https://doi.org/10.26509/frbc-cd-20250923
September 23, 2025

LOOKING FOR WORKERS TO FILL IN-DEMAND JOBS?

THE OME's GOT YOU COVERED

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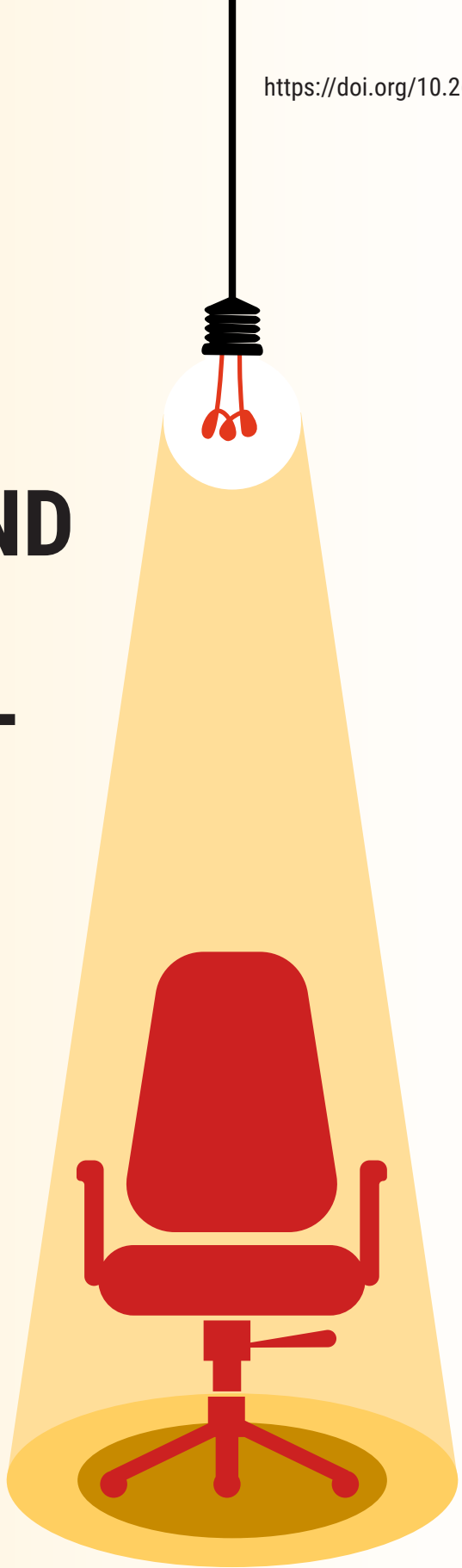
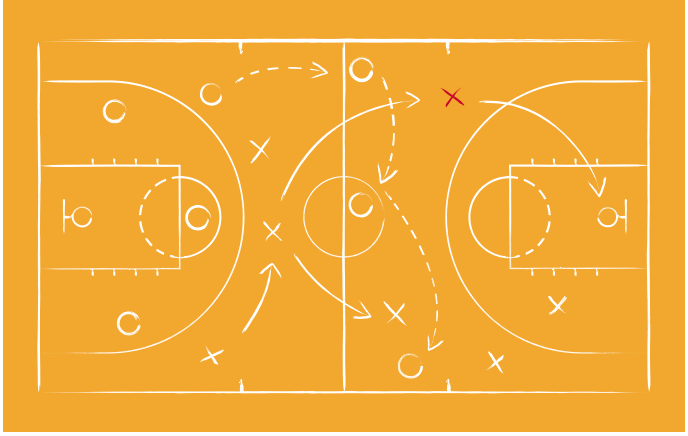




The story of an NBA hall-of-famer shows that the best people for jobs can come from unexpected places.

It may seem like Hakeem Olajuwon was always destined for basketball greatness. Standing at a towering seven feet, Olajuwon was a scoring, rebounding, and shot-blocking machine who propelled the Houston Rockets to two NBA championships, the only two in franchise history. But here's another fun fact about Olajuwon: His first love was *soccer*. He didn't discover that his natural talents—and the skills he learned as a soccer player—were an ideal fit for basketball until high school, when he entered a local tournament. If it weren't for this tournament (and some coaching along the way), Olajuwon may have never mastered basketball, and the Rockets might not have two championship banners hanging in their arena.

Olajuwon's story tells us that, when it comes to filling in-demand jobs (whether it be an NBA player or a semiconductor plant worker), it's all about knowing where to look for the right people. And those people often come from places you wouldn't expect. Olajuwon made the unlikely jump from soccer player to basketball legend—who will be the next all-star health care practitioner or homebuilder? That's where the Occupational Mobility Explorer (OME) comes in. Originally released by the Federal Reserve Banks of Cleveland and Philadelphia, the OME is a free tool that can be used to generate data to help individuals better understand employment and career options. It can also be used by employers and workforce development professionals to identify untapped talent pools for in-demand jobs, supporting the broader economy. Let's check out a couple of examples.

Example #1: Help Wanted in Cleveland

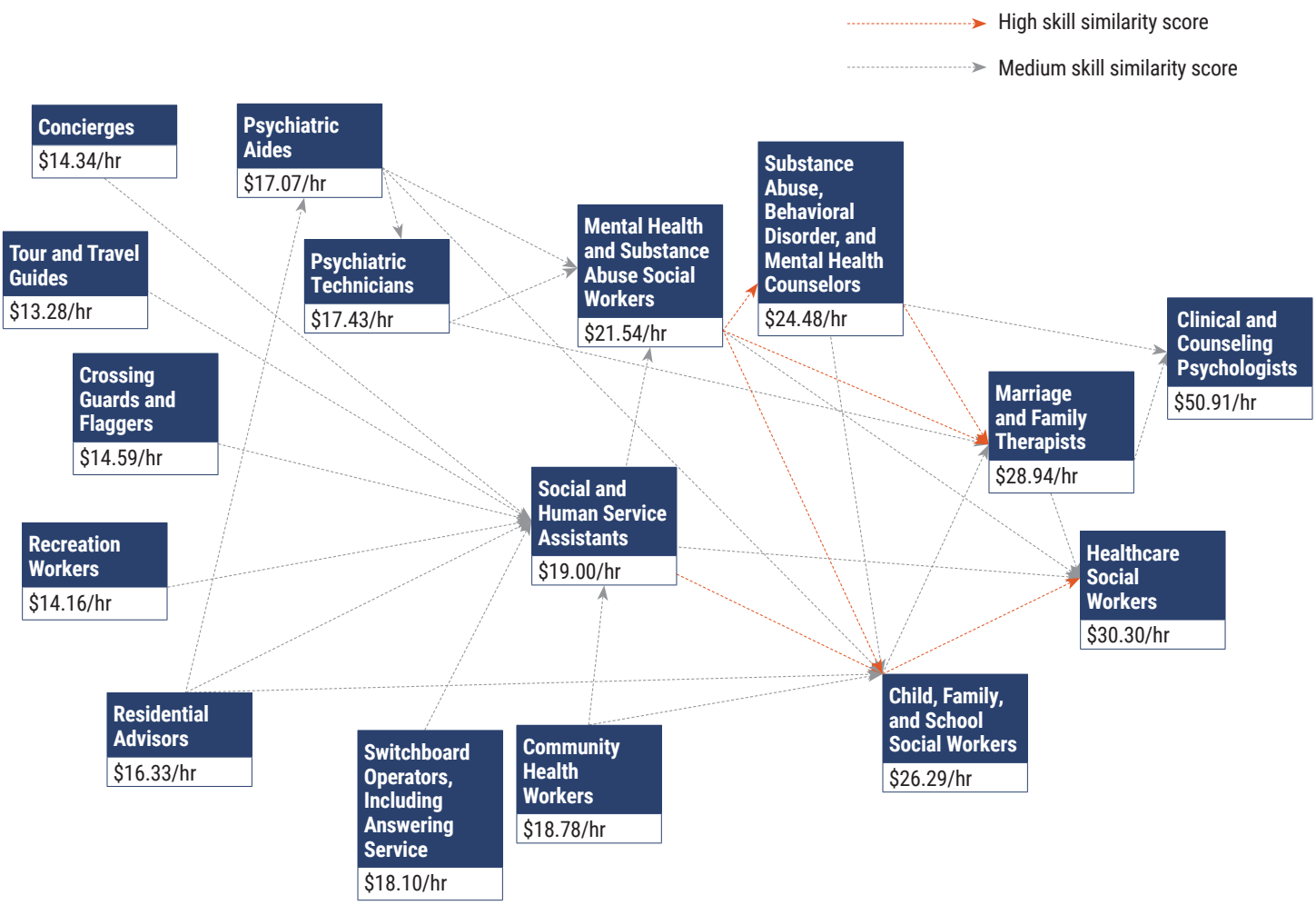
We start in Cleveland, which has a shortage of mental health workers for young people. The city has been trying to boost the number of workers in this crucial field. To encourage people to pursue jobs in mental health services, the city has launched several programs to identify potential workers and help them map out careers in this field. How can the OME help?

First, let's use the OME to pick two jobs in mental health services: *clinical counseling psychologists* and *healthcare social workers*. We will make these our goal jobs, or "destination occupations," and then use the OME to create pathways to these two jobs from other roles that require at least some of the same skills. This will allow us to see what types of workers in Cleveland may be a good fit for these two jobs and what the career paths that lead to these jobs might look like.

Once we generate the pathways in the OME and put them all together (see **Figure 1**), we have a network of **14 jobs** that either directly or indirectly connect with our two destination occupations. The median hourly wages in this network range from $13.28 to $50.91. Some of the lower-wage roles shown in Figure 1 are expected (*community health workers*), while others are more surprising (*concierges*, *tour and travel guides*, and *recreation workers*). The connections between these jobs are made based on the shared importance of commonly requested skills, which happen to be a variety of "social and soft skills." More information on the shared skills across occupations is provided below. In total, more than 3,700 individuals in the Cleveland metro area are employed in the lower-wage occupations shown in Figure 1. These individuals could potentially be tapped for upskilling opportunities to fill roles in the city's mental health workforce.[1] Further up the wage distribution, the network also features a pair of more profession-specific occupations in *psychiatric aides* and *social and human service assistants*, both of which serve as access points into the higher-wage roles.

Overall, *healthcare social workers* have skill overlaps with more jobs than *clinical counseling psychologists*, reflecting the higher educational requirements for the latter. This suggests that skills-based approaches might be more beneficial for identifying talent pools for *healthcare social worker* roles, while more robust recruitment efforts would likely be needed for *clinical counseling psychologist* positions.

Figure 1. Mental Health Career Pathways in the Cleveland Metro Area



Source: Occupational Mobility Explorer

Now let's turn to a more specific career track to help reveal what skills and entry-level training are needed to progress within this network. For example, consider the following career trajectory:

Recreation workers → social and human service assistants → child, family, and school social workers → healthcare social workers

An individual that progresses from the lowest-paying to the highest-paying job on this pathway could see median hourly wage growth of more than 100 percent, from about $14.00 an hour to more than $30.00 an hour. **Table 1** presents the skill profiles for the four occupations in this pathway. Notice how common skills (not shaded) are present across the four occupations. These skills help to promote upward mobility at lower wage levels and are still important for the higher-wage occupations. Next, there are baseline pathway-specific skills (shaded in gray) that open additional higher-wage job opportunities in this pathway. Finally, there are specialized skills (shaded in orange) found only in the skill profiles for *child, family, and school social workers* and *healthcare social workers*, reflecting the generally higher educational requirements to enter these jobs. Thus, progression along this career trajectory may require additional training, licensure, and education. Ensuring that these specialized skills are incorporated into training curricula would likely increase employability in these roles.[2]

Table 1. Select Occupation Skill Profiles in Mental Health Pathway

☐ Common skills ▒ Baseline pathway-specific skills ▒ Specialized skills

Median hourly wage: $14.16		Median hourly wage: $19.00		Median hourly wage: $26.29		Median hourly wage: $30.30	
Recreation workers*		Social and human service assistants*		Child, family, and school social workers**		Healthcare social workers***	
Skill	**%**	**Skill**	**%**	**Skill**	**%**	**Skill**	**%**
Planning	38.9	Communication	36.5	Social work	63.1	Social work	63.1
Communication	33.5	Advocacy	26.5	Communication	33.2	Medical social work	33.2
Customer service	19.0	Social work	22.0	Case management	27.0	Communication	27.0
Management	14.1	Planning	18.4	Mental health	21.2	Treatment planning	21.2
Professionalism	11.2	Customer service	16.1	Advocacy	20.0	Advocacy	20.0
Leadership	10.3	Management	15.8	Treatment planning	17.5	Discharge planning	17.5
Enthusiasm	10.0	English language	14.0	Planning	17.4	Ethical standards & conduct	17.4
Computer literacy	9.5	Crisis intervention	13.1	Crisis intervention	15.9	Management	15.9
Sales	8.8	Computer literacy	13.1	Psychology	15.5	Home health care	15.5
Scheduling	8.7	Writing	11.1	Management	15.3	Mental health	15.3
English language	8.1	Case management	10.9	Discharge planning	15.2	Case management	15.2
Lifting ability	7.6	Coordinating	9.2	Coordinating	15.1	Care coordination	15.1
Coordinating	7.3	Mental health	8.7	Psychosocial assessments	14.9	Psychosocial assessments	14.9
Energetic	6.9	Human services	8.6	Behavioral health	14.6	Planning	14.6
Tactfulness	6.5	Housekeeping	8.6	Human services	14.5	Crisis intervention	14.5
Positivity	6.5	Microsoft Office	8.5	Customer service	14.1	Patient assistance	14.1
Merchandising	6.4	Problem solving	7.9	Problem solving	13.4	Hospice	13.4
Nursing	6.0	Empathy	7.8	Computer literacy	13.1	Behavioral health	13.1
Working with children	5.8	Leadership	7.3	Writing	12.3	Coordinating	12.3
Operations	5.8	Good driving record	7.2	Leadership	12.2	Computer literacy	12.2
Product knowledge	5.7	Interpersonal communications	7.0	Ethical standards & conduct	12.1	Psychology	12.1
Writing	5.6	Psychology	6.4	Care coordination	12.0	Problem solving	12.0
Strong work ethic	5.6	Patience	6.3	Interpersonal communications	11.0	Medicare	11.0
Organizational skills	5.2	Operations	6.3	Good driving record	10.4	Medicaid	10.4
Selling techniques	5.2	Social skills	6.2	Psychiatry	10.2	Customer service	10.2

Source: Occupational Mobility Explorer

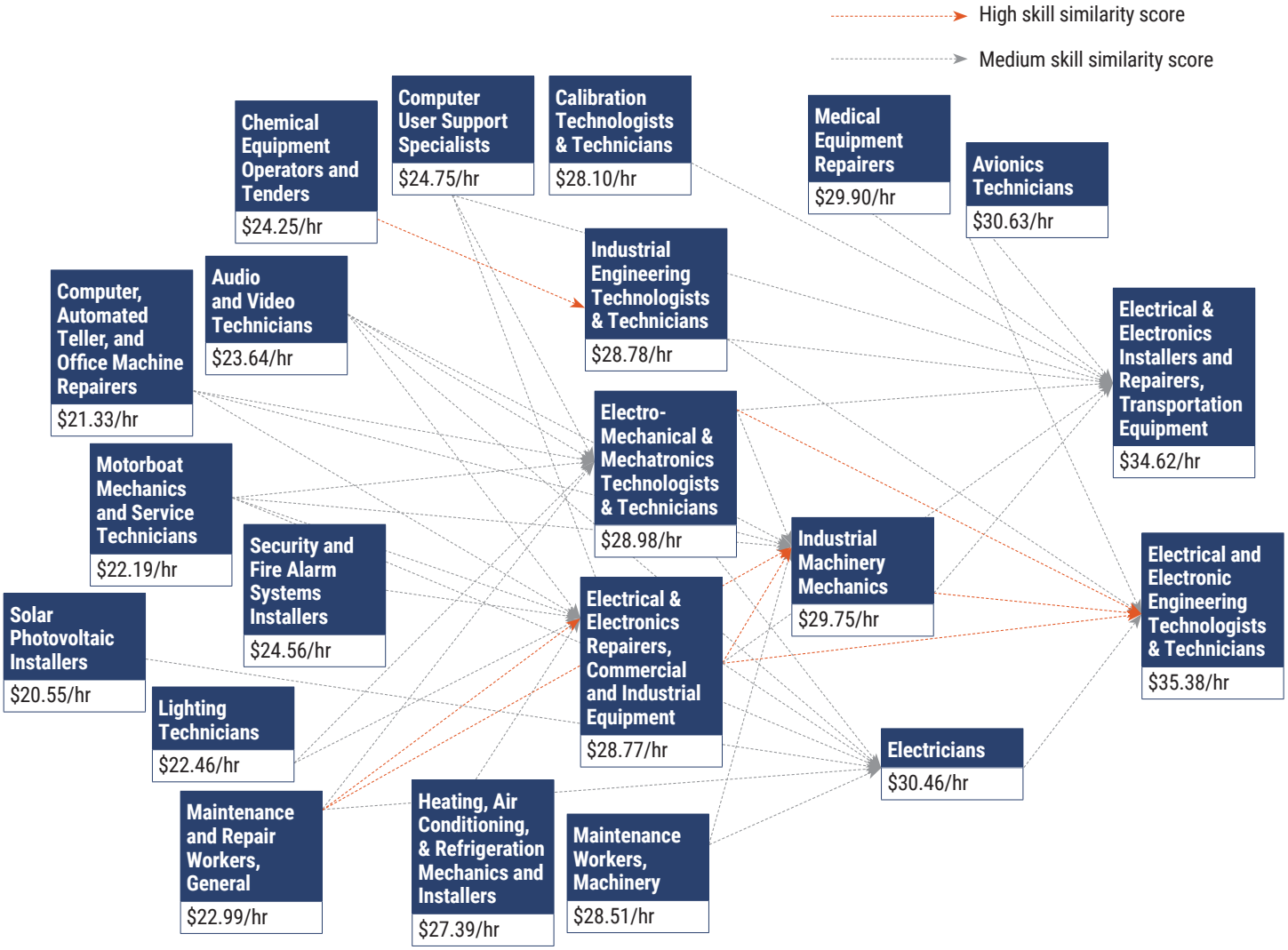
* High school diploma or equivalent typically required ** Bachelor's degree typically required *** Master's degree typically required

Example #2: Advanced Manufacturing in the Buckeye State

For this next example, let's zoom out and look at Ohio as a whole. Like many states across the country, Ohio is hoping to bring advanced manufacturing jobs, including semiconductor production and related roles, to the state. Many of these jobs are high-paying and accessible in terms of required education. For example, entry-level *electrical and electronic engineering technologist and technician* jobs typically require only an associate's degree, and the median wage for this occupation is more than $35 an hour. So how can we identify people that have the right skills for this line of work?

Let's start by using the OME to map pathways to *electrical and electronic engineering technologists and technicians*. **Figure 2** displays **20 jobs** that either directly or indirectly connect with this destination occupation based on overlaps in employer-requested skills between jobs.[3] The median hourly wages earned in this network range from $20.55 to $35.38. This network includes job pairs with medium skill similarity (gray arrows) and high skill similarity (orange arrows). Seven occupation pairs have a high degree of skill similarity, with several of these aligning so well that they resemble a more conventional career path. There are nine relatively low-wage (less than $25 an hour) occupations in this network, including some expected positions (*computer, automated teller, and office machine repairers* and *general maintenance and repair workers*) but also some unexpected ones (*motorboat mechanics and service technicians* and *security and fire alarm system installers*). In total, over 100,000 Ohioans are currently employed across these nine occupations and could potentially be tapped for upskilling opportunities related to careers in semiconductor production.

Figure 2. Microchip Production Career Pathways in Ohio



Source: Occupational Mobility Explorer

Now let's shift gears and take a closer look at the skill profiles of four of these jobs to see what skills and entry-level training are needed to progress. Consider this career track:

General maintenance and repair workers → electrical and electronics repairers of commercial and industrial equipment → industrial machinery mechanics → electrical and electronic engineering technologists and technicians

An individual who progresses from the lowest-paying to the highest-paying job in this pathway could see hourly wage gains of more than $12 an hour, or almost $500 a week. **Table 2** presents the skill profiles for these four occupations. Once again, notice how the common skills (not shaded) and baseline pathway-specific skills (shaded in gray) are present across the four occupations. And the specialized skills (shaded in orange) are found mostly in the two higher-wage jobs, suggesting that these skills could be incorporated into training curriculums to support occupational mobility. Based on these skill profiles and the educational requirements, some upskilling or postsecondary training could help a portion of the more than 63,000 maintenance and repair workers in Ohio transition into microchip production roles.

Conclusion

This report shows how the OME can help employers and workforce development professionals cast the widest net possible when looking for workers to fill crucial jobs. It also explains how the tool can be used to see what skills are most important for workers to develop to help them climb the career ladder. If you are interested in learning more about the OME, please contact us at communitydevelopment@clev.frb.org. Additionally, feel free to check out these free OME-related resources from the Philadelphia Fed.

Table 2. Select Occupation Skill Profiles in Advanced Manufacturing Pathway

□ Common skills ▒ Baseline pathway-specific skills ▒ Specialized skills

Median hourly wage: $22.99		Median hourly wage: $28.77		Median hourly wage: $29.75		Median hourly wage: $35.38	
Maintenance & repair workers, general*		Electrical & electronics repairers, commercial & industrial equipment**		Industrial machinery mechanics*		Electrical & electronic engineering technologists & technicians***	
Skill	**%**	**Skill**	**%**	**Skill**	**%**	**Skill**	**%**
Troubleshooting	39.0	Troubleshooting	61.9	Troubleshooting	45.3	Troubleshooting	63.7
Plumbing	32.7	Communication	29.3	Communication	25.0	Communication	31.0
Communication	26.6	Machinery	22.7	Operations	22.2	Programmable logic controllers	23.4
HVAC	23.8	Preventive maintenance	21.8	Industrial repair, maintenance	20.5	Automation	23.0
Preventive maintenance	23.3	Electrical wiring	18.4	Machinery	20.4	Electrical wiring	19.4
Customer service	21.6	Hydraulics	17.3	Lifting ability	17.6	Operations	18.3
Carpentry	20.0	Customer service	16.9	Customer service	16.8	Electromechanics	18.0
Painting	19.3	Problem solving	16.9	Preventive maintenance	16.7	Hand tools	17.3
Lifting ability	18.8	Management	16.8	Hydraulics	16.5	Problem solving	16.3
Machinery	17.7	Blueprinting	16.5	Management	16.3	Instrumentation	15.6
Operations	17.2	Industrial repair, maintenance	15.9	Problem solving	13.5	Electrical systems	15.0
Management	15.8	Lifting ability	15.7	Hand tools	13.4	Electronics	14.5
Hydraulics	14.8	Electronics	15.6	Field service management	13.3	Machinery	14.2
Power tool operation	13.5	Operations	14.7	Mechanical aptitude	12.4	Test equipment	13.7
Problem solving	13.1	Programmable logic controllers	14.7	Power tool operation	12.2	Customer service	13.6
Hand tools	12.8	Computer literacy	14.3	Blueprinting	11.6	Computer literacy	13.2
Detail oriented	10.7	Electrical systems	13.6	Housekeeping	9.9	Management	12.8
Programmable logic controllers	10.3	Power tool operation	13.0	Detail oriented	9.8	Lifting ability	12.7
Facility repair & maintenance	9.8	Hand tools	12.9	Welding	9.5	Blueprinting	12.3
Drywall (installation & repair)	9.5	Plumbing	11.9	Production equipment	8.9	Preventive maintenance	12.2
Good driving record	9.5	HVAC	11.3	Programmable logic Controllers	8.5	Hydraulics	11.5
Self-motivation	9.4	Production equipment	11.0	Computer literacy	8.4	Electronic components	11.3
Field service management	9.2	Equipment repair	10.6	Self-motivation	8.3	Microsoft Office	11.2
Blueprinting	9.1	Microsoft office	10.2	Machining	8.2	Power tool operation	11.1
Computer literacy	9.1	Test equipment	10.2	Forklift truck	8.2	Control systems	10.9

Source: Occupational Mobility Explorer

* High school diploma or equivalent typically required ** Postsecondary nondegree award typically required *** Associate's degree typically required

Endnotes

1 The employment count data are not readily available in the tool; these data come from the Bureau of Labor Statistics Occupational Employment and Wage Statistics database.

2 Although skill overlaps are observable in the OME, the top 25 skills for a given job are not readily accessible in the tool.

3 This is also a good example of how different criteria can be used to limit the complexity of the network. For this network, I first removed occupation connections with a less than $1 or greater than $10 difference in median hourly wage. I did this for two reasons: First, I assumed that an individual would likely be unwilling to change jobs for a mere $1 difference in hourly wage, and second, I assumed that making a wage jump of $10 or more per hour would also be unlikely without some additional investments in training. This narrowed the network from 25 to 21 occupations and removed dozens of interconnections, dramatically reducing the network's complexity.

References

City of Cleveland Ohio. 2023. "County and City of Cleveland Announce Youth Mental Health Workforce Development Sprint Task Force." City of Cleveland, August 15. https://www.clevelandohio.gov/news/county-and-city-cleveland-announce-youth-mental-health-workforce-development-sprint-task-force.

Federal Reserve Bank of Philadelphia and Federal Reserve Bank of Cleveland. "Occupational Mobility Explorer." Accessed August 19, 2025. https://www.philadelphiafed.org/surveys-and-data/community-development-data/occupational-mobility-explorer.

Fee, Kyle D. 2025. "Using the Occupational Mobility Explorer to Understand Which Skills Are Most in Demand." Federal Reserve Bank of Cleveland, Community Development Reports. https://doi.org/10.26509/frbc-cd-20250425

Muro, Mark, Lavea Brachman, and Yang You. 2023. "With High-Tech Manufacturing Plants Promising Good Jobs in Ohio, Workforce Developers Race to Get Ready." *Brookings*, January 24. https://www.brookings.edu/articles/with-high-tech-manufacturing-plants-promising-good-jobs-in-ohio-workforce-developers-race-to-get-ready/.

Wilder, Candice. 2024. "Cleveland Mental Health Task Force Address Worker Shortage." Signal Cleveland, April 16. https://signalcleveland.org/cleveland-youth-mental-health-task-force-shares-recommendations-to-retain-workers/.

Youth Mental Health Workforce Sprint Task Force. 2024. "2024 Recommendations - Youth Mental Health Workforce Sprint Task Force." City of Cleveland, April 12. https://clevelandohio.prod.acquia-sites.com/sites/clevelandohio/files/2024-04/2024%20Recommendations%20-%20Youth%20Mental%20Health%20Workforce%20Sprint%20Task%20Force.pdf.

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