%	High Growth
Electrical and Electronic Engineering Technologists and Technicians	High	Associate degree	\$72,650	High	4.4%	High Growth
Plumbers, Pipefitters, and Steamfitters	Medium	High school or GED	\$81,480	Medium	4.59%	High Growth
Registered Nurses	Medium	Associate degree	\$88,980	Low	4.47%	High Growth
Control and Valve Installers and Repairers, Except Mechanical Door	Medium	High school or GED	\$93,760	Low	4.34%	High Growth
Securities, Commodities, and Financial Services Sales Agents	Low	High school or GED	\$77,200	Low	5.58%	High Growth
Engineering Technologists and Technicians, Except Drafters, All Other	Medium	High school or GED	\$74,180	Medium	4.43%	Medium Growth
Millwrights	Medium	High school or GED	\$83,860	Medium	4.31%	Medium Growth
Executive Secretaries and Executive Administrative Assistants	Medium	High school or GED	\$72,630	Low	6.08%	Low Growth
First-Line Supervisors of Non-Retail Sales Workers	Low	High school or GED	\$82,850	Low	5.82%	Low Growth

Occupation	Local Demand	Education Level Needed	Estimated Salary	National Demand	Salary Growth Estimate	National Demand Growth
Production, Planning, and Expediting Clerks	Medium	High school or GED	\$60,260	High	4.07%	High Growth
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	High	High school or GED	\$60,170	High	3.57%	High Growth
Heavy and Tractor-Trailer Truck Drivers	High	High school or GED	\$55,830	Medium	6.91%	Medium Growth
Machinists	High	High school or GED	\$57,240	High	5.57%	High Growth
Tool and Die Makers	High	High school or GED	\$72,300	Medium	5.69%	Low Growth
First-Line Supervisors of Retail Sales Workers	Medium	High school or GED	\$47,810	Medium	5.91%	High Growth
Structural Iron and Steel Workers	Low	High school or GED	\$72,710	Medium	4.54%	High Growth
Industrial Engineering Technologists and Technicians	Medium	High school or GED	\$65,840	Medium	4.43%	Medium Growth
Computer User Support Specialists	High	High school or GED	\$59,520	High	4.66%	Medium Growth

Source: Lightcast

Figure A.5: Healthcare JTM

Occupation	Local Demand	Education Level Needed	Estimated Salary	National Demand	Salary Growth Estimate	National Demand Growth
Magnetic Resonance Imaging Technologists	High	Associate degree	\$82,800	High	4.51%	High Growth
Respiratory Therapists	High	Associate degree	\$78,160	High	4.56%	High Growth
Cardiovascular Technologists and Technicians	High	Associate degree	\$79,770	High	4.35%	High Growth
Diagnostic Medical Sonographers	High	Associate degree	\$81,450	High	4.42%	High Growth
Licensed Practical and Licensed Vocational Nurses	High	Associate degree	\$65,030	High	4.71%	High Growth
Physical Therapist Assistants	High	Associate degree	\$59,730	High	6.79%	High Growth
Radiologic Technologists and Technicians	High	Associate degree	\$69,550	High	4.44%	High Growth
Nuclear Medicine Technologists	Medium	Associate degree	\$93,430	Medium	4.41%	High Growth
First-Line Supervisors of Office and Administrative Support Workers	High	High school or GED	\$66,690	High	6.51%	Medium Growth
Occupational Therapy Assistants	Medium	Associate degree	\$59,960	High	6.77%	High Growth
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	Medium	High school or GED	\$77,730	Medium	5.83%	High Growth
Radiation Therapists	Medium	Associate degree	\$88,230	Medium	4.03%	High Growth
Personal Financial Advisors	Medium	High school or GED	\$99,600	Medium	4.47%	Medium Growth
Surgical Technologists	High	High school or GED	\$63,760	High	4.42%	High Growth

Occupation	Local Demand	Education Level Needed	Estimated Salary	National Demand	Salary Growth Estimate	National Demand Growth
First-Line Supervisors of Mechanics, Installers, and Repairers	Medium	High school or GED	\$80,320	Medium	5.25%	Medium Growth
Logisticians	Medium	High school or GED	\$83,270	Medium	3.87%	High Growth
Education Administrators, Postsecondary	Medium	High school or GED	\$98,800	Medium	3.95%	Medium Growth
Securities, Commodities, and Financial Services Sales Agents	Low	High school or GED	\$77,200	Low	5.58%	High Growth
Transportation, Storage, and Distribution Managers	Medium	High school or GED	\$101,470	Medium	4.52%	Low Growth
Production, Planning, and Expediting Clerks	High	High school or GED	\$60,260	High	4.07%	Medium Growth
Education Administrators, Kindergarten through Secondary	Low	High school or GED	\$107,920	Low	3.95%	Medium Growth
Eligibility Interviewers, Government Programs	Medium	High school or GED	\$63,560	Medium	5.36%	High Growth
Massage Therapists	Medium	High school or GED	\$53,370	Low	7.64%	High Growth
Stationary Engineers and Boiler Operators	Low	High school or GED	\$82,580	Low	5.07%	High Growth
Phlebotomists	High	High school or GED	\$43,720	High	7.22%	Medium Growth
Nursing Assistants	High	High school or GED	\$39,080	High	8.41%	Medium Growth
Pharmacy Technicians	High	High school or GED	\$39,610	High	4.41%	High Growth

Source: Lightcast

Endnotes

¹ Healthcare is defined as NAICS 62. Automotive manufacturing is defined as NAICS 336.

² <https://www.burningglassinstitute.org/s/JobsThatMobilizeNationalFramework-Update.pdf>

³ Additional information about the JTM metrics can be found in the appendix, including thresholds, filters, and detailed definitions.

⁴ Additional data for each JTM can be found in the appendix, including the occupation code, local demand level, national demand level, salary growth estimate, and national demand growth.

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⁶ Henry Ford Surgical Technologist Apprenticeship.

<https://www.henryford.com/careers/healthcare-apprenticeships/surgical-technologist>

⁷ Similarity scores (ranging from 0-1) reflect the degree of overlap in underlying skills between occupations. Scores above 0.50 indicate meaningful alignment between occupations.

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