Extension Area 12: Economic Overview
Logan, Union, Champaign, Clark, and Madison Counties

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 2020, the combined Area 12 footprint was 2,189 square miles (mi²) supporting a population of 324,382 residents and an overall population density of 148 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 335, followed by Union County with a population density of 138, while Logan, Champaign, and Madison counties ranged between 91 to 99 residents per square mile.

Overall, the combined population in Area 12 has remained consistent increasing slightly by 3.8% from 312,291 in 2001 to a total population of 324,382 in 2020. However, there were some notable shifts in the population trends of individual counties between 2001 and 2020. Union County experienced the greatest amount of growth as the population increased by 41% from 42,793 in 2001 to 60,379 in 2020. During this period, Madison County underwent a population increase of 11% to a total of 44,825 in 2020, while Clark County had a population decrease of -6.7% to a total of 134,390 in 2020. Between 2001 and 2020 there were minor shifts in population as Champaign County had 39,192 residents and Logan County had 45,596 in 2020.

Key Stats
Population 324,382
Total of 336 Industries
Total Employment of 166,885
Gross Domestic Product $14.89B

Data retrieved from IMPLAN (2020 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 2020. Automobile manufacturing was the highest ranked industry with a total output of $5.14 billion, supporting 4,160 jobs, and an average employee compensation of $113,916. However, when comparing 2019 to 2020, the data shows the automobile manufacturing industry experienced a 33% decrease in total output and a reduction in total employment from 6,197 in 2019 to 4,160 jobs in 2020.

The industry with the second highest total output in Area 12 was heavy duty truck manufacturing with a total output of $1.949 billion, supporting 1,875 jobs, and an average employee compensation of $82,246 per year. 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 7,664 employees. The average annual income for these workers was $73,117 per year.

Owner-occupied dwellings had the fourth 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.

### Table 1: Area 12 Top 10 Industries by Total Output

<table>
<thead>
<tr>
<th>Industry Description</th>
<th>Output</th>
<th>Total Employment</th>
<th>Average Employee Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobile manufacturing</td>
<td>$5,135,756,045</td>
<td>4,160</td>
<td>$113,916</td>
</tr>
<tr>
<td>Heavy duty truck manufacturing</td>
<td>$1,949,844,745</td>
<td>1,875</td>
<td>$82,246</td>
</tr>
<tr>
<td>Nitrogenous fertilizer manufacturing</td>
<td>$1,587,526,089</td>
<td>972</td>
<td>$262,380</td>
</tr>
<tr>
<td>Owner-occupied dwellings</td>
<td>$1,324,688,290</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Other motor vehicle parts manufacturing</td>
<td>$1,166,904,425</td>
<td>2,571</td>
<td>$67,312</td>
</tr>
<tr>
<td>Scientific research and development services</td>
<td>$1,105,384,950</td>
<td>5,150</td>
<td>$110,077</td>
</tr>
<tr>
<td>Motor vehicle electrical and equipment manufacturing</td>
<td>$793,174,244</td>
<td>1,618</td>
<td>$71,983</td>
</tr>
<tr>
<td>Insurance carriers, except direct life</td>
<td>$758,994,642</td>
<td>1,678</td>
<td>$53,833</td>
</tr>
<tr>
<td>Employment and payroll of local govt, education</td>
<td>$643,421,492</td>
<td>7,664</td>
<td>$73,117</td>
</tr>
<tr>
<td>Other real estate</td>
<td>$638,911,460</td>
<td>3,854</td>
<td>$46,544</td>
</tr>
</tbody>
</table>
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 2020. 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 2020 Area 12 experienced the greatest year to year job loss, loosing 7,796 jobs, leaving an annual employment of 166,885 in 2020.

When considering the long-term employment trends by county, Union County saw the greatest growth in total employment of 38.6%, increasing from 30,573 jobs in 2001 to 42,392 in 2020. Similarly, Madison County total employment increased by 38.6%, from 18,474 jobs in 2001 to 23,669 in 2020. During the same period (2001-2020) three of the counties in Area 12 experienced a decline in total employment including Clark County (-16.25%), Logan County (-12.32%), and Champaign County (-2.8%).
A location quotient (LQ) is a metric that compares the relative concentration of a local region's 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 2020, the top occupation by LQ in Area 12 was engine and other machine assemblers, with an LQ of 8.19. 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 tool and die makers at 6.19, followed by multiple machine tool setters, operators, and tenders, metal and plastic with an LQ of 5.48, and miscellaneous assemblers and fabricators at 5.44.
Of the counties in Area 12, Union County had the highest average employee compensation of $78,051, also ranking 5 highest in Ohio. The next highest average employee compensation in Area 12 was Logan County ($59,257), followed by Madison County ($58,370), Champaign County ($58,161), and Clark County ($56,904).
IMPLAN® model, 2020 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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OSU Extension Community Development Mission:
We help communities enhance their well-being and create social, economic and environmental conditions in which they can thrive.