

Extension Area 12: Economic Overview

Logan, Union, Champaign, Clark, and Madison Counties

Report prepared March 2023 by Eric Romich, Associate Professor, OSU Extension Community Development

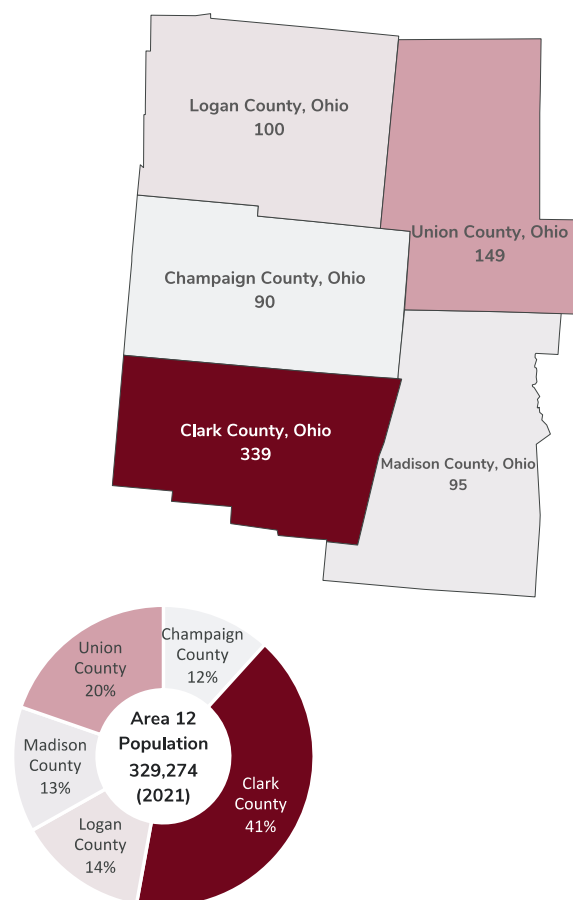
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Regional Overview

OSU Extension Area 12 is a five-county area in the west-central part of the state, including Logan, Union, Champaign, Clark, and Madison counties. In 2021, the combined Area 12 footprint was 2,189 square miles (mi²) supporting a population of 329,724 residents and an overall population density of 151 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, Clark County had the highest population density of 339, followed by Union County with a population density of 149, while Logan, Champaign, and Madison counties ranged between 90 and 100 residents per square mile.

Overall, the combined population in Area 12 has remained consistent increasing slightly by 6% from 312,291 in 2001 to a total population of 329,724 in 2021. However, there were some notable shifts in the population trends of individual counties between 2001 and 2021. Union County experienced the greatest amount of growth as the population increased by 52% from 42,793 in 2001 to 64,971 in 2021. During this period, Madison County underwent a population increase of 10% to a total of 44,386 in 2021, while Clark County had a population decrease of -6% to a total of 135,633 in 2021. Between 2001 and 2021 there were minor shifts in population for Champaign County which had 38,699 residents and Logan County had 46,035 in 2021.

Image 1: OSU Extension Area 12 Population Density



Key Stats

Total of 333 Industries

Total Employment of 169,156

Gross Domestic Product \$16.558 B

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 12 by total output in 2021. Automobile manufacturing remained the highest ranked industry with a total output of \$5.6 billion, supporting 4,160 jobs, and an average employee compensation of \$110,429. When comparing 2020 to 2021, the automobile manufacturing industry experienced a 9% increase in total output, a 6% increase in total employment, and a -3% reduction in average employment compensation. Heavy duty truck manufacturing remained the industry with the second highest total output in Area 12 with a total output of \$1.95 billion,

supporting 2,298 jobs, and an average employee compensation of \$82,060 per year.

Owner-occupied dwellings had the third greatest total output at \$1.324 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.

Of the top 10 industries, the Nitrogenous fertilizer manufacturing industry posted the greatest decline of total output which fell by -25% to \$1.18 billion in 2021,

and employment which declined by -32% to 658 jobs in 2021. However, the average employee compensation for the Nitrogenous fertilizer manufacturing industry increased by 18% to \$310,532.

When comparing 2020 to 2021, the warehousing and storage, truck transportation, and employment services industries were new to the top 10 list. The warehousing and storage industry posted the seventh highest total output of \$789 million, while undergoing a 28% increase in employment from 5,888 in 2020 to 7,540 in 2021. The truck transportation industry experienced a 26% increase in total output growing from \$592 million in 2020 to \$734 million in 2021.

Table 1: Area 12 Top 10 Industries by Total Output

Industry Description	Output	Total Employment	Average Employee Compensation
Automobile manufacturing	\$5,610,486,755	4,396	\$110,429
Heavy duty truck manufacturing	\$1,948,785,542	2,298	\$82,060
Owner-occupied dwellings	\$1,411,362,002	N/A	N/A
Other motor vehicle parts manufacturing	\$1,347,924,446	3,064	\$71,079
Scientific research and development services	\$1,258,177,443	5,323	\$124,731
Nitrogenous fertilizer manufacturing	\$1,187,850,476	658	\$310,532
Warehousing and storage	\$789,184,763	7,540	\$53,170
Truck transportation	\$744,957,186	3,646	\$77,343
Employment services	\$734,099,276	7,022	\$43,048
Motor vehicle electrical & electronic equipment manufacturing	\$720,487,614	1,695	\$65,746

Area 12 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 12 annual employment trends between 2001 and 2021. As shown in the chart, Area 12 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.

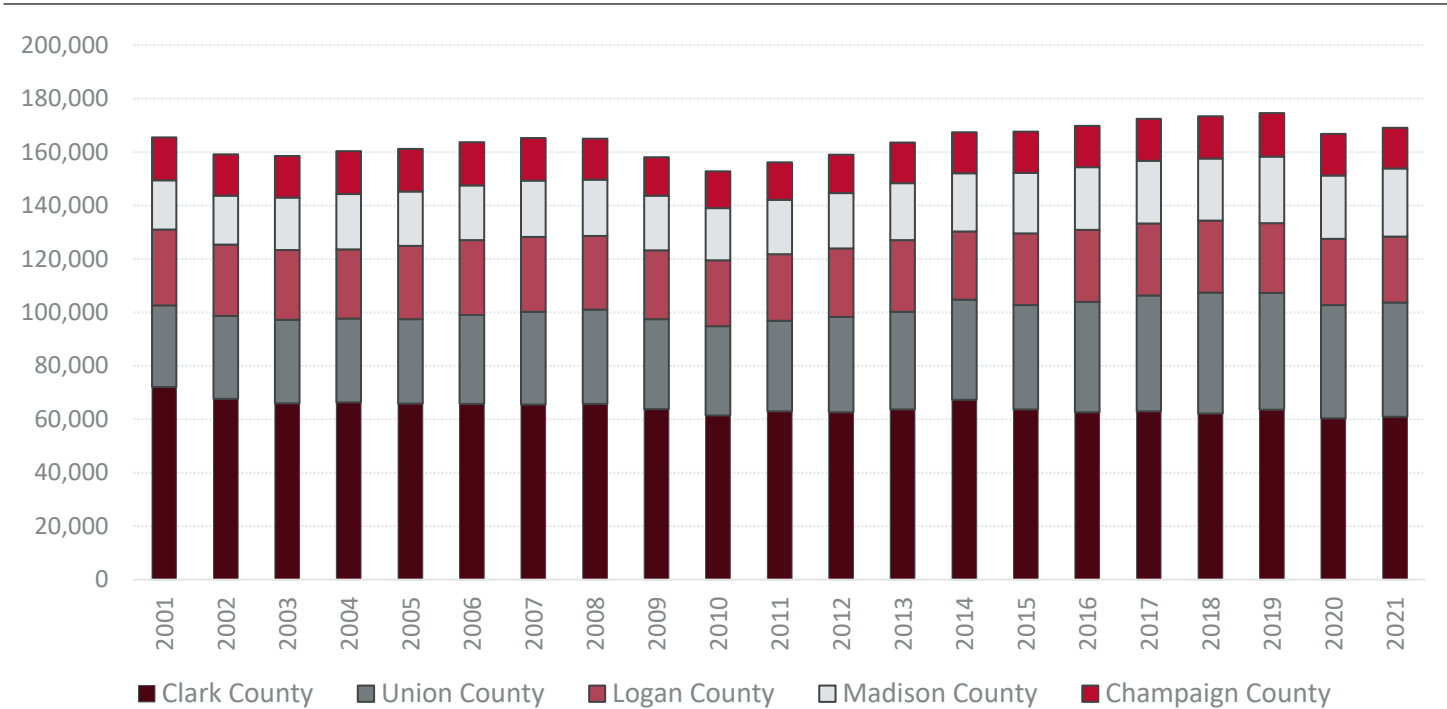
Since 2010 annual employment in Area 12 increased by 14% reaching a peak employment of 174,681 jobs in 2019. However, between 2019 and 2021 Area 12 experienced a -3% job loss, losing 5,524 jobs, leaving an annual employment of 169,157 in 2021.

When considering the long-term employment trends by county, Union County saw the greatest growth in total employment of 40%, increasing from 30,573 in 2001 to 42,868 in 2021. Similarly, Madison County total employment increased by 38%, from 18,474 jobs in 2001 to 25,448

“Since 2018, the Area 12 total employment has declined by 4,259 jobs”

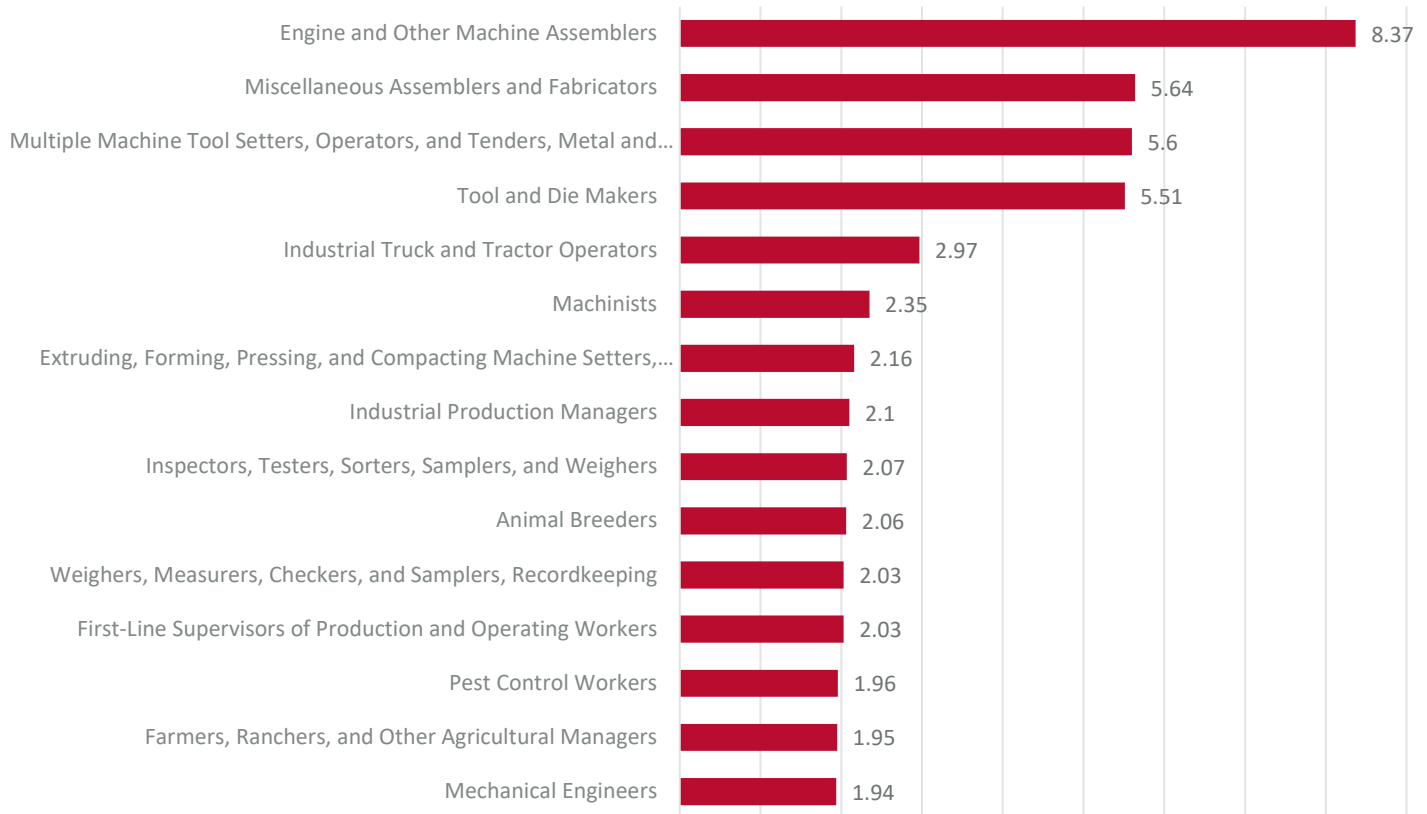
in 2021. During the same period (2001–2021) three of the counties in Area 12 experienced a decline in total employment including Clark County (-16%), Logan County (-13%), and Champaign County (-5%).

Chart 1: Area 12 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 12 demonstrating a significant concentration of workers relative to the nation. In 2021, the top occupation by LQ in Area 12 was engine and other machine assemblers, with an LQ of 8.37. This suggests the region has more than eight times the number of engine and other machine assembler workers compared to the national average. The second highest occupation by LQ in Area 12 was miscellaneous assemblers and fabricators at 5.64, followed by multiple machine tool setters, operators, and tenders, metal and plastic with an LQ of 5.6, and tool and die makers at 5.51.



IMPLAN® model, 2021 Data, using inputs provided by the user and IMPLAN Group LLC, IMPLAN System (data and software), 16905 Northcross Dr., Suite 120, Huntersville, NC 28078 www.IMPLAN.com



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