Extension Area 21: Economic Overview

Butler and Hamilton Counties

Regional Overview

OSU Extension Area 21 is a two-county area in the southwest part of the state, including Butler and Hamilton counties. In 2020, the combined Area 21 footprint is 874 square miles (mi²) supporting a population of 1,220,509 residents and an overall population density of 1,384 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, Hamilton County has the highest population density of 2,019 followed by Butler County with a population density of 830 residents per square mile.

Overall, the combined population in Area 21 has remained consistent increasing slightly by 4% from 1,177,014 in 2001 to a total population of 1,220,509 in 2020. However, there were some notable shifts in the population trends of individual counties between 2001 and 2020. Butler County experienced the greatest amount of growth as the population increased by 16% from 336,679 in 2001 to 390,600 in 2020. During this period, Hamilton County underwent a population decrease of -1.2% to a total of 829,909 in 2020. Hamilton County is the third largest county by population in Ohio while Butler County is the seventh largest county by population.

Key Stats

Population 1,220,509
Total of 429 Industries
Total Employment of 845,131
Gross Domestic Product $104.93B

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 21 by total output in 2020. Monetary authorities and depository credit intermediation was the highest ranked industry with a total output of $9.90 billion, supporting 14,000 jobs, and an average employee compensation of $104,655. However, when comparing 2020 to 2019, the data shows the monetary authorities and depository credit intermediation industry experienced a 6% increase in total output and an increase in total employment from 11,405 in 2019 to 14,000 jobs in 2020.

It is interesting to note that in 2019, the top total output industry in Area 21 was aircraft engine and engine parts manufacturing with $9.35 billion in total output. In 2020, this industry fell to fifth place in terms of total output in 2020 at $7.40 billion, a decrease of -26%.

The third highest industry by total output was the insurance carriers, except direct life industry with total output of $7.61 billion, supporting 13,132 jobs, and an average employee compensation of $115,679 per year.

Of the top 10 industries by total output, the sector with the most employees in the region was hospitals with a total output of $7.77 billion, supporting 43,068 jobs, and an average employee compensation of $79,834 per year.

The industry with the second highest total output in Area 21 was hospitals with a total output of $7.77 billion, supporting 43,068 jobs, and an average employee compensation of $79,834 per year.

Table 1: Area 21 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>Monetary authorities and depository credit intermediation</td>
<td>$9,902,481,132</td>
<td>14,000</td>
<td>$104,655</td>
</tr>
<tr>
<td>Hospitals</td>
<td>$7,777,800,803</td>
<td>43,068</td>
<td>$79,834</td>
</tr>
<tr>
<td>Insurance carriers, except direct life</td>
<td>$7,611,880,553</td>
<td>13,132</td>
<td>$115,679</td>
</tr>
<tr>
<td>Soap and other detergent manufacturing</td>
<td>$7,600,783,394</td>
<td>3,123</td>
<td>$400,158</td>
</tr>
<tr>
<td>Aircraft engine and engine parts manufacturing</td>
<td>$7,408,343,942</td>
<td>9,987</td>
<td>$164,644</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>$7,196,553,977</td>
<td>27,655</td>
<td>$159,228</td>
</tr>
<tr>
<td>Other real estate</td>
<td>$5,842,566,474</td>
<td>27,067</td>
<td>$78,410</td>
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<tr>
<td>Owner-occupied dwellings</td>
<td>$5,462,433,474</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Offices of physicians</td>
<td>$2,936,467,676</td>
<td>17,890</td>
<td>$145,605</td>
</tr>
<tr>
<td>Retail- Non-store retailers</td>
<td>$2,558,116,554</td>
<td>9,470</td>
<td>$65,904</td>
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</tbody>
</table>
Area 21 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 21 annual employment trends between 2001 and 2020. As shown in the chart, Area 21 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 21 increased by 7% reaching a peak employment of 883,715 jobs in 2019. However, between 2019 and 2020 Area 21 experienced the greatest year to year job loss, losing 38,584 jobs, leaving an annual employment of 845,131 in 2020.

When considering the long-term employment trends by county, Butler County saw the greatest growth in total employment of 24.4%, increasing from 162,995 in 2001 to 202,738 in 2020.

Hamilton County total employment decreased by -3.7%, from 667,030 jobs in 2001 to 642,393 in 2020.

"Year-to-year, Area 21 total employment is down 38,584 Jobs in 2020"

Chart 1: Area 21 Annual Employment
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 21 demonstrating a significant concentration of workers relative to the nation. In 2020, the top occupation by LQ in Area 21 was printing workers, with an LQ of 1.5. This suggests the region has nearly two times the number of printing workers compared to the national average. The second highest occupation by LQ in Area 21 was sales representatives-wholesale and manufacturing at 1.30, followed by other production occupations with an LQ of 1.28, and art and design workers, metal and plastic workers at 1.27.
Image 2: Average Employee Compensation by County

2020 Data and Dollar Year

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 21, Hamilton County had the highest average employee compensation of $84,376, also the highest of all Ohio counties. Butler County’s average employee compensation in Area 21 was $68,466 in 2020.
IMPLAN® model, 2020 Data, using inputs provided by the user and IMPLAN Group LLC. IMPLAN System (data and software). 16905 Northcross Drive, Suite 120, Huntersville, NC, 28078. www.implan.com

OSU Extension Community Development Mission:
We help communities enhance their well-being and create social, economic and environmental conditions in which they can thrive.

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