

Extension Area 10: Economic Overview

Columbiana, Mahoning, Portage, and Stark Counties

Report prepared **March** 2023 by Amanda Osborne, Extension Educator, OSU Extension Community Development

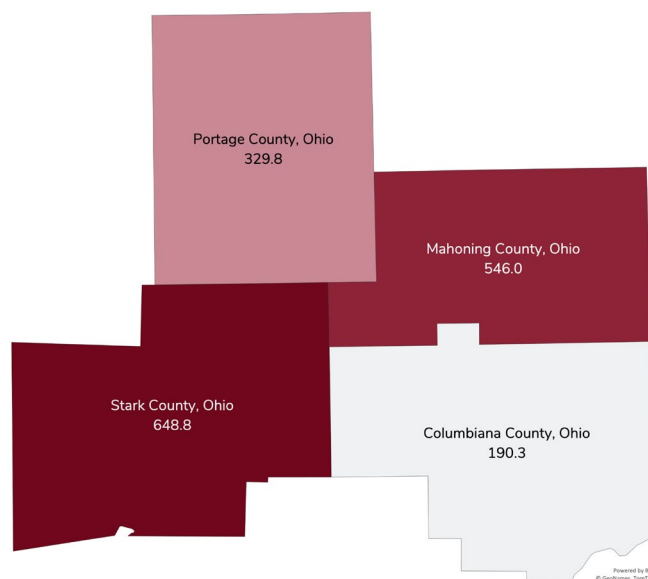
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Regional Overview

OSU Extension Area 10 is a four-county area in the north-east part of the state, including Columbiana, Mahoning, Portage, and Stark counties. In 2021, the combined Area 10 footprint is 2,016 square miles (mi²) supporting a population of 864,288 residents and an overall population density of 429 residents per square mile. Population density is a ratio of total population to total land area, simply described as a count of residents per square mile. As illustrated in Image 1, Stark County has the highest population density of 649, followed by Mahoning County with a population density of 546, while Columbiana and Portage counties ranged between 190 to 330 residents per square mile.

Overall, the combined population in Area 10 has remained consistent decreasing slightly by -3.6% from 896,817 in 2001 to a total population of 864,288 in 2021. However, there were some notable shifts in the population trends of individual counties between 2001 and 2021. Mahoning County experienced the greatest amount of decline as the population decreased by -11% from 254,958 in 2001 to 226,762 in 2021. During this period, Columbiana County underwent a population decrease of -9.3% to a total of 101,310 in 2021, and Stark County had a population decrease of -0.95% to a total of 373,834 in 2021. Between 2001 and 2021, Portage County was the only county in Area 10 to experience a population increase (6.3%) with 162,382 residents in 2021.

Image 1: OSU Extension Area 10 Population Density



Key Stats

Population 864,288

Total of 423 Industries

Total Employment of 444,591

Gross Domestic Product \$40.6B

Data retrieved from IMPLAN
(2021 data)

Regional Industry Sector Overview

IMPLAN defines the total annual production value of each Industry or Commodity as Output. Total output represents the total production value of an industry including intermediate inputs, employee compensation, proprietor income, taxes on production and imports, and other property income.

Table 1 below ranks the top 10 industries in Area 10 by total output in 2021. Owner-occupied dwellings was the highest ranked industry with a total output of \$3.6 billion. The owner-occupied dwellings sector represents the wealth generated from home ownership. Owning and maintaining a home is also a major area of spending and the owner-

occupied dwellings sector captures that economic effect. However, there is no employment or labor income generated in the owner-occupied dwellings sector, as the employment positions such as property managers and real estate agents is captured in the other real estate sector. When comparing 201 to 2020, the data shows the owner-occupied dwellings industry experienced a 3.9% increase in total output.

The industry with the second highest total output in Area 10 was petroleum refineries with a total output of \$3.3 billion, supporting 344 jobs, and an average employee compensation of \$247,505 per year.

This industry saw an 86.2% increase in output between 2020 and 2021.

The iron and steel mills and ferroalloy manufacturing industry had the third highest total output with a total output of \$2.5 billion, supporting 2,454 jobs, and an average employee compensation of \$115,996.

Of the top 10 industries by total output, the sector with the most employees in the region was employment and payroll of local government and education with 21,932 employees. The average annual income for these workers was \$68,896 per year.

Table 1: Area 10 Top 10 Industries by Total Output

Industry Description	Output	Total Employment	Average Employee Compensation
Owner-occupied dwellings	\$3,599,276,492	N/A	N/A
Petroleum refineries	\$3,300,088,248	344	\$247,505
Iron and steel mills and ferroalloy manufacturing	\$2,503,594,009	2454	\$115,996
Hospitals	\$2,328,056,540	13,822	\$67,120
Monetary authorities and depository credit intermediation	\$2,266,977,941	3441	\$80,615
Other real estate	\$2,004,478,391	11,340	\$57,288
* Employment and payroll of local govt, education	\$1,752,799,422	22,146	\$68,896
Limited-service restaurants	\$1,574,149,671	16,869	\$20,724
Truck transportation	\$1,493,956,694	8,546	\$79,081
Offices of physicians	\$1,345,411,745	8,351	\$120,254

Area 10 Annual Employment Trends

The Total Employment figure reported by IMPLAN represents a full and part-time annual average including the self-employed, all federal, state, and local government employment and military employment (including overseas military).

Chart 1 provides a visual reference of the Area 10 annual employment trends between 2001 and 2020. As shown in the chart, Area 10 experienced consistent growth between 2002 and 2007 when the U.S. housing market collapsed, stressing global financial markets, and ultimately triggering the U.S. economy into a period of recession.

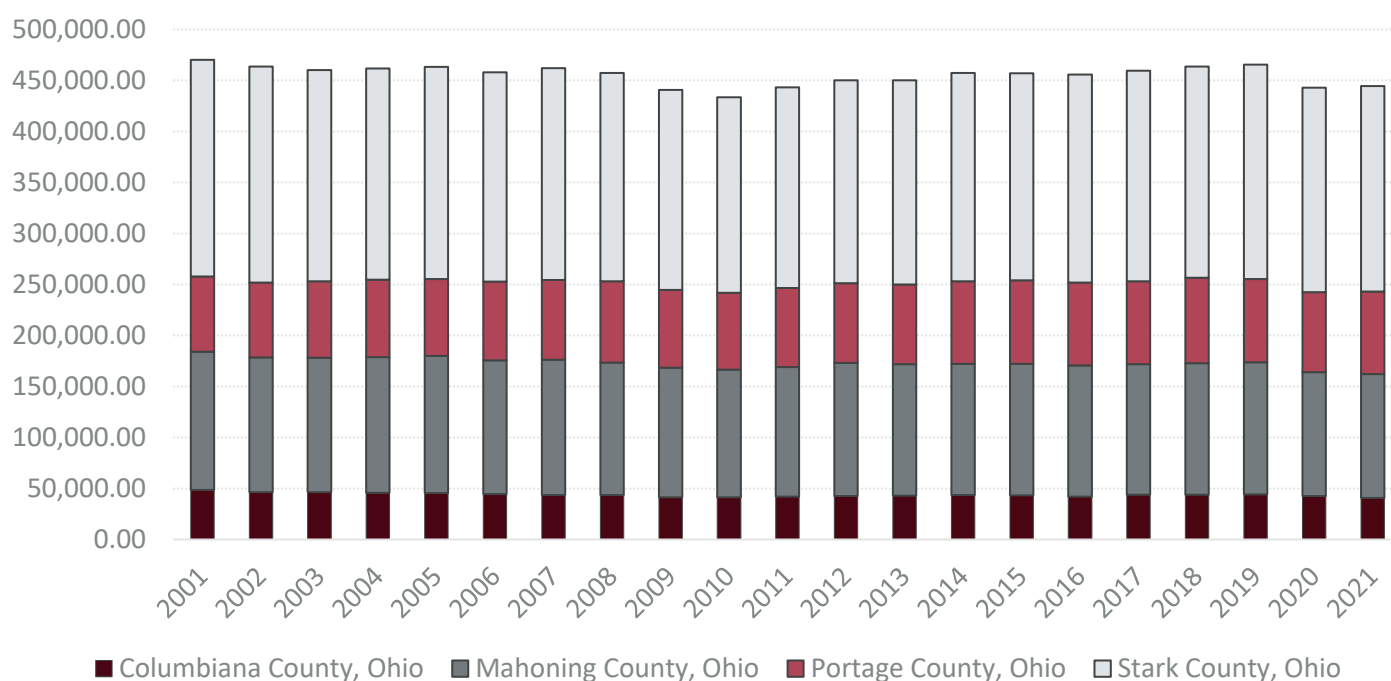
Since 2001 annual employment in Area 10 decreased by -5.4%, with a peak employment of 470,187 jobs in 2001. Between 2019 and 2020 Area 10 experienced the greatest year to year job loss, losing 22,561 jobs, leaving an annual employment of 442,884 in 2020. Since 2020, Area 10 did experience a slight increase (0.4%) in employment with 1,706 jobs added.

When considering the long-term employment trends by county, Columbiana County saw the greatest decrease in total employment of -16.2%, decreasing from 48,671 in 2001 to 40,783 in 2020. Similarly,

“Year-to-year, Area 10 total employment is up 1,706 Jobs in 2021”

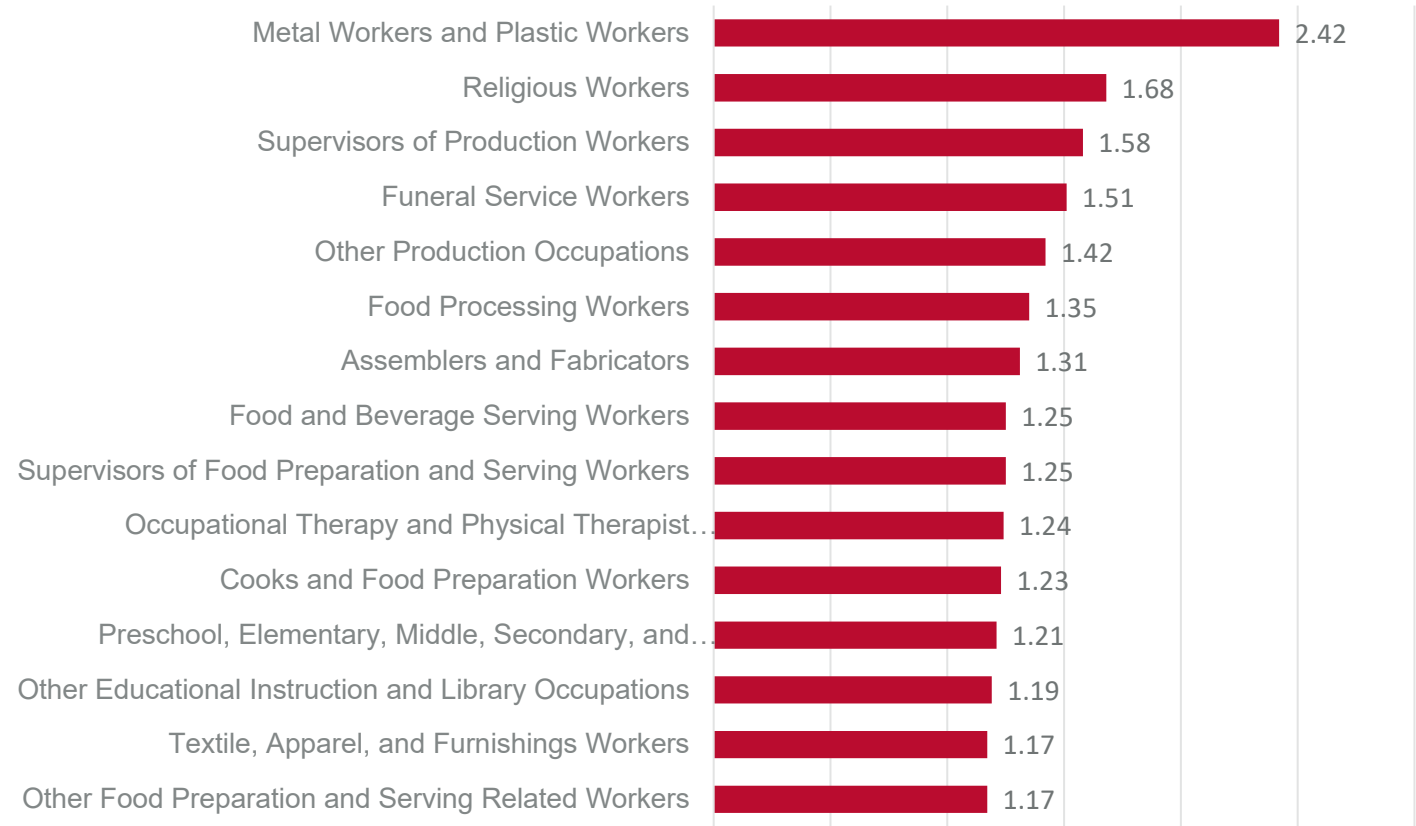
Mahoning County total employment decreased by -10.5%, from 135,597 jobs in 2001 to 121,351 in 2021. Stark County saw only a -5.1% decline in total employment, decreasing from 212,258 in 2001 to 201,534 in 2021. During the same period (2001–2020) the only county in Area 10 that experienced an increase in total employment was Portage County (9.9%).

Chart 1: Area 10 Annual Employment



Top 15 Occupations by Location Quotient

Chart 2: Occupation Location Quotient

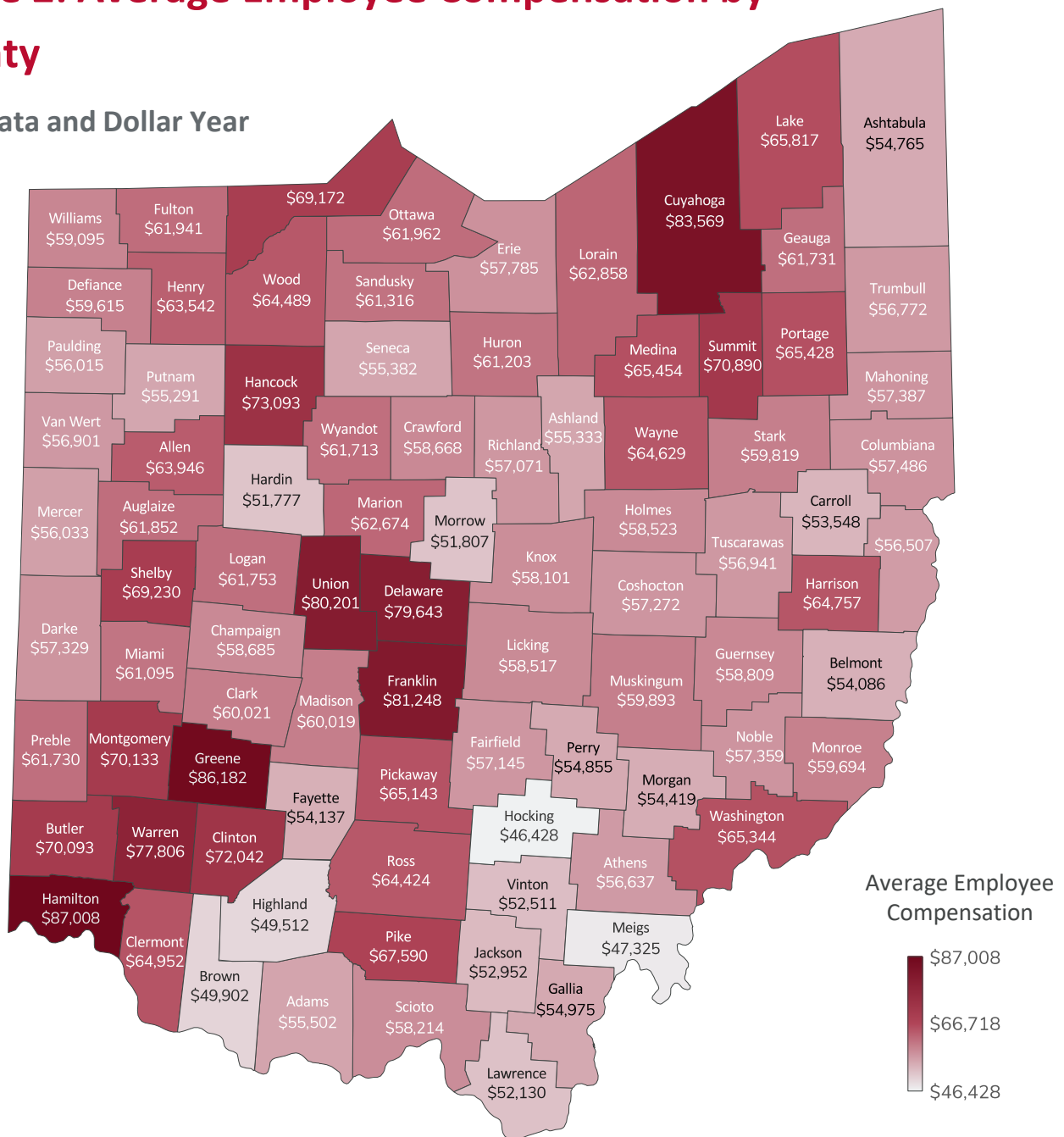


A location quotient (LQ) is a metric that compares the relative concentration of a local regions workers in a specific industry sector to the concentration of workers nationally in the same sector. An LQ equal to 1 signifies that the local share is equal to the national share, while an LQ greater than 1 means the local share is greater than the national share and is typically an exporter or perhaps has a specialization in that sector. Where there is an occupational concentration, there also tends to be higher core competencies relative to other areas, creating a competitive advantage. In addition, training and education opportunities associated with the occupation are often readily available to meet hiring demands.

Illustrated above, Chart 2 lists the top 15 occupations with the highest LQ in Area 10 demonstrating a significant concentration of workers relative to the nation. In 2021, the top occupation by LQ in Area 10 was metal and plastic workers, with an LQ of 2.42. This suggests the region has more than twice the number of supervisors of production workers compared to the national average. The second highest occupation by LQ in Area 10 was religious workers at 1.68, followed by supervisors of production workers with an LQ of 1.58, and funeral service workers at 1.51.

Image 2: Average Employee Compensation by County

2021 Data and Dollar Year





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