Preparing for PORTS Site Reindustrialization Workforce Ready: An Analysis of Workforce Strength in the OVRDC Region

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1 Understanding the OVRDC Region Workforce Specialization and Economic Strengths

A region's workforce is one of its most valuable assets, directly shaping its economic growth, business competitiveness, and long-term prosperity. Understanding regional workforce strengths and vulnerabilities is crucial for economic planners, policymakers, and business leaders as they develop targeted workforce strategies to drive sustainable development. For example, the Appalachian Regional Commission (ARC) POWER Initiative targets areas previously dependent on coal mining by analyzing regional workforce trends and funding programs that help transition workers into renewable energy, advanced manufacturing, and healthcare occupations. By recognizing the shifting job landscape, ARC can support economic diversification and resilience. Understanding regional workforce strengths also enables regions to identify key occupations and industries that provide a competitive advantage, ensuring that workforce development initiatives align with employer needs and emerging economic opportunities.

Location Quotient (LQ) analysis is a widely used tool for identifying regional labor force strengths. Location Quotient (LQ) is a metric that measures the concentration of specific occupations within a region relative to a broader reference area, such as a state or the national economy. It quantifies workforce specialization by comparing the share of employment in a given occupation at the regional level to its share in the larger economy. Location Quotient is calculated as follows:

 $LQ = \frac{\frac{\text{Employment in occupation in region}}{\text{Total employment in region}}}{\frac{\text{Employment in occupation in reference area}}{\text{Total employment in reference area}}}$

A Location Quotient greater than 1.0 indicates that an occupation is more concentrated in the region than the reference area, suggesting a competitive workforce advantage or regional specialization (U.S. Bureau of Labor Statistics, 2022). This information is crucial for policymakers, economic developers, and businesses seeking to identify key occupations that distinguish a region's workforce and drive economic development.

By identifying strong occupational clusters, Location Quotient (LQ) analysis helps guide workforce training programs, ensuring that education and skill development efforts align with regional labor market needs (Feser and Sweeney, 2003; Glasmeier and Fuellhart, 1999). A high LQ in a particular occupation signals a strong talent pool in that field, making the region attractive for industry expansion and investment (U.S. Bureau of Labor Statistics, 2022; Fullenbaum and McNeill, 1995). However, a high LQ in a declining industry or occupation can indicate

¹ For more details regarding the POWER Initiative, please visit: ://www.eda.gov/archives/2016/power/.

economic vulnerability, as regions heavily dependent on shrinking sectors may face job losses and economic instability (Herzog and Olsen, 2003; Feser and Sweeney, 2003). For instance, areas with historically high LQ values in manufacturing or coal mining may struggle to sustain employment as automation, globalization, or environmental policies reshape those industries (Acemoglu and Restrepo, 2020; Autor et al., 2013; Houseman, 2018; Bessen, 2019; Popper and Popper, 1994; Bernstein et al., 2000), emphasizing the need for workforce transition programs and economic diversification (Wood and Bischak, 1999).

A specific example in Ohio is the occupation *Chemical Equipment Operators and Tenders*, which has an LQ of 1.63 relative to the national average (IMPLAN® Model, 2022). While this suggests a regional specialization, employment in this field is projected to decline by 8.7% between 2020 and 2030, leading to an estimated loss of 462 jobs (Ohio Department of Job and Family Services, Bureau of Labor Market Information, 2020). This highlights how a high LQ does not always signify a growing or stable occupation, reinforcing the importance of proactive workforce planning. Conversely, an occupation with a low LQ suggests underrepresentation and potential workforce gaps, which could be addressed through targeted workforce development strategies (Feser and Sweeney, 2003). Economic planners rely on LQ data to assess labor market trends, support industry diversification, and enhance regional economic resilience by fostering employment opportunities in established and emerging sectors (Feser and Sweeney, 2003; U.S. Bureau of Labor Statistics, 2022; Glasmeier and Fuellhart, 1999).

Location Quotient analysis can help indicate the regional workforce's strengths, influencing decisions related to workforce training, education investments, and economic development initiatives. It also plays a critical role in assessing labor supply, helping to align workforce skills with regional employer needs, and attracting industry growth. By identifying dominant occupations and emerging workforce trends, Location Quotient analysis is a valuable tool for shaping regional economic resilience and developing targeted workforce strategies that foster sustainable economic growth.

The Ohio Valley Regional Development Commission (OVRDC) Region serves as a regional economic and workforce development organization covering twelve counties in southern Ohio, including Adams, Brown, Clermont, Fayette, Gallia, Highland, Jackson, Lawrence, Pike, Ross, Scioto, and Vinton (Figure 1). With a total workforce of 214,890 (IMPLAN® Model, 2022), OVRDC Region offers a diverse talent pool and specialized industry expertise, making it a key area for workforce development and economic planning. Additionally, all counties in the OVRDC Region are within a reasonable driving distance of the PORTS site in Pike County, enhancing workforce accessibility and regional mobility for industries and employers seeking talent in this strategic location.

To assess the skills and strengths of the OVRDC Region workforce, we utilize Location Quotient (LQ) analysis to identify occupations that are more concentrated in the region com-

FAYETTE

ROSS

VINTON

HIGHLAND

PIKE

JACKSON

GALLIA

Kentucky

West Virginia

Figure 1: OVRDC Region's map

<u>Source:</u> Ohio Valley Regional Development Commission. Retrieved from https://www.ovrdc.org/about

pared to Ohio as a whole. This approach highlights key workforce specializations, providing valuable insights for policymakers, workforce developers, and economic planners to guide training programs, education strategies, and workforce policies that align with employer needs and regional economic opportunities. Ohio was selected as the reference area instead of the national labor market to ensure regional strengths are assessed within the state's economic context. This makes the findings more relevant and actionable for local decision-makers.

To maintain statistical reliability and economic significance, we apply a minimum threshold of 50 workers per occupation in the LQ analysis. This ensures that only economically meaningful occupations are considered, preventing artificially high LQ values that may arise due to small workforce sizes. The Location Quotient (LQ) for a specific occupation i in the OVRDC Region, relative to Ohio as the reference area, is calculated as:

$$LQ_i = rac{rac{ ext{Employment in occupation } i ext{in OVRDC Region}}{ ext{Total employment in OVRDC Region}}}{ ext{Employment in occupation } i ext{in Ohio}}{ ext{Total employment in Ohio}}$$

where:

• LQi represents the Location Quotient for occupation i.

- The numerator measures the share of occupation *i* in total employment within the OVRDC Region.
- The denominator measures the share of occupation *i* in total employment within Ohio.

 $LQ_i > 1$ indicates that occupation i is more concentrated in the OVRDC Region than in Ohio, suggesting regional specialization. $LQ_i = 1$ indicates that occupation i has the same concentration in the OVRDC Region as in Ohio. Lastly, $LQ_i < 1$ indicates that occupation i is less concentrated in OVRDC, suggesting a possible workforce gap compared to Ohio.

Among the 844 occupations in the region, we identified 215 occupations with an LQ greater than 1, meaning these jobs are more concentrated in OVRDC than in Ohio as a whole ². This higher concentration indicates that OVRDC has a greater supply of skills and talent in these fields, highlighting regional workforce strengths that could support industry growth, workforce development, and economic expansion opportunities.

In the OVRDC Region, **215 occupations** with a Location Quotient (LQ) greater than 1 collectively account for **114,704 jobs**, representing **53.4%** of the region's total employment of **214,890** (IMPLAN® Model, 2022). To better understand this workforce distribution, we group these occupations into broader occupational categories (Figure 2), with the 10 largest contributors to regional employment being:

- Food Preparation and Serving Related Occupations 20,680 employees (9.62% of the total region's workforce)
- Sales and Related Occupations 12,115 employees (5.64% of the total region's workforce)
- **Transportation and Material Moving Occupations** 11,985 employees (5.58% of the total region's workforce)
- Educational Instruction and Library Occupations 11,569 employees (5.38% of the total region's workforce)
- **Healthcare Support Occupations** 9,477 employees (4.41% of the total region's workforce)
- **Production Occupations** 8,448 employees (3.93% of the total region's workforce)
- **Construction and Extraction Occupations** 8,011 employees (3.73% of the total region's workforce)

² To see the full list of occupations in the OVRDC Region with LQ > 1, please refer to **Appendix A**.

- **Installation, Maintenance, and Repair Occupations** 7,071 employees (3.29% of the total region's workforce)
- **Community and Social Service Occupations** 5,217 employees (2.43% of the total region's workforce)
- **Healthcare Practitioners and Technical Occupations** 4,722 employees (2.20% of the total region's workforce)

SHARE OF REGIONAL EMPLOYMENT BY OCCUPATION GROUPS - OVRDC, 2022. Food Preparation and Serving Related Sales and Related Occupations, 5.64% ■ Transportation and Material Moving Occupations, 5.58% ■ Other Occupations (LQ <1), 46.62% Occupations, 5.38% ■ Healthcare Support Occupations, 4.41% ■ Production Occupations, 3.93% Business and Financial Operations Occupations, 0.18% Construction and Extraction Occupations, Life, Physical, and Social Science Occupations, 0.16% Installation, Maintenance, and Repair Occupations, 3.29% Farming, Fishing, and Forestry Occupations, ■ Community and Social Service Occupations, Building and Grounds Cleaning and Maintenance Occupations, 0.73% Healthcare Practitioners and Technical Occupations, 2.20% Protective Service Occupations, 1.33% Office and Administrative Support Occupations, 0.94% Management Occupations, 1.24%

Figure 2: Share of Regional Employment by Occupation Groups - OVRDC Region, 2022.

These groups represent the most prevalent high-LQ occupations in the OVRDC Region, emphasizing the region's strengths in **hospitality**, **logistics**, **education**, **healthcare**, **and skilled trades**, including **manufacturing** and **construction**. This suggests these fields benefit from established expertise, industry infrastructure, and a readily available skills and talent pool.

Conversely, occupations with LQ < 1—those less concentrated in the region—comprise **100,186 jobs**, or **46.62%** of total employment, indicating areas where the workforce is less specialized compared to the state average. While some of these occupations may reflect naturally less prominent occupations in the region, others may point to potential workforce gaps or emerging opportunities for economic diversification.

Top Businesses in the OVRDC Region (By Revenues)

Table 1: Largest businesses in the OVRDC Region by revenues *

Company Name	County, State	Sales	Emplo	Industry
KGBO HOLDINGS, INC.	Clermont County, Ohio	\$8,848,904,025	4077	Process, Physical Distri- bution, and Logistics Con- sulting Services
TOTAL QUALITY LOGISTICS, LLC	Clermont County, Ohio	\$6,686,053,627	9000	Process, Physical Distri- bution, and Logistics Con- sulting Services
ALCON, INC.	Clermont County, Ohio	\$1,309,919,399	51-200	Current-Carrying Wiring Device Manufacturing
MILACRON HOLDINGS CORP.	Clermont County, Ohio	\$1,239,575,317	5000- 10000	Special Die and Tool, Die Set, Jig, and Fixture Man- ufacturing
OHIO VALLEY ELECTRIC CORPORATION	Pike County, Ohio	\$855,001,574	525	Fossil Fuel Electric Power Generation
ADENA HEALTH SYSTEM	Ross County, Ohio	\$670,036,465	4100	General Medical and Surgical Hospitals
SOUTHERN OHIO MEDI- CAL CENTER	Scioto County, Ohio	\$546,101,359	3000	General Medical and Surgical Hospitals
INDIANA-KENTUCKY ELECTRIC CORPORA- TION	Pike County, Ohio	\$374,039,381	525	Fossil Fuel Electric Power Generation
HOLZER HOSPITAL FOUNDATION INC	Gallia County, Ohio	\$220,846,143	2400	General Medical and Surgical Hospitals
MILACRON MARKETING COMPANY LLC	Clermont County, Ohio	\$218,339,811	2000	Machine Tool Manufacturing
HOLZER HEALTH SYSTEM	Gallia County, Ohio	\$204,072,228	2400	General Medical and Surgical Hospitals
NATIONAL COOPERATIVE BANK, N.A.	Highland County, Ohio	\$199,181,000	328	Commercial Banking
COUNTY OF CLERMONT	Clermont County, Ohio	\$196,660,351	1000	Executive Offices

Table 1 continued from previous page

Company Name	County, State	Sales	Emplo	Industry
MIDLAND-GUARDIAN CO.	Clermont County, Ohio	\$140,799,242	1080	Direct Life Insurance Carriers
GEIGER BROTHERS, INC.	Jackson County, Ohio	\$140,149,974	51-200	Industrial Building Construction
BIG SANDY DISTRIBUTION, INC.	Scioto County, Ohio	\$136,237,772	500- 1000	Furniture Stores
WEST CLERMONT LO- CAL SCHOOL DISTRICT	Clermont County, Ohio	\$123,822,900	1231	Elementary and Secondary Schools
MERCY HEALTH - CLER- MONT HOSPITAL LLC	Clermont County, Ohio	\$121,158,894	33500	General Medical and Surgical Hospitals
FLUOR-BWXT PORTSMOUTH LLC	Pike County, Ohio	\$149,645,071	1900	Site Preparation Contractors
LIFE ENRICHING COM- MUNITIES	Clermont County, Ohio	\$146,576,273	650	Assisted Living Facilities for the Elderly

^{*} For companies with multiple regional operations, sales and employee numbers are based on total company estimates and may not reflect regional sales and employment.

Top 20 Industries in the OVRDC Region (By Employment)

The top 20 employing industries in the OVRDC region (listed below) are a mix of healthcare, manufacturing, retail, and service-based sectors, reflecting the region's economic strengths and industrial composition. This mix highlights both the diversity of the local economy and its reliance on essential services and production.

- 1. Food Services and Drinking Places
- 2. Ambulatory Health Care Services
- 3. Nursing and Residential Care Facilities
- 4. General Merchandise Stores

- 5. Social Assistance
- 6. Professional, Scientific, and Technical Services
- 7. Food and Beverage Stores
- 8. Administrative and Support Services
- 9. Transportation Equipment Manufacturing
- 10. Specialty Trade Contractors
- 11. Fabricated Metal Product Manufacturing
- 12. Motor Vehicle and Parts Dealers
- 13. Religious, Civic, and Professional Organizations
- 14. Merchant Wholesalers, Durable Goods
- 15. Machinery Manufacturing
- 16. Building Material and Garden Supply Stores
- 17. Food Manufacturing
- 18. Truck Transportation
- 19. Credit Intermediation and Related Activities
- 20. Management of Companies and Enterprises

For the detailed trends in employment and the number of establishments for each of these industries from 2001 to 2022, please refer to **Appendix B**.

2 Assessing The OVRDC Region Workforce Core Competencies

After identifying occupations with a high Location Quotient (LQ) in the OVRDC Region, we further analyzed the core competencies of workers in these occupations in terms of their skills and knowledge. To achieve this, we rely on the **O*NET 28.2 database**³. This database contains 277 descriptors collected through the **O*NET program**, covering various aspects such as work activities, work context, and occupational requirements. These requirements include knowledge,

³ National Center for O*NET Development. O*NET 28.0 Database. O*NET Resource Center. Retrieved April 26, 2024, from https://www.onetcenter.org/database.html.

skills, and the education level necessary to perform a given occupation effectively. Since this analysis aims to identify the core competencies of high-LQ occupations in the OVRDC Region, we focus on two domains that are most relevant to workforce abilities and capacities: knowledge (33 descriptors) and skills (35 descriptors).

Each descriptor in the database is rated based on two factors: **Level** and **Importance**. The **Level** rating, ranging from 0 (no requirement) to 7 (mastery), indicates the extent to which workers must possess a specific competency to perform their jobs effectively. The Importance rating, ranging from 1 (not important) to 5 (extremely important), reflects how critical each descriptor is for a given occupation. In this analysis, we use the **Level** rating to identify the core competencies of workers employed in occupations with high LQ in the OVRDC Region.

To make this report more intuitive for readers, we convert the O*NET Level rating from the original 0-7 scale to a standardized 0-100 scale (Burrus et al., 2013) using the following formula:

$$Score_{ij} = \frac{(O_{ij} - L_j)}{(H_j - L_j)} * 100$$
 (3)

For each occupation i and descriptor j, $Score_{ij}$ is the new standardized score, O_{ij} is the original level rating, L_j is the lowest original rating for descriptor j among all occupations with high LQ in the OVRDC Region, and H_j is the highest original rating for descriptor j in the same set.

For example, if an occupation has a descriptor with an **original level rating of 4**, it is converted to a new **standardized score of 57**. Calculated as: $\frac{(4-0)}{(7-0)} \times 100 = 57$

Tables 2 and 3 display the top knowledge and skill-related descriptors with the highest standardized scores, respectively. The descriptive statistics in Table 2 show that workers in the OVRDC Region have high levels of knowledge in **Customer and Personal Service**, **Computers and Electronics**, **English Language**, and **Administrative** fields, as these descriptors exhibit the highest mean standardized scores. Additionally, they also have strong knowledge in **Education and Training**, **Administration and Management**, **Mathematics**, **Production and Processing**, **Personnel and Human Resources**, and **Public Safety and Security** (Table 2).

Table 3 displays the top 10 skills possessed by workers in the OVRDC Region. OVRDC Region workers demonstrate high levels of proficiency in **Instructing**, **Management of Personnel Resources**, **Coordination**, and **Critical Thinking**, which have the highest standardized scores. Additionally, they also excel in **Quality Control Analysis**, **Writing**, **Time Management**, **Service Orientation**, **Negotiation**, and **Systems Analysis** (Table 3).

Table 2: OVRDC Workers' Top 10 Knowledge

Knowledge	Mean Standardized Score	SD	% High Level
Customer and Personal Service	58.45	21.93	0.68
Computers and Electronics	54.17	23.88	0.59
English Language	49.46	18.86	0.45
Administrative	48.94	21.90	0.46
Education and Training	46.21	21.99	0.39
Administration and Management	45.84	18.47	0.41
Mathematics (Knowledge)	45.12	17.00	0.36
Production and Processing	44.69	21.78	0.38
Personnel and Human Resources	40.92	20.25	0.28
Public Safety and Security	39.57	18.52	0.23

N=215. % High Level represents the percentage of occupations among the 215 occupations with a high Location Quotient (LQ) that have a standardized competency score exceeding 50.

Table 3: OVRDC Workers' Top 10 Skills

Skills	Mean Standardized Score	SD	% High Level
Instructing	63.55	17.48	0.72
Management of Personnel Resources	57.50	16.47	0.62
Coordination	57.32	24.17	0.51
Critical Thinking	55.81	24.81	0.54
Quality Control Analysis	54.76	23.26	0.60
Writing	53.70	23.00	0.56
Time Management	52.72	21.01	0.60
Service Orientation	49.53	23.88	0.48
Negotiation	48.30	23.86	0.44
Systems Analysis	47.89	22.04	0.46

N=215. % High Level represents the percentage of occupations among the 215 occupations with a high Location Quotient (LQ) that have a standardized competency score exceeding 50.

The O*NET data contains vast information on knowledge, skills, and abilities. Analyzing all these variables individually may introduce redundancies due to the high correlation among descriptors. To address this high-dimensionality problem and identify the OVRDC Region workforce's core competencies, we utilize Principal Component Analysis (PCA), a statistical technique widely used to reduce dimensionality while preserving key patterns of complex datasets. Principal Component Analysis (PCA) addresses the challenge of analyzing high-dimensional data by transforming it into a smaller set of uncorrelated variables called **principal components**. These components effectively capture the most significant variations within the original O*NET dataset, reducing redundancy while preserving essential information.

Based on an analysis of 215 occupations with a high Location Quotient in the OVRDC Region, we apply Principal Component Analysis (PCA) to identify eight principal components of OVRDC Region workers' competencies. Each component consists of several descriptors and represents a distinct domain of expertise required across various occupations in the OVRDC Region. According to the PCA Standardized Component Loading Matrix presented in Table 4,

the eight principal components (core competencies) are as follows.

Component 1: Leadership, Coordination & Decision-Making

This component groups skills that are fundamental for people management, organizational leadership, and strategic decision-making. The high loadings for **Management of Personnel Resources (0.75)**, **Coordination (0.71)**, **Time Management (0.65)**, and **Complex Problem Solving (0.61)** suggest that workers in the OVRDC Region possess the ability to lead teams, allocate resources efficiently, and solve workplace challenges effectively. This component is particularly relevant to industries such as business management, government, corporate leadership, and human resources.

Component 2: Engineering, Construction & Technical Design

Component 2 consists of technical and applied engineering skills fundamental in construction, engineering, and design-driven industries. The high loadings for **Installation (1.17)**, **Building and Construction (1.13)**, **Design (1.10)**, and **Engineering and Technology (0.80)** highlight proficiency in problem-solving, technical planning, and structural design. This component is essential for the construction, manufacturing, and engineering industries.

Component 3: Manufacturing, Production & Quality Control

This component highlights skills necessary for monitoring, controlling, and optimizing production processes. High loadings in Food Production (0.81), Operations Monitoring (0.75), Quality Control Analysis (0.63), Operation and Control (0.59), and Production and Processing (0.53) suggest a strong focus on efficiency, process management, and maintaining high product quality. This component is critical for positions in the manufacturing, food processing, and industrial industries.

Component 4: Business, Finance & Administrative Management

This component encompasses finance, business strategy, and administrative operations. High loadings in Economics and Accounting (1.11), Sales and Marketing (1.08), Management of Material Resources (0.83), Administration and Management (0.74), and Personnel and Human Resources (0.65) suggest proficiency in budgeting, business growth strategies, and operational efficiency. This component is essential in industries such as banking, corporate finance, human resources, and marketing.

Component 5: Education, Communication & Cultural Competency

This component highlights teaching, communication, and cross-cultural skills. The high

Table 4: PCA Component Loading Matrix of Knowledge and Skills for OVRDC Region Workers Employed in Occupations with high LQ

Descriptor	Comp	Comp	Comp	Comp	Comp	Comp	Comp	Comp
Management of Personnel Resources	0.75	2	3	4	5	6	7	8
Coordination	0.73							
Time Management	0.65							
Complex Problem Solving	0.61							
Persuasion	0.57							
Systems Evaluation	0.56							
Monitoring	0.55							
Negotiation Operations Analysis	0.54 0.52							
Systems Analysis	0.52							
Social Perceptiveness	0.49							
Judgment and Decision Making	0.48							
Instructing	0.45							
Management of Financial Resources Installation	0.43	1.17		0.87				
Building and Construction		1.13						
Design		1.10						
Engineering and Technology Technology Design		0.80 0.70						
Mathematics K		0.70		0.57			0.48	
Physics		0.76		0.01		0.43	0.70	
Equipment Selection		0.59						
Mechanical		0.56						
Repairing		0.52						
Food Production			0.81	0.78	0.45	0.69		
Geography			0.75		0.87		0.42	0.73
Operations Monitoring			0.75 0.63					0.41
Quality Control Analysis Operation and Control			0.59					0.50
Production and Processing			0.53	0.82				0.00
History and Archeology			0.52		1.44			
Biology			0.51			1.45		
Troubleshooting			0.43					
Chemistry			0.41			1.13		
Fine Arts			0.40	1.11	1.50			
Economics and Accounting Sales and Marketing				1.11				
Management of Material Resources				0.83				
Administration and Management				0.74				
Personnel and Human Resources				0.65				0.49
Mathematics				0.56				
Philosophy and Theology					0.65			
Foreign Language					0.54			0.45
Communications and Media Education and Training					0.52			0.47
Learning Strategies					0.49 0.41			
Medicine and Dentistry					0.71	1.31		
Science						0.99		
Psychology						0.51		
Therapy and Counseling						0.44		
Programming							1.28	
Computers and Electronics							1.15	
Administrative Reading Comprehension							0.70 0.50	
English Language							0.50	
Writing							0.43	
Transportation								1.32
Public Safety and Security								1.25
Telecommunications								1.16
Law and Government								0.96
Customer and Personal Service								
Sociology and Anthropology Active Listening								
Speaking								
Critical Thinking								
Active Learning								
Service Orientation								
Equipment Maintenance		12	2					

loadings for Fine Arts (1.5), History and Archeology (1.44), Philosophy and Theology (0.65), Foreign Language (0.54), Education and Training (0.48), and Communications and Media (0.52) suggest that individuals with these skills excel in knowledge transfer, effective communication, and working in diverse environments. This component highlights cultural, linguistic, and educational expertise, making it crucial for educators, historians, communication specialists, and cultural researchers.

Component 6: Science, Research & Healthcare Professions

This component represents expertise in medicine, mental health, and therapeutic practices. The high loadings for Medicine and Dentistry (1.31), Biology (1.45), Chemistry (1.13), Science (0.99), Physics (0.66), Psychology (0.51, and Therapy and Counseling (0.44) indicate the need for specialized medical knowledge, diagnostic abilities, and psychological understanding. This component is essential in the healthcare, mental health, and social services industries.

Component 7: Technology, IT & Digital Skills

This component emphasizes skills and expertise in computer and IT. The high loadings for Computers and Electronics (1.15), Programming (1.28), Knowledge in Mathematics (0.48), Reading Comprehension (0.50), Writing (0.43), and English Language (0.43) indicate suggests proficiencies in this component possess strong computational, analytical, and communication skills essential for roles in technology, software development, and data analysis. This component is relevant for software developers, IT specialists, and digital professionals.

Component 8: Public Safety, Security & Law

This component emphasizes skills and expertise in law enforcement, governance, and public infrastructure. The high loadings for **Public Safety and Security (1.25)**, **Law and Government (0.96)**, **Telecommunications (1.16)**, **Transportation (1.32)**, and **Geography (0.73)** indicate that individuals proficient in this component possess strong regulatory, logistical, and crisis management skills essential for roles in government, public policy, and security operations.

The result from PCA analysis of 215 occupations with high LQ in the OVRDC Region indicates a diverse and specialized workforce with strengths in **leadership**, **technical trades**, **manufacturing**, **business administration**, and **public safety**. The region has a well-established industrial base, supported by strong production, engineering, and quality control expertise, while also demonstrating growing capabilities in healthcare, IT, and digital skills.

Education, healthcare, and research competencies in the region help to ensure long-term

sustainability in human capital development, equipping the workforce with the adaptability needed for future economic shifts. These findings highlight strategic opportunities for workforce development, economic diversification, and investment in emerging sectors to ensure long-term regional growth and resilience.

3 Key Takeaways

The workforce in the OVRDC Region is heavily concentrated in several key industries, including food preparation, sales, transportation, education, healthcare, production, and construction. The high workforce concentration in these industries suggests that OVRDC Region has established expertise and infrastructure to sustain these occupations over time. However, not all high-LQ occupations indicate growth, as some face projected job declines. If high-LQ occupations are expected to shrink, it signals economic vulnerability, as the region may be overly dependent on industries undergoing structural changes. Therefore, this analysis should be supplemented with an employment projection study to evaluate the long-term sustainability of these occupations and identify where workforce development efforts should be prioritized.

By analyzing workforce skills and knowledge using Principal Component Analysis (PCA), we identified eight key competency areas that define the strengths of the OVRDC Region workforce. These competencies highlight the dominant skills that support employment in the region and provide insight into potential opportunities for workforce development:

- Leadership, Coordination & Decision-Making
- Engineering, Construction & Technical Design
- Manufacturing, Production & Quality Control
- Business, Finance & Administrative Management
- Education, Communication & Cultural Competency
- Science, Research & Healthcare Professions
- Technology, IT & Digital Skills
- Public Safety, Security & Law

The region has a well-established industrial base, strong healthcare, and emerging digital skills. Workforce development programs should focus on bridging skill gaps, supporting economic diversification, and preparing for future industry shifts. Insights from this analysis can

guide education programs, training initiatives, and investment priorities to align with regional labor market trends, ensuring long-term economic resilience and job growth.

4 Conclusion

The combined findings from the Location Quotient (LQ) analysis and Principal Component Analysis (PCA) provide a comprehensive understanding of the workforce strengths and specialization in the OVRDC Region. The LQ analysis identified **215 occupations** with a higher concentration in the region compared to Ohio, collectively accounting for **114,704 jobs** or **53.4% of total regional employment**. These occupations indicate key areas of specialization that drive economic activity and labor market competitiveness.

The LQ analysis highlights the region's high concentration in **food preparation and serving, sales, transportation and material moving, education, healthcare support, production, and construction**. These occupational clusters reflect the economic foundation of the region, with manufacturing, logistics, and skilled trades playing a critical role in job creation and industry specialization. Additionally, a significant proportion of employment is concentrated in **healthcare**, **educational instruction**, **and community services**, reinforcing the importance of human capital-driven industries.

The PCA further refines these insights by identifying eight core competencies that define the region's workforce expertise. The results indicate that the OVRDC Region has a diverse and specialized labor force with strengths in **leadership**, **skilled trades**, **manufacturing**, **business administration**, **and public safety**. The region's well-established industrial base is supported by strong capabilities in **production**, **engineering**, **and quality control**. The region's competencies in **healthcare**, **education**, **IT**, **and digital skills** suggest opportunities for workforce transformation and economic diversification.

From both analyses, the findings highlight that **manufacturing**, **skilled trades**, **business administration**, **and public safety** are dominant workforce strengths in the region. At the same time, expertise in technology and IT presents opportunities for digital transformation and expansion into knowledge-based industries. Furthermore, competencies in education, healthcare, and research ensure long-term sustainability by fostering continuous workforce adaptability and resilience.

From an economic development perspective, these insights offer a roadmap for workforce training programs, investment priorities, and industry partnerships that align with regional labor market trends. By leveraging its existing strengths while fostering innovation in emerging fields, the OVRDC Region can enhance economic resilience and create sustainable employment

opportunities. Strategic workforce planning, targeted educational initiatives, and industry-driven training programs will be key to ensuring long-term regional growth and competitiveness in an evolving economic landscape.

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Appendix A

List of Occupations in the OVRDC Region with LQ > 1 (Ordered by Employment in Descending Order)⁴

*Note: A SOC (Standard Occupational Classification) code is a federal statistical standard that uses a six-digit number to classify workers into occupational categories, providing a hierarchical structure from broad groups to specific job titles. The SOC codes used in this table represent the most detailed level of classification, corresponding to specific job titles.

SOC	Occupation	OVRDC	Ohio	OVRDC-	Average
Code		Employ-	Employ-	OH LQ	Compen-
		ment	ment		sation per
					hour
35-3023	Fast Food and Counter Workers	7190	137,971	1.38	\$17.80
31-1121	Home Health and Personal Care Aides	6060	116,470	1.38	\$18.86
41-2011	Cashiers	5412	104,276	1.37	\$20.44
41-2031	Retail Salespersons	4448	107,932	1.09	\$22.41
53-7065	Stockers and Order Fillers	4006	102,040	1.04	\$24.23
51-2098	Miscellaneous Assemblers and Fabricators	3301	84,044	1.04	\$29.94
35-3031	Waiters and Waitresses	3006	77,546	1.02	\$18.80
31-1131	Nursing Assistants	2622	60,107	1.15	\$22.11
25-2021	Elementary School Teachers, Except Special Education	2589	48,013	1.43	\$42.42
25-9045	Teaching Assistants, Except Postsecondary	2295	43,806	1.39	\$26.35
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	2249	47,406	1.25	\$22.63
49-3023	Automotive Service Technicians and Mechanics	2057	42,874	1.27	\$27.81
35-2014	Cooks, Restaurant	1896	48,448	1.03	\$17.77
25-2031	Secondary School Teachers, Except Special and Career/Technical Educa- tion	1870	35,610	1.39	\$41.76
35-2021	Food Preparation Workers	1587	35,088	1.2	\$18.19
35-2011	Cooks, Fast Food	1585	29,213	1.43	\$15.83
37-2012	Maids and Housekeeping Cleaners	1569	36,914	1.12	\$15.06
41-1011	First-Line Supervisors of Retail Sales Workers	1560	33,690	1.22	\$28.14
53-3033	Light Truck Drivers	1542	39,926	1.02	\$22.15

⁴ Source: IMPLAN® Model (2022) Data and Authors' calculation.

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compensation per hour
47-2061	Construction Laborers	1456	35,399	1.09	\$25.37
47-2031	Carpenters	1402	33,808	1.1	\$29.52
29-2061	Licensed Practical and Licensed Vo- cational Nurses	1252	26,853	1.23	\$34.35
39-9011	Childcare Workers	1165	24,413	1.26	\$14.81
53-7061	Cleaners of Vehicles and Equipment	1164	25,223	1.22	\$30.51
25-2022	Middle School Teachers, Except Special and Career/Technical Education	1129	21,034	1.42	\$42.15
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1007	24,446	1.09	\$43.01
47-2111	Electricians	990	23,948	1.09	\$36.67
53-1047	First-Line Supervisors of Transporta- tion and Material Moving Workers, Except Aircraft Cargo Handling Su- pervisors	929	23,899	1.03	\$39.29
33-3051	Police and Sheriff's Patrol Officers	903	19,685	1.21	\$35.02
47-1011	First-Line Supervisors of Construc- tion Trades and Extraction Workers	880	20,451	1.14	\$37.23
35-2012	Cooks, Institution and Cafeteria	863	19,565	1.17	\$20.18
49-9041	Industrial Machinery Mechanics	851	21,081	1.07	\$39.78
51-4121	Welders, Cutters, Solderers, and Brazers	842	21,710	1.02	\$31.05
25-2011	Preschool Teachers, Except Special Education	794	18,540	1.13	\$22.99
53-3031	Driver/Sales Workers	774	18,048	1.13	\$17.73
11-9111	Medical and Health Services Managers	759	19,592	1.02	\$68.00
29-2052	Pharmacy Technicians	747	18,452	1.07	\$25.01
25-3031	Substitute Teachers, Short-Term	715	13,739	1.38	\$25.67
21-2011	Clergy	706	14,360	1.3	\$23.79
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	701	12,474	1.49	\$31.31
51-9111	Packaging and Filling Machine Operators and Tenders	699	17,720	1.04	\$26.16
41-2022	Parts Salespersons	695	14,180	1.3	\$18.28
21-1093	Social and Human Service Assistants	683	13,053	1.38	\$24.45
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	668	10,696	1.65	\$20.13
35-9021	Dishwashers	648	16,687	1.03	\$16.99

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compensation per hour
53-3051	Bus Drivers, School	636	12,814	1.31	\$28.25
33-3012	Correctional Officers and Jailers	606	11,765	1.36	\$30.38
47-2152	Plumbers, Pipefitters, and Steamfitters	604	14,486	1.1	\$35.87
53-7081	Refuse and Recyclable Material Collectors	574	5,054	3	\$44.23
47-2073	Operating Engineers and Other Construction Equipment Operators	570	12,529	1.2	\$32.56
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	554	12,428	1.18	\$37.43
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	537	14,066	1.01	\$18.30
21-1021	Child, Family, and School Social Workers	536	10,697	1.33	\$34.73
29-1051	Pharmacists	532	13,714	1.03	\$74.75
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	512	12,837	1.06	\$30.71
11-9032	Education Administrators, Kindergarten through Secondary	507	9,871	1.36	\$27.51
21-2021	Directors, Religious Activities and Education	505	10,197	1.31	\$26.43
11-9021	Construction Managers	494	12,397	1.05	\$73.76
49-3021	Automotive Body and Related Repairers	475	10,642	1.18	\$31.24
35-3041	Food Servers, Nonrestaurant	473	11,165	1.12	\$19.70
51-9196	Paper Goods Machine Setters, Operators, and Tenders	469	5,350	2.32	\$33.96
53-5021	Captains, Mates, and Pilots of Water Vessels	463	3,964	3.09	\$54.46
43-5052	Postal Service Mail Carriers	457	11,744	1.03	\$40.51
53-3052	Bus Drivers, Transit and Intercity	441	6,401	1.82	\$39.75
33-2011	Firefighters	436	9,711	1.19	\$21.68
21-1012	Educational, Guidance, and Career Counselors and Advisors	433	9,876	1.16	\$41.97
11-9051	Food Service Managers	409	9,612	1.13	\$55.64
39-9032	Recreation Workers	394	9,477	1.1	\$21.52
51-9198	Helpers-Production Workers	394	9,579	1.09	\$28.10
51-3092	Food Batchmakers	381	7,987	1.26	\$25.04
51-5112	Printing Press Operators	377	7,498	1.33	\$33.92

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compensation per hour
25-2052	Special Education Teachers, Kindergarten and Elementary School	367	6,588	1.47	\$43.01
39-7018	Tour and Travel Guides	365	3,706	2.61	\$59.99
51-9124	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	365	9,438	1.02	\$30.88
53-3053	Shuttle Drivers and Chauffeurs	361	7,861	1.22	\$22.41
29-1123	Physical Therapists	349	8,884	1.04	\$59.11
21-1022	Healthcare Social Workers	318	7,247	1.16	\$33.87
29-2099	Health Technologists and Technicians, All Other	316	6,303	1.33	\$26.52
13-1051	Cost Estimators	315	8,144	1.02	\$39.98
49-9051	Electrical Power-Line Installers and Repairers	311	5,380	1.53	\$52.41
99-8012	Military - Engineering, Science, and Technical Occupations	309	6,767	1.21	\$19.01
53-6031	Automotive and Watercraft Service Attendants	303	6,051	1.32	\$27.31
43-5032	Dispatchers, Except Police, Fire, and Ambulance	289	7,461	1.02	\$33.06
49-3093	Tire Repairers and Changers	289	5,573	1.37	\$20.17
25-2058	Special Education Teachers, Secondary School	283	5,154	1.45	\$44.80
47-2141	Painters, Construction and Maintenance	269	6,652	1.07	\$27.92
11-9151	Social and Community Service Managers	267	5,460	1.29	\$71.11
53-5011	Sailors and Marine Oilers	266	2,362	2.97	\$36.33
25-9031	Instructional Coordinators	264	6,520	1.07	\$46.59
29-1127	Speech-Language Pathologists	264	5,807	1.2	\$56.50
35-1011	Chefs and Head Cooks	260	6,737	1.02	\$30.88
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	254	6,139	1.09	\$35.98
99-8021	Military - Combat Specialty Occupations	249	5,455	1.21	\$19.01
47-2051	Cement Masons and Concrete Finishers	248	6,016	1.09	\$28.40
35-2015	Cooks, Short Order	248	5,687	1.15	\$17.28
29-2042	Emergency Medical Technicians	244	5,816	1.11	\$23.74
43-4031	Court, Municipal, and License Clerks	244	4,995	1.29	\$28.48

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compen- sation per hour
51-8031	Water and Wastewater Treatment Plant and System Operators	240	5,276	1.2	\$34.35
99-8028	Military - Transportation and Material Handling Occupations	235	5,144	1.21	\$19.01
43-4061	Eligibility Interviewers, Government Programs	228	4,689	1.28	\$30.06
47-4041	Hazardous Materials Removal Workers	225	1,845	3.23	\$50.16
39-9041	Residential Advisors	225	4,320	1.38	\$29.88
47-4051	Highway Maintenance Workers	223	4,618	1.28	\$26.06
21-1023	Mental Health and Substance Abuse Social Workers	222	3,869	1.52	\$30.89
21-2099	Religious Workers, All Other	220	4,444	1.31	\$17.11
25-2012	Kindergarten Teachers, Except Special Education	219	4,153	1.4	\$44.73
27-2042	Musicians and Singers	214	4,589	1.24	\$73.18
29-1122	Occupational Therapists	213	5,235	1.07	\$56.73
99-8029	Military - Vehicle and Machinery Mechanic Occupations	204	4,478	1.21	\$19.01
31-9097	Phlebotomists	198	4,811	1.09	\$22.87
49-9098	Helpers–Installation, Maintenance, and Repair Workers	195	4,356	1.18	\$29.38
21-1015	Rehabilitation Counselors	194	3,065	1.68	\$25.93
33-1012	First-Line Supervisors of Police and Detectives	182	3,965	1.22	\$47.63
47-2181	Roofers	181	4,287	1.12	\$29.00
47-2211	Sheet Metal Workers	180	4,500	1.06	\$34.08
29-2053	Psychiatric Technicians	178	4,002	1.17	\$25.56
25-3099	Teachers and Instructors, All Other	177	4,238	1.1	\$43.73
51-7042	Woodworking Machine Setters, Operators, and Tenders, Except Sawing	176	2,338	1.99	\$27.65
25-4022	Librarians and Media Collections Specialists	176	3,915	1.19	\$40.99
25-2032	Career/Technical Education Teachers, Secondary School	168	2,982	1.49	\$40.99
43-4181	Reservation and Transportation Ticket Agents and Travel Clerks	167	3,444	1.28	\$37.11

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compensation per hour
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	167	4,284	1.03	\$42.06
51-3021	Butchers and Meat Cutters	160	3,643	1.16	\$23.32
25-2057	Special Education Teachers, Middle School	157	2,809	1.48	\$43.65
29-2056	Veterinary Technologists and Technicians	155	3,150	1.3	\$24.10
21-1092	Probation Officers and Correctional Treatment Specialists	154	2,938	1.38	\$38.97
25-9099	Educational Instruction and Library Workers, All Other	152	3,971	1.01	\$33.53
31-9096	Veterinary Assistants and Laboratory Animal Caretakers	152	3,131	1.28	\$19.76
31-2021	Physical Therapist Assistants	150	3,730	1.06	\$37.53
31-9099	Healthcare Support Workers, All Other	149	3,802	1.04	\$27.38
99-8023	Military - Electronic and Electrical Equipment Repair Occupations	148	3,253	1.21	\$19.01
51-9041	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	145	3,803	1.01	\$26.90
51-7041	Sawing Machine Setters, Operators, and Tenders, Wood	144	1,279	2.97	\$29.38
21-1099	Community and Social Service Specialists, All Other	143	3,165	1.19	\$30.76
33-3021	Detectives and Criminal Investigators	143	3,204	1.18	\$46.99
45-2093	Farmworkers, Farm, Ranch, and Aquacultural Animals	142	3,416	1.1	\$17.61
33-9099	Protective Service Workers, All Other	141	3,165	1.18	\$39.29
35-9099	Food Preparation and Serving Related Workers, All Other	138	3,468	1.05	\$17.51
29-2043	Paramedics	136	3,232	1.11	\$25.71
33-9091	Crossing Guards and Flaggers	134	3,211	1.1	\$30.49
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	132	2,940	1.19	\$31.84
45-2091	Agricultural Equipment Operators	129	1,728	1.98	\$22.04
43-5031	Public Safety Telecommunicators	129	2,909	1.17	\$25.49
51-8013	Power Plant Operators	127	971	3.47	\$70.66

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compensation per hour
49-9043	Maintenance Workers, Machinery	121	3,089	1.04	\$38.13
29-1031	Dietitians and Nutritionists	120	2,975	1.07	\$40.69
99-8024	Military - Health Care Occupations	118	2,594	1.21	\$19.01
47-2081	Drywall and Ceiling Tile Installers	117	2,785	1.11	\$31.53
33-1021	First-Line Supervisors of Firefighting and Prevention Workers	112	2,499	1.19	\$34.41
29-2081	Opticians, Dispensing	112	2,654	1.12	\$30.38
33-9094	School Bus Monitors	111	2,330	1.26	\$24.13
51-5113	Print Binding and Finishing Workers	110	1,961	1.49	\$33.47
19-3034	School Psychologists	109	2,034	1.42	\$55.48
43-5051	Postal Service Clerks	109	2,792	1.03	\$44.31
47-4071	Septic Tank Servicers and Sewer Pipe Cleaners	107	1,043	2.72	\$40.71
99-8011	Military - Administrative Occupations	106	2,318	1.21	\$19.01
11-9031	Education and Childcare Administrators, Preschool and Daycare	106	2,575	1.08	\$64.91
53-6061	Passenger Attendants	105	940	2.97	\$43.70
29-1131	Veterinarians	104	2,090	1.32	\$65.82
21-1013	Marriage and Family Therapists	103	1,978	1.38	\$39.95
99-8026	Military - Protective Service Occupations	101	2,221	1.21	\$19.01
27-2041	Music Directors and Composers	100	2,123	1.25	\$45.67
33-1011	First-Line Supervisors of Correctional Officers	100	1,875	1.41	\$38.57
53-7063	Machine Feeders and Offbearers	100	2,355	1.12	\$31.00
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	98	1,588	1.63	\$24.95
21-1094	Community Health Workers	96	2,206	1.15	\$29.35
19-2041	Environmental Scientists and Specialists, Including Health	96	2,436	1.04	\$53.57
47-3013	Helpers-Electricians	95	2,293	1.09	\$24.53
19-3033	Clinical and Counseling Psychologists	93	2,173	1.13	\$58.30
39-1014	First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services	93	2,396	1.02	\$35.09
43-4121	Library Assistants, Clerical	93	2,100	1.17	\$20.53
45-4022	Logging Equipment Operators	92	439	5.52	\$27.86
25-4031	Library Technicians	91	2,080	1.16	\$24.43

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compen- sation per hour
53-2012	Commercial Pilots	88	1,742	1.34	\$82.80
49-9044	Millwrights	85	1,693	1.32	\$36.58
53-4031	Railroad Conductors and Yardmasters	85	1,296	1.73	\$49.10
49-3051	Motorboat Mechanics and Service Technicians	85	1,386	1.62	\$35.60
47-2221	Structural Iron and Steel Workers	85	2,159	1.04	\$36.63
27-4011	Audio and Video Technicians	84	2,141	1.03	\$29.89
49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	82	1,934	1.12	\$51.91
21-1091	Health Education Specialists	76	1,954	1.03	\$40.96
39-9099	Personal Care and Service Workers, All Other	76	1,860	1.08	\$19.05
21-1029	Social Workers, All Other	75	1,627	1.22	\$36.35
53-5022	Motorboat Operators	75	605	3.28	\$47.01
31-9095	Pharmacy Aides	75	1,722	1.15	\$21.63
51-3093	Food Cooking Machine Operators and Tenders	74	1,157	1.7	\$24.84
47-2121	Glaziers	73	1,756	1.11	\$30.20
39-4021	Funeral Attendants	73	1,465	1.33	\$21.61
53-4011	Locomotive Engineers	73	1,104	1.74	\$51.43
13-2081	Tax Examiners and Collectors, and Revenue Agents	72	1,559	1.23	\$39.59
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	72	962	1.98	\$62.93
47-2021	Brickmasons and Blockmasons	72	1,756	1.09	\$33.66
51-9197	Tire Builders	71	1,651	1.14	\$30.04
31-2011	Occupational Therapy Assistants	71	1,694	1.11	\$42.11
25-2059	Special Education Teachers, All Other	70	1,428	1.29	\$44.98
51-3099	Food Processing Workers, All Other	69	1,545	1.19	\$21.15
49-9031	Home Appliance Repairers	67	1,496	1.18	\$28.19
27-3091	Interpreters and Translators	65	1,602	1.07	\$38.05
47-3015	Helpers-Pipelayers, Plumbers, Pipefitters, and Steamfitters	63	1,509	1.11	\$23.78
51-5111	Prepress Technicians and Workers	63	1,229	1.35	\$35.57
11-1031	Legislators	60	1,284	1.23	\$69.28
43-9022	Word Processors and Typists	59	1,296	1.21	\$31.85
47-3012	Helpers-Carpenters	59	1,435	1.09	\$23.33

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SOC Code	Occupation	OVRDC Employ- ment	Ohio Employ- ment	OVRDC- OH LQ	Average Compen- sation per hour
11-9013	Farmers, Ranchers, and Other Agricultural Managers	57	822	1.84	\$65.39
47-2044	Tile and Stone Setters	56	1,401	1.06	\$30.56
47-2071	Paving, Surfacing, and Tamping Equipment Operators	56	1,363	1.09	\$25.46
51-8021	Stationary Engineers and Boiler Operators	56	1,105	1.33	\$42.49
49-3022	Automotive Glass Installers and Repairers	54	1,258	1.14	\$27.35
51-8093	Petroleum Pump System Operators, Refinery Operators, and Gaugers	53	1,292	1.09	\$67.94
25-3011	Adult Basic Education, Adult Secondary Education, and English as a Second Language Instructors	53	1,135	1.24	\$38.48
39-4031	Morticians, Undertakers, and Funeral Arrangers	53	1,062	1.32	\$31.42
21-1019	Counselors, All Other	52	1,053	1.32	\$28.64
99-8013	Military - Human Resource Development Occupations	52	1,129	1.21	\$19.01
19-3051	Urban and Regional Planners	51	1,187	1.14	\$46.15

 $\underline{\textit{Note:}}$ **Average compensation** includes average wage and salaries and average supplements to wages and salaries.

Appendix B:

Trends in EmpLoyment and the Number of EstabLishments in the Top 20 Industries by EmpLoyment in the OVRDC Region

Top 20 Industries by EmpLoyment in the OVRDC Region

- 1. Food Services and Drinking Places
- 2. Ambulatory Health Care Services
- 3. Nursing and Residential Care Facilities
- 4. General Merchandise Stores
- 5. Social Assistance
- 6. Professional, Scientific, and Technical Services
- 7. Food and Beverage Stores
- 8. Administrative and Support Services
- 9. Transportation Equipment Manufacturing
- 10. Specialty Trade Contractors
- 11. Fabricated Metal Product Manufacturing
- 12. Motor Vehicle and Parts Dealers
- 13. Religious, Civic, and Professional Organizations
- 14. Merchant Wholesalers, Durable Goods
- 15. Machinery Manufacturing
- 16. Building Material and Garden Supply Stores
- 17. Food Manufacturing
- 18. Truck Transportation
- 19. Credit Intermediation and Related Activities
- 20. Management of Companies and Enterprises







































