



July 2022

KENTUCKY LABOR FORCE UPDATE

Measuring Occupational Uniqueness in Kentucky Compared to the U.S.

Location quotients (LQ) can be used to measure the concentration of occupational employment in a geographic area as compared to a larger area. These ratios can identify occupations that may be unique or unusually predominant in a regional economy. For example, an occupation that makes up 10 percent of regional employment but only 2 percent of U.S. employment would have a location quotient of 5 (10% regional share ÷ 2% U.S. share = location quotient of 5). A location quotient of 1 means the occupation has the same share of regional employment as the national average, less than 1 indicates the occupation is less prevalent in the area than in the U.S., and greater than 1 indicates that employment in the occupation is concentrated in that region.

The table below shows the most concentrated occupation in each of Kentucky’s Local Workforce Areas (LWA) relative to the nation. Your job is to match them! (Answers are on the next page.)

Local Workforce Area	Most Concentrated Occupation (SOC Code)
Bluegrass	Aircraft Cargo Handling Supervisors (53-1041)
Cumberlands	Animal Breeders (45-2021)
EKCEP	Captains, Mates, and Pilots of Water Vessels (53-5021)
Green River	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic (51-4031)
Kentuckiana Works	Log Graders and Scalers (45-4023)
Lincoln Trail	Motorboat Mechanics and Service Technicians (49-3051)
Northern Kentucky	Rolling Machine Setters, Operators, and Tenders, Metal and Plastic (51-4023)
South Central	Sailors and Marine Oilers (53-5011)
TENCO	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders (51-9012)
West Kentucky	Tax Examiners and Collectors, and Revenue Agents (13-2081)

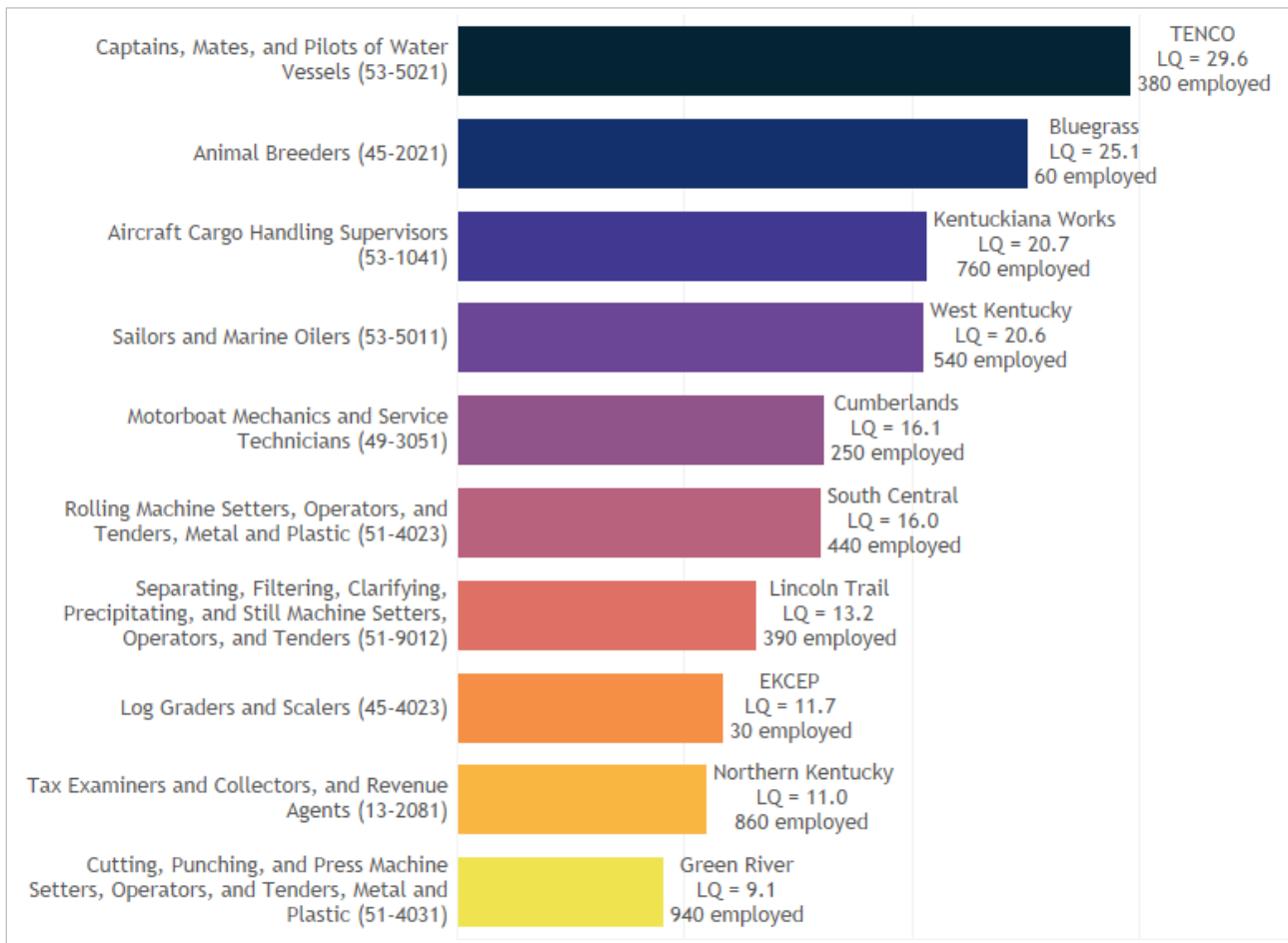
Source: 2021 LWA Occupational Employment and Wages Report



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The LQ of Aircraft Cargo Handling Supervisors in Kentuckiana Works was 20.7 indicating that these supervisors were employed in the LWA at nearly 21 times the national rate. However, having a high concentration of an occupation does not necessarily mean employment in that occupation is high. According to 2021 occupational employment estimates, there were 760 Aircraft Cargo Handling Supervisors employed in Kentuckiana Works, 0.15 percent of the total workforce in the LWA compared to 0.01 percent in the U.S.

High location quotients reveal specialization in an area. The occupation with the largest location quotient for each LWA is shown in the adjacent chart. The occupation with the largest location quotient among the ten LWAs was Captains, Mates, and Pilots of Water Vessels in TENCO at 29.6 with an estimated employment of 380, followed by Animal Breeders in the Bluegrass at 25.1, with 60 employed. The most concentrated occupation in the Green River LWA was Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic, which had the largest employment among the occupations identified in the chart above at 940.



Source: 2021 LWA Occupational Employment and Wages Report

High location quotients for an occupation may be related to industries that are also geographically concentrated. For example, in the Bluegrass LWA, Animal Breeders are found in the Support Activities for Animal Production sector (NAICS 11521). In 2021, Kentucky had the highest LQ in that sector at 7.4 among all states according to data from the Quarterly Census of Employment and Wages (QCEW) program.



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Another reason an occupational LQ may be high is that the occupation is associated with geographical features such as waterways or natural resource deposits. For example, Excavating and Loading Machine and Dragline Operators, Surface Mining (SOC 47-5022) has a LQ of 8.6 in the EKCEP LWA, where coal is mined.

The occupations with the 10 highest LQs in Kentucky overall, ranging from 3.8 to 13.9, have a combined employment of 7,460, 0.4 percent of total employment, indicating that the state's specialty occupations are not large employers. Information from the BLS's Occupational Employment and Wage Statistics (OEWS) Occupation Profiles shows that these occupations are concentrated in Mining, Agriculture, Transportation, and Manufacturing sectors. With the exception of Animal Breeders, all have an hourly wage above the state average of \$22.69 per hour as shown below.

Location Quotients and Employment for Select Occupations in Kentucky

Occupation (SOC code)	Employment	LQ	Average Hourly Wage
Occupations with Highest Location Quotient			
Roof Bolters, Mining (47-5043)	370	13.9	\$26.36
Loading and Moving Machine Operators, Underground Mining (47-5044)	400	8.9	\$26.76
Farm and Home Management Educators (25-9021)	760	7.3	\$22.73
Aircraft Cargo Handling Supervisors (53-1041)	830	6.5	\$27.40
Pourers and Casters, Metal (51-4052)	530	5.7	\$22.82
Animal Breeders (45-2021)	60	5.1	\$16.29
Continuous Mining Machine Operators (47-5041)	910	4.7	\$30.26
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)	1,680	4.0	\$24.67
Forging Machine Setters, Operators, and Tenders, Metal and Plastic (51-4022)	680	3.9	\$23.79
Sailors and Marine Oilers (53-5011)	1,240	3.8	\$26.75
Occupations with Highest Employment			
Laborers and Freight, Stock, and Material Movers, Hand (53-7062)	65,050	1.8	\$15.92
Fast Food and Counter Workers (35-3023)	54,430	1.2	\$10.40
Cashiers (41-2011)	48,050	1.1	\$11.28
Retail Salespersons (41-2031)	46,080	1.0	\$14.08
Registered Nurses (29-1141)	42,940	1.1	\$31.75
Customer Service Representatives (43-4051)	40,620	1.1	\$16.97
Miscellaneous Assemblers and Fabricators (51-2090)	38,230	2.4	\$18.48
Stockers and Order Fillers (53-7065)	35,950	1.3	\$13.99
Office Clerks, General (43-9061)	33,660	0.9	\$16.48
General and Operations Managers (11-1021)	32,010	1.1	\$45.05

Source: 2021 Statewide Occupational Employment and Wages Report

Among occupations with the highest employment, most LQs hover near 1 indicating that these jobs are found in Kentucky at the same proportion throughout the U.S. Miscellaneous Assemblers and Fabricators, with more than 38,000 employed in Kentucky, had a LQ of 2.4. These workers are employed in various manufacturing sectors, including Motor Vehicle, Motor Vehicle Parts, Machinery Manufacturing, and Plastics Product Manufacturing according to the BLS.



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The occupation with the most employment in Kentucky was Laborers and Freight, Stock, and Material Movers, Hand (53-7062) with 65,050 employed. The state LQ relative to the U.S. was 1.8. The following chart shows the relative concentration of employment in this occupation throughout the state, ranging from 0.5 in EKCEP to 3.0 in Northern Kentucky indicating that its share of employment was 3 times higher in this LWA than the national average. Those employed in this occupation manually move freight, stock, luggage or other materials. According to the BLS Occupation Profiles, the industries with the highest levels of employment for this occupation include Employment Services (NAICS 561300), Courier and Express Delivery Services (NAICS 492100), Warehousing and Storage (NAICS 493100), Merchant Wholesalers, Durable Goods (NAICS 4232-37 and 4239), and Truck Transportation (NAICS 484000).

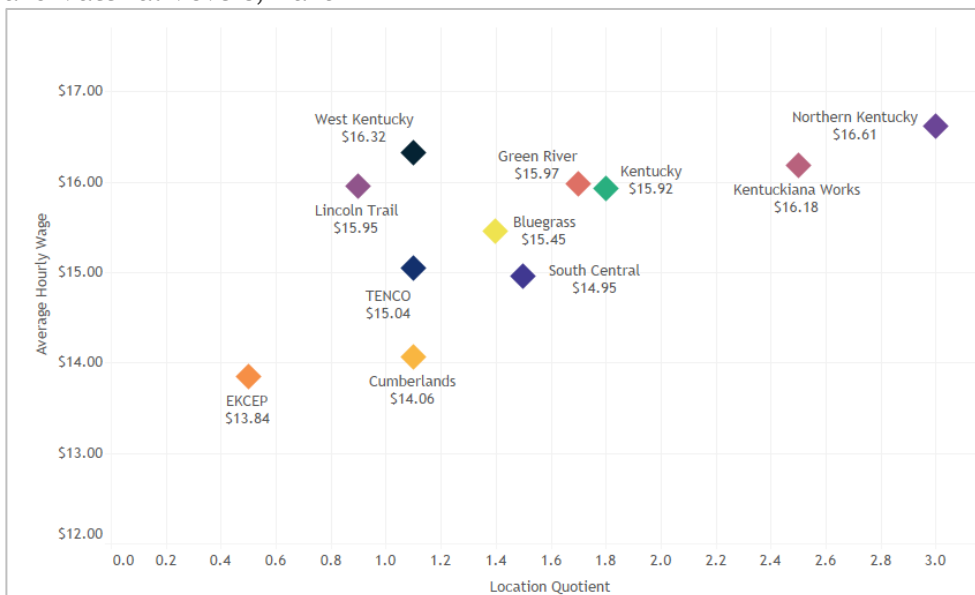
Concentration of Laborers and Freight, Stock, and Material Movers, Hand



— State LQ = 1.8

Sources: 2021 Statewide Occupational Employment and Wages Report and 2021 LWA Occupational Employment and Wages Report

Location Quotient and Average Hourly Wage for Laborers and Freight, Stock, and Material Movers, Hand



Sources: 2021 Statewide Occupational Employment and Wages Report and 2021 LWA Occupational Employment and Wages Report

The average hourly wage paid for Laborers and Freight, Stock, and Material Movers, Hand ranged from \$13.84 per hour in EKCEP to \$16.61 in Northern Kentucky, where this occupation accounts for 6 percent of employment overall. The following chart shows a correlation between the LQ and the average hourly wage in this occupation – the higher the concentration, the higher the wage.

Location quotients show which occupations or industries are unique in a region. In Kentucky and its LWAs, these occupations have relatively low employment and pay higher than average wages.



New and Noteworthy

As of July 1, 2022, the Education and Workforce Development Cabinet and the Labor Cabinet merged under the leadership of Secretary Jamie Link to form the Education and Labor Cabinet.

Several KYSTATS reports have been updated recently including:

- ♦ [Workforce Overview Report for Kentucky Regions WORKR](#)
This interactive quarterly report provides a snapshot of Kentucky's workforce at the state and local levels by bringing together data from Kentucky's Labor Market Information branch.
- ♦ [Civilian Labor Force Report](#)
This interactive report allows users to explore estimates from the U.S. Bureau of Labor Statistics' Local Area Unemployment Statistics (LAUS) program and the Current Population Survey (CPS).
- ♦ [Kentucky Students' Right to Know](#)
This interactive report was designed to help prospective students make more informed decisions about their futures and ensure that they are adequately aware of career paths, employment outcomes, and the cost of college.



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Kentucky Labor Force Update

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