Extension Area 20: Economic Overview
Belmont, Guernsey, Monroe and Noble Counties

Regional Overview

OSU Extension Area 20 is a four-county area in the west-central part of the state, including Belmont, Guernsey, Monroe, and Noble counties. In 2020, the combined Area 20 footprint is 1,914 square miles (mi²) supporting a population of 133,452 residents and an overall population density of 70 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, Belmont County has the highest population density of 123, followed by Guernsey County with a population density of 75, while Noble and Monroe counties were 36 and 30 residents per square mile, respectively.

Overall, the combined population in Area 20 has remained fairly consistent, decreasing slightly by 4.4% from 139,611 in 2001 to a total population of 133,432 in 2020. However, there were also shifts in the population trends of individual counties between 2001 and 2020. Noble County’s population increased by almost 3% from 14,038 in 2001 to 14,450 in 2020, the only county out of the four to have grown during this two-decade period of time. Belmont and Guernsey counties underwent similar population decreases of 4.5% and 4.8% respectively, from 69,451 in 2001 to 66,325 in 2020 for Belmont, and from 40,959 in 2001 to 39,010 in 2020 for Guernsey. Monroe County experienced the greatest decrease in population with a loss of almost 1,500 residents, dropping from 15,163 in 2001 to 13,667 in 2020, a negative percentage change of almost 10%.

Key Stats
- Population 133,452
- Total of 270 Industries
- Total Employment of 55,671
- Gross Domestic Product $4.89B

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 20 by total output in 2020. Of jobs-producing industries, oil and gas extraction ranked highest with a total output of $410 million, supporting 360 jobs, with an average employee compensation of just over $100K. However, when comparing 2020 to 2019, the data shows that the oil and gas extraction industry decreased by 64% in total output, while the total employment increased by 68 jobs during the same time period. Average employment compensation also dropped slightly from about $107K to $100K.

The second highest jobs-producing industry by total output was the monetary authorities with depository credit intermediation industry with an output of $272 million, supporting 611 jobs. This industry was not included in the top ten in 2019. The support activities for oil and gas operations industry, which was in the second position in 2019 with total employment of 1,565, dropped off the 2020 top 10 list altogether. These changes indicate major shifts within the regional economy during this pandemic year.

Owner-occupied dwellings is not a job-producing industry but had the greatest total output in 2020 at $514 million, increasing output from 2019 by about $16 million. 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. During the pandemic, home-owners stayed home, spending more time and money to making improvements. 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: Top 10 Industries by Total Output

<table>
<thead>
<tr>
<th>Industry</th>
<th>Output</th>
<th>Total Employment</th>
<th>Average Employee Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupied dwellings</td>
<td>$513,716,977</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Oil and gas extraction</td>
<td>$410,191,261</td>
<td>360</td>
<td>$100,428</td>
</tr>
<tr>
<td>Monetary authorities and depository credit</td>
<td>$272,491,080</td>
<td>611</td>
<td>$60,008</td>
</tr>
<tr>
<td>Intermediation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogenous fertilizer manufacturing</td>
<td>$255,932,624</td>
<td>199</td>
<td>$132,521</td>
</tr>
<tr>
<td>Truck transportation</td>
<td>$254,407,420</td>
<td>1,474</td>
<td>$73,220</td>
</tr>
<tr>
<td>Electric power transmission and distribution</td>
<td>$252,246,817</td>
<td>196</td>
<td>$140,143</td>
</tr>
<tr>
<td>Support activities for oil and gas operations</td>
<td>$243,890,080</td>
<td>895</td>
<td>$88,767</td>
</tr>
<tr>
<td>Employment and payroll of local govt, education</td>
<td>$212,803,751</td>
<td>2,585</td>
<td>$71,708</td>
</tr>
<tr>
<td>Other engine equipment manufacturing</td>
<td>$199,096,649</td>
<td>234</td>
<td>$63,976</td>
</tr>
<tr>
<td>Soap and other detergent manufacturing</td>
<td>$188,517,091</td>
<td>126</td>
<td>$155,549</td>
</tr>
</tbody>
</table>
Area 20 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 20 annual employment trends between 2001 and 2020. As shown in the chart, Area 20 experienced a total decrease of 5,000 jobs or a percentage loss about -8% during this period of time. The greatest loss of employment took place 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. Between 2009 and 2012, annual employment dropped off but regained momentum in 2013. Employment peaked in 2015 at 63,623 before dropping yet again for the next five consecutive years. Total employment reached a low in 2020, at 55,670, most likely due to the pandemic.

When considering the long-term employment trends by county, Monroe County saw the greatest in percentage decrease in employment of almost -19% from 6,905 in 2001 to 5,603 in 2020.

“From 2001 to 2020, Area 20 total employment is down just under 5,000 Jobs”

During the same period (2001–2020) Guernsey and Noble counties experienced the least percentage loss in employment of -1.6% and -2.7% respectively. Belmont County, representing the largest number of jobs within the region, declined by almost -11% or from 29,697 to 26,448. None of the four counties added jobs during the time period between 2001-2020.

Chart 1: Area 20 Annual Employment
### Top 15 Occupations by Location Quotient

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 20 demonstrating a significant concentration of workers relative to the nation. In 2020, the top occupation by LQ in Area 20 was personal appearance workers, with an LQ of 13.42. This suggests the region has more than thirteen times the number of personal appearance workers compared to the national average. The second highest occupation by LQ in Area 20 was other construction and related workers at 2.39 followed by cooks and food preparation workers with an LQ of 1.57, supervisors of productive service workers at 1.54, and occupational therapy and physical therapist workers at 1.48.
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 20, Monroe County had the highest average employee compensation of $63,545, ranking in the middle in Ohio. The next highest average employee compensation in Area 20 was Guernsey County ($56,953), followed by Noble County ($54,941), and Belmont County ($53,126).
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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.