Extension Area 11: Economic Overview

## Darke, Mercer, Miami, Preble and Shelby Counties

2023 Edition

Regional Overview

OSU Extension Area 11 is a five-county area in the far west part of the state, including Darke, Mercer, Miami, Preble, and Shelby counties. In 2021, the combined Area 11 footprint is 2,304 square miles (mi2) supporting a population of 288,744 residents and an overall population density of 125 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, Miami County has the highest population density of 263, followed by Shelby County with a population density of 118, while Darke, Mercer, and Preble counties ranged between 85 and 96 residents per square mile.

Overall, the combined population in Area 11 has increased only slightly by 3%, from 284,031 in 2001 to a total population of 292,014 in 2021. However, there were some notable differences in the population trends of individual counties between 2001 and 2021. Miami County experienced the greatest amount of growth as the population increased by 10% from 99,351 in 2001 to 109,264 in 2021. In contrast, Mercer County grew by only 3%, from 40,899 in 2001 to 42,309 in 2021. Darke and Preble Counties experienced a decrease in population of 3% and 4% respectively, while Shelby County's population remained unchanged. Darke's population was 53,078 in 2001, dropping to 51,597 in 2021. Preble County had a population of 42,520 in 2001, dropping to 40,867 in 2021. Shelby County's population remained dropped only slightly. Their population was 48,183 in 2001 and, in 2021, dropped by about 100 to 47,977.

Image 1: OSU Extension Area 11 Population Density

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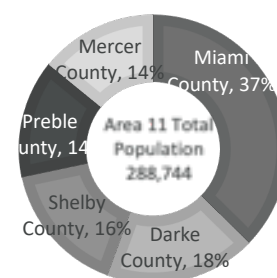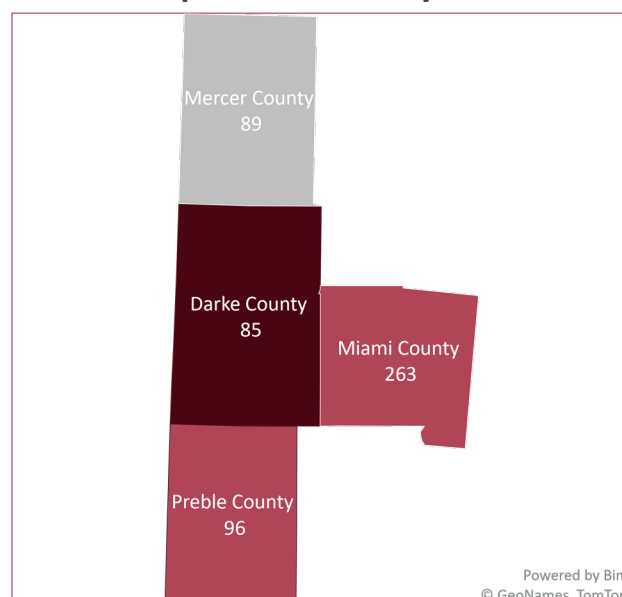
Key Stats

Total of 345 Industries

Total Employment of 159,863

Gross Domestic Product $14.84B

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 11 by total output in 2021. Owner-occupied dwellings had the greatest total output at $1.22 billion. This sector also ranked 2nd in 2020. 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.

Motor vehicle gasoline engine and engine parts manufacturing was the second highest ranked industry in 2021 with a total output of $1.06 billion, supporting 1,849 jobs, and an average employee compensation of $102,399. When comparing 2021 to 2020 and 2019, this industry experienced a 8% decrease in total output and a reduction in total employment. Employment dropped from 1,839 in 2019 to 1,764 jobs in

2020, but rebounded to 1,849 jobs in 2021. Truck transportation ranked third in output at $879 million, with the second highest number of jobs at 4,429. Meanwhile, the air conditioning, refrigeration, and warm air heating equipment manufacturing industry, which had a decrease in output to $785 million between 2019-2020, rebounded in 2021 to $806, retaining 1,968 jobs.

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 7,000 employees. The average annual income for these workers was $69,646 per year.

Table 1: Area 11 Top 10 Industries by Total Output

Industry Description	Output	Total Employment	Average Employee Compensation
Owner-occupied dwellings	$1,228,301,985	N/A	N/A
Motor vehicle gasoline engine and engine parts mfg	$1,067,267,660	1,849	$102,399
Truck transportation	$879,153,799	4,429	$76,113
Air conditioning, refrigeration, and air heating equipment mfg	$806,790,987	1,968	$94,955
Other real estate	$682,371,758	4,344	$42,865
Monetary authorities and depository credit intermediation	$670,123,699	1,202	$66,123
* Employment and payroll of local govt, education	$560,058,050	7,000	$69,646
Small electrical appliance manufacturing	$548,229,672	1,018	$74,864
Grain farming	$488,374,666	2,345	$37,115
Dry, condensed, and evaporated dairy product mfg	$450,004,193	356	$112,144

Area 11 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 11 annual employment trends between 2001 and 2021. As shown in the chart, Area 11 experienced slight overall growth of 2%, with a notable drop off in growth between 2008-2011 when the U.S. housing market collapsed, stressing global financial markets,
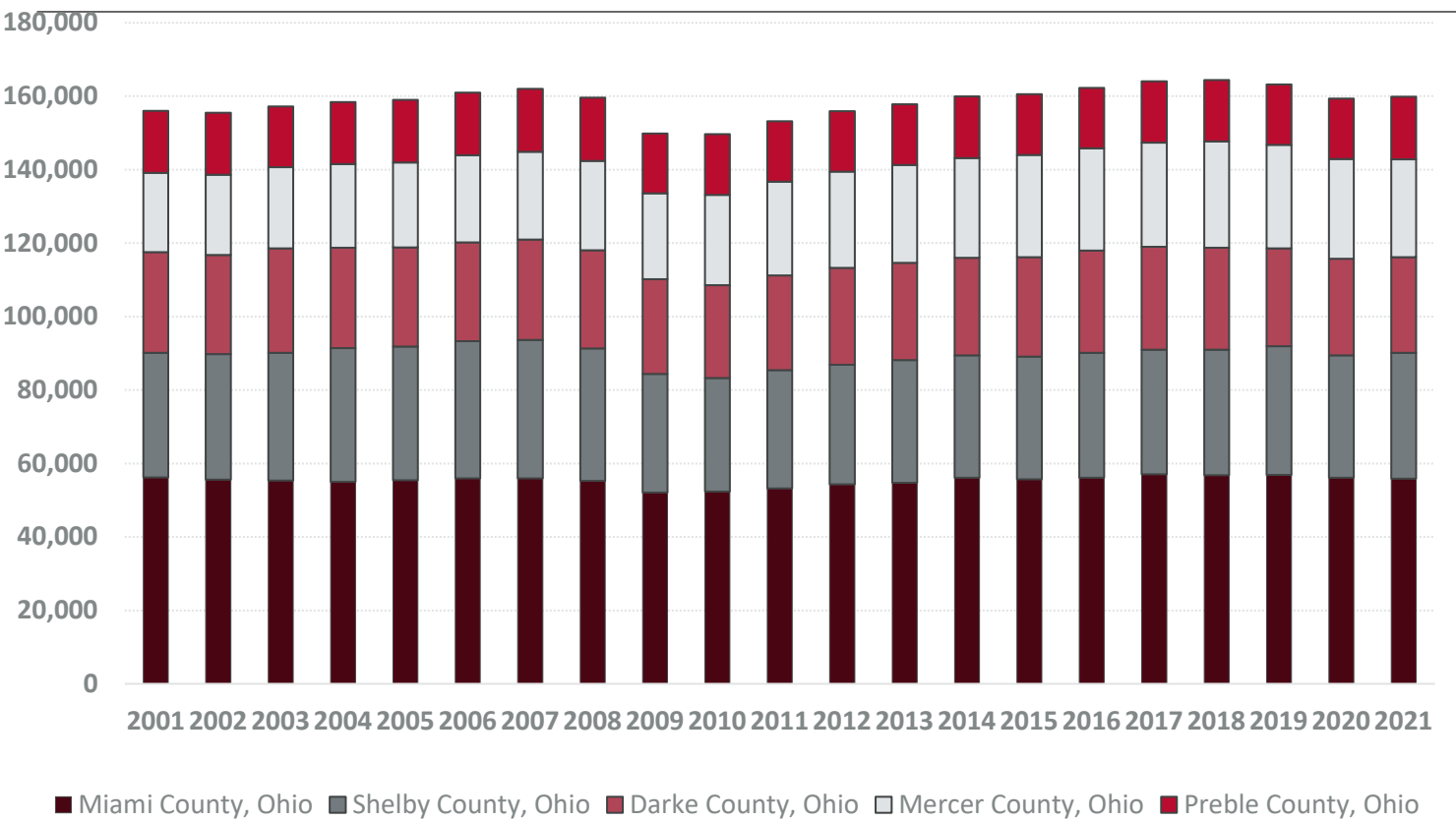
and ultimately triggering the U.S. economy into a period of recession. From 2011 through 2018, employment in Area 11 increased year to year, reaching a peak of 164,428 jobs in 2018. However, between 2018 and 2020, Area 11 experienced a decline of 5,130 jobs, likely due to the pandemic. An upswing then occurred in 2021, adding 560 jobs, leaving an annual employment of 159,863 in 2021.

When considering the long-term employment trends by county, Mercer County saw the greatest growth in total employment of 23%, increasing from 21,615 in 2001 to 26,574 in 2021.

"Overall, Area 11 total employment increased by 2% between 2001-2021"

Both Preble and Shelby County's total employment increased by 1% between 2001-2021 while the other two counties in Area 11 experienced a decline in total employment. Darke County saw the sharpest decline at -5%, from 27,338 jobs in 2001 to 26,097 in 2021. Miami County's employment decreased by -1% from 56,191 jobs in 2001 to a total of 55,872 jobs in 2021.

Chart 1: Area 11 Annual Employment

Legend: ■ Miami County, Ohio ■ Shelby County, Ohio ■ Darke County, Ohio □ Mercer County, Ohio ■ Preble County, Ohio

Top 15 Occupations by Location Quotient

Chart 2: Occupation Location Quotient

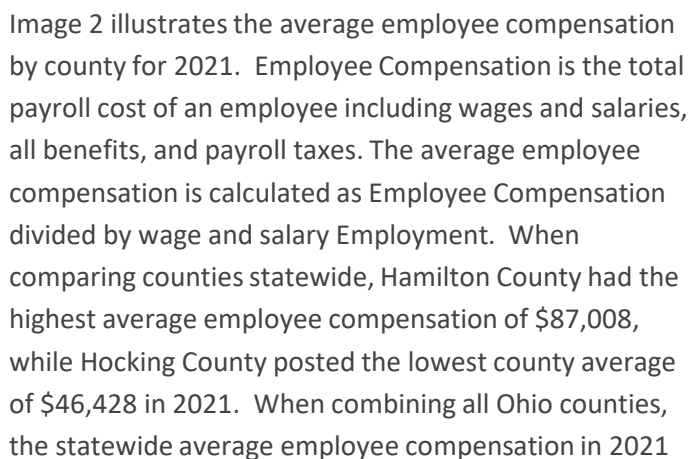| Occupation	LQ
Metal Workers and Plastic Workers	4.56
Assemblers and Fabricators	3.99
Printing Workers	3.02
Supervisors of Production Workers	2.88
Other Production Occupations	2.56
Woodworkers	2.28
Supervisors of Farming, Fishing, and Forestry…	2.2
Food Processing Workers	1.8
Agricultural Workers	1.78
Religious Workers	1.72
Sales Representatives, Wholesale and…	1.53
Engineers	1.46
Drafters, Engineering Technicians, and Mapping…	1.45
Motor Vehicle Operators	1.41
Material Moving Workers	1.39

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 11 demonstrating a significant concentration of workers relative to the nation. In 2021, the top occupation by LQ in Area 11 was metal and plastic workers, with an LQ of 4.56. This suggests the region has almost five times the number of metal and plastic workers compared to the national average. The second highest occupation by LQ in Area 11 was assemblers and fabricators at almost 4, followed by printing workers with an LQ of 3.02, supervisors of production workers at 2.88, and other production workers with a LQ of 2.56.

Image 2: Average Employee Compensation by County

2021 Data and Dollar Year

Average Employee Compensation

$87,008

$66,718

$46,428

Image 2 illustrates the average employee compensation by county for 2021. Employee Compensation is the total payroll cost of an employee including wages and salaries, all benefits, and payroll taxes. The average employee compensation is calculated as Employee Compensation divided by wage and salary Employment. When comparing counties statewide, Hamilton County had the highest average employee compensation of $87,008, while Hocking County posted the lowest county average of $46,428 in 2021. When combining all Ohio counties, the statewide average employee compensation in 2021 was $60,659 pe worker, which was a 4% increase compared to 2020. Of the counties in Area 8, Marion County had the highest average employee compensation of $62,674, ranking 29th highest in Ohio. The next highest average employee compensation in Area 8 was Wyandot County at $61,713, followed by Crawford County $58,668, Richland County $57,071, and Hardin County $51,777.

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