Extension Area 6: Economic Overview

Lake, Geauga, Ashtabula and Trumbull Counties

Regional Overview

OSU Extension Area 6 is a four-county area in the north-east part of the state, including Lake, Geauga, Ashtabula, and Trumbull counties. In 2020, the combined Area 6 footprint is 1,950 square miles (mi²) supporting a population of 626,562 residents and an overall population density of 317 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, Lake County has the highest population density of 1,011, followed by Trumbull County with a population density of 321, while Geauga and Ashtabula counties ranged between 232 to 138 residents per square mile.

Overall, the combined population in Area 6 has remained consistent decreasing slightly by -3% from 645,518 in 2001 to a total population of 626,562 in 2020. However, there were some notable shifts in the population trends of individual counties between 2001 and 2020. Geauga County experienced the greatest amount of growth as the population increased by 4.3% from 91,429 in 2001 to 95,334 in 2020. During this period, Lake County underwent a population increase of 2.1% to a total of 232,410 in 2020, while Ashtabula County had a population decrease of -4.9% to a total of 97,413 in 2020. Between 2001 and 2020, Trumbull County experienced a decrease in population of -10.1% to a total of 201,405.

Key Stats
- Population 626,562
- Total of 416 Industries
- Total Employment of 298,546
- Gross Domestic Product $25.19B

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 6 by total output in 2020. Owner-occupied dwellings was the highest ranked industry with a total output of $2.58 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.

The industry with the second highest output in Area 6 was other real estate with an output of $1.71 billion, supporting 10,187 jobs, and an average employee compensation of $55,861.

The industry with the third highest output was hospitals at $1.11 billion, supporting 6,811 jobs, an and average employee compensation of $65,248.

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 12,457 employees. The average annual income for these workers was $76,019 per year.

Table 1: Area 6 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>Owner-occupied dwellings</td>
<td>$2,586,857,937</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Other real estate</td>
<td>$1,712,344,332</td>
<td>10,187</td>
<td>$55,861</td>
</tr>
<tr>
<td>Hospitals</td>
<td>$1,116,951,039</td>
<td>6,811</td>
<td>$65,248</td>
</tr>
<tr>
<td>Employment and payroll of local govt, education</td>
<td>$1,087,264,375</td>
<td>12,457</td>
<td>$76,019</td>
</tr>
<tr>
<td>Monetary authorities and depository credit intermediation</td>
<td>$1,073,758,496</td>
<td>2,251</td>
<td>$69,972</td>
</tr>
<tr>
<td>Other basic organic chemical manufacturing</td>
<td>$972,080,146</td>
<td>634</td>
<td>$146,977</td>
</tr>
<tr>
<td>Limited-service restaurants</td>
<td>$825,792,002</td>
<td>10,439</td>
<td>$18,755</td>
</tr>
<tr>
<td>Aircraft engine and engine parts manufacturing</td>
<td>$783,550,112</td>
<td>1,385</td>
<td>$79,688</td>
</tr>
<tr>
<td>Other plastics product manufacturing</td>
<td>$762,850,237</td>
<td>2,573</td>
<td>$73,309</td>
</tr>
<tr>
<td>Electric power generation- Nuclear</td>
<td>$733,260,552</td>
<td>794</td>
<td>$194,668</td>
</tr>
</tbody>
</table>
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 6 annual employment trends between 2001 and 2020. As shown in the chart, Area 6 experienced consistent growth between 2002 and 2008 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 6 decreased by -2% reaching a peak employment of 320,523 jobs in 2018. However, between 2019 and 2020 Area 6 experienced the greatest year to year job loss, losing 17,674 jobs, leaving an annual employment of 298,546 in 2020.

When considering the long-term employment trends by county, Geauga County saw the greatest growth in total employment of 4.3%, increasing from 91,429 in 2001 to 95,334 in 2020. Lake County total employment increased by 2.1%, from 227,648 jobs in 2001 to 232,410 in 2020. During the same period (2001–2020) two of the counties in Area 6 experienced a decline in total employment including Ashtabula County (-4.9%) and Trumbull County (-10.1%).

“Year-to-year, Area 6 total employment is down 17,674 Jobs in 2020”
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 6 demonstrating a significant concentration of workers relative to the nation. In 2020, the top occupation by LQ in Area 6 was metal workers and plastic workers, with an LQ of 3.28. This suggests the region has more than three times the number of metal workers and plastic workers compared to the national average. The second highest occupation by LQ in Area 6 was supervisors of production workers at 2.26, followed by other production occupations with an LQ of 2.00, and assemblers and fabricators at 1.83.
Image 2 illustrates the average employee compensation by county for 2020. 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.

Of the counties in Area 6, Lake County had the highest average employee compensation of $64,793. The next highest average employee compensation in Area 6 was Geauga County ($58,355), followed by Trumbull County ($54,321) and Ashtabula County ($52,548).
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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.