Extension Area 12: Economic Overview

Logan, Union, Champaign, Clark, and Madison Counties

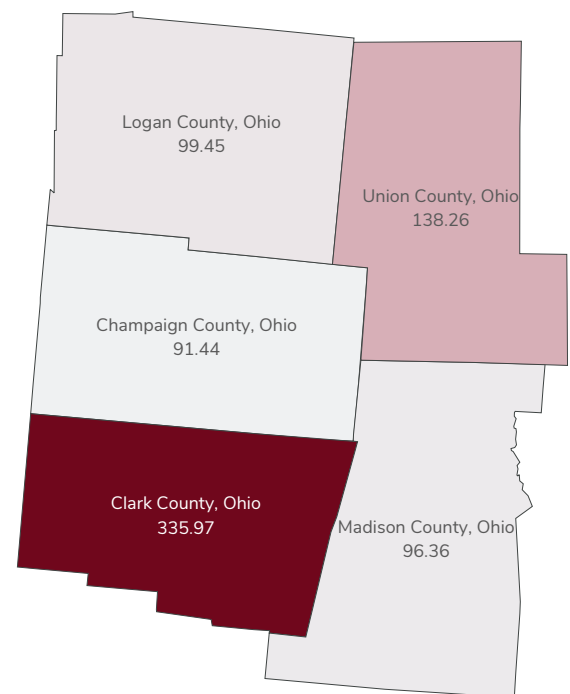## Regional Overview

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 is 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 has 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.

Image 1: OSU Extension Area 12 Population Density

Logan County, Ohio
99.45

Union County, Ohio
138.26

Champaign County, Ohio
91.44

Clark County, Ohio
335.97

Madison County, Ohio
96.36

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 2020 to 2019, 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

Industry Description	Output	Total Employment	Average Employee Compensation
Automobile manufacturing	$5,135,756,045	4,160	$113,916
Heavy duty truck manufacturing	$1,949,844,745	1,875	$82,246
Nitrogenous fertilizer manufacturing	$1,587,526,089	972	$262,380
Owner-occupied dwellings	$1,324,688,290	N/A	N/A
Other motor vehicle parts manufacturing	$1,166,904,425	2,571	$67,312
Scientific research and development services	$1,105,384,950	5,150	$110,077
Motor vehicle electrical and equipment manufacturing	$793,174,244	1,618	$71,983
Insurance carriers, except direct life	$758,994,642	1,678	$53,833
Employment and payroll of local govt, education	$643,421,492	7,664	$73,117
Other real estate	$638,911,460	3,854	$46,544

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 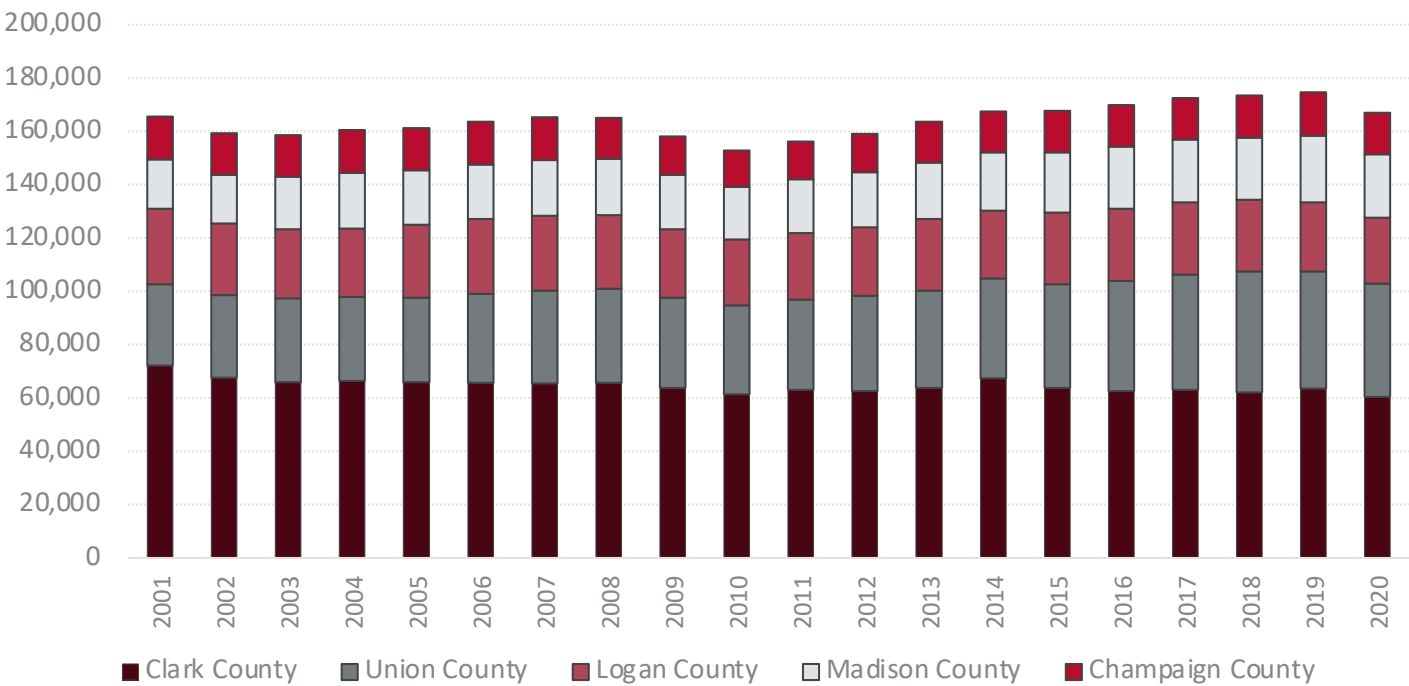global financial markets, and ultimately triggering the U.S. economy into a period of recession. Since 2010 annual employment in Area 12 increased by 14% reaching a peak employment of 174,681 jobs in 2019. However, between 2019 and 2020 Area 12 experienced the greatest year to year job loss, loosing 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 in 2001 to 42,392 in 2020. Similarly,

"Year-to-year, Area 12 total employment is down 7,796 Jobs in 2020"
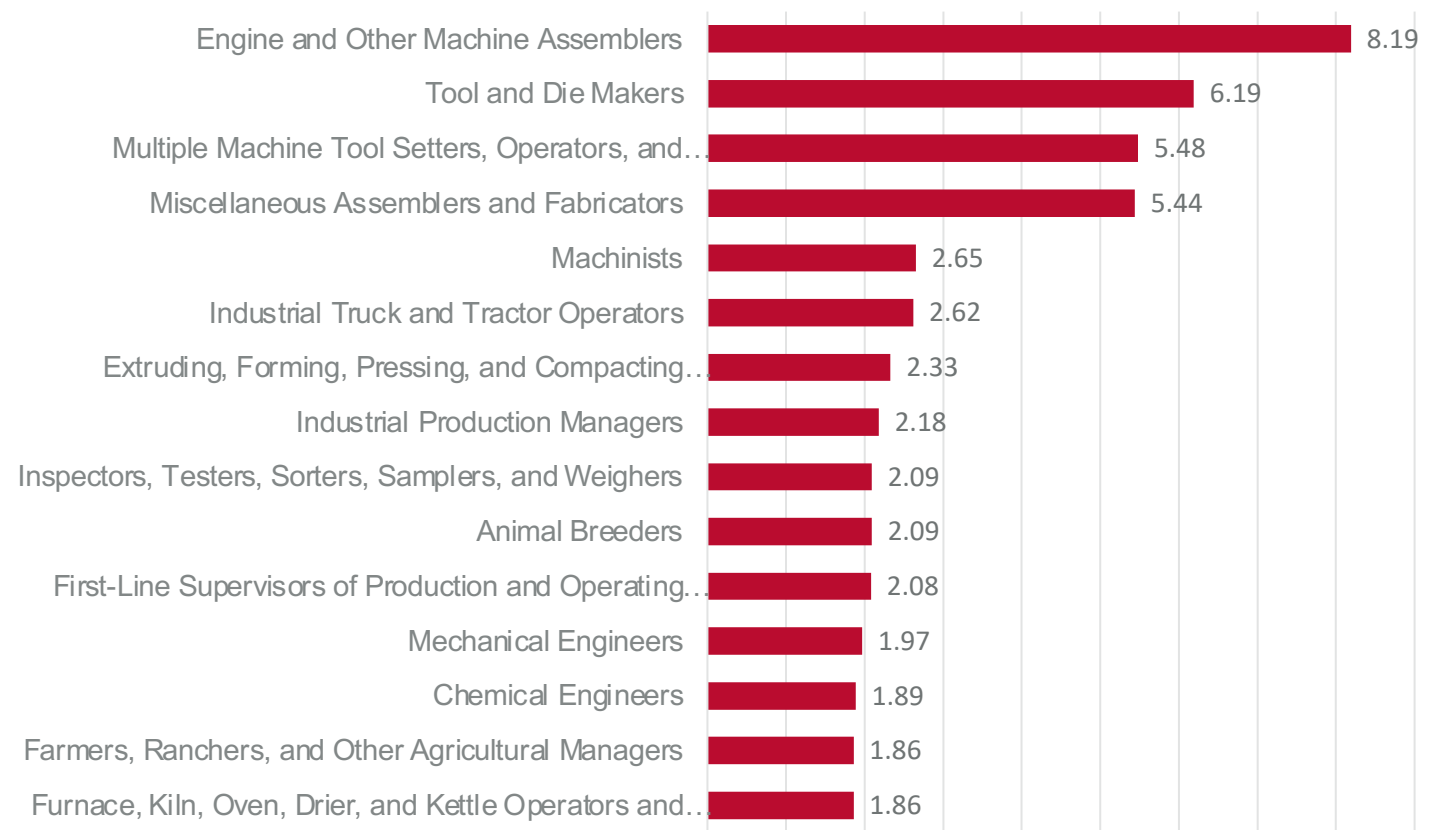
Madison County total employment increased by 38.6%, from 18,474 jobs in 2001 to 23,669 in 2020. During the same period (2001–2020) three of the counties in Area 12 experienced a decline in total employment including Clark County (-16.25%), Logan County (-12.32%), and Champaign County (-2.8%).

Chart 1: Area 12 Annual Employment

Top 15 Occupations by Location Quotient

Chart 2: Occupation Location Quotient

Occupation	LQ
Engine and Other Machine Assemblers	8.19
Tool and Die Makers	6.19
Multiple Machine Tool Setters, Operators, and…	5.48
Miscellaneous Assemblers and Fabricators	5.44
Machinists	2.65
Industrial Truck and Tractor Operators	2.62
Extruding, Forming, Pressing, and Compacting…	2.33
Industrial Production Managers	2.18
Inspectors, Testers, Sorters, Samplers, and Weighers	2.09
Animal Breeders	2.09
First-Line Supervisors of Production and Operating…	2.08
Mechanical Engineers	1.97
Chemical Engineers	1.89
Farmers, Ranchers, and Other Agricultural Managers	1.86
Furnace, Kiln, Oven, Drier, and Kettle Operators and…	1.86

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 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.

Image 2: Average Employee Compensation by County 2020 Data and Dollar Year

Williams $57,140

Fulton $59,021

Lucas $66,447

Ottawa $60,208

Erie $55,126

Lorain $62,030

Lake $64,793

Ashtabula $52,548

Cuyahoga $79,619

Geauga $58,355

Defiance $57,353

Henry $62,218

Wood $61,423

Sandusky $59,005

Huron $60,402

Medina $61,252

Summit $67,126

Portage $58,746

Trumbull $54,321

Paulding $54,824

Putnam $54,217

Hancock $70,899

Seneca $52,994

Ashland $52,283

Wayne $61,501

Stark $57,409

Mahoning $54,544

Van Wert $54,644

Allen $61,430

Wyandot $60,466

Crawford $55,707

Richland $54,868

Columbiana $53,708

Mercer $54,025

Hardin $49,126

Marion $60,291

Morrow $49,873

Holmes $54,128

Carroll $52,270

Jefferson $55,850

Auglaize $59,510

Logan $59,257

Knox

Tuscarawas $55,989

Shelby $66,990

Union $78,051

Delaware $77,522

Coshocton $57,119

Harrison $64,907

Darke $54,351

Champaign $58,161

Miami $58,653

Licking

Guernsey $56,953

Belmont $53,126

Clark $56,904

Madison $58,370

Franklin $78,324

Noble $54,941

Monroe $62,463

Pre $58

Washington $63,545

Average Employee Compensation by County (2020)

Average Employee Compensation
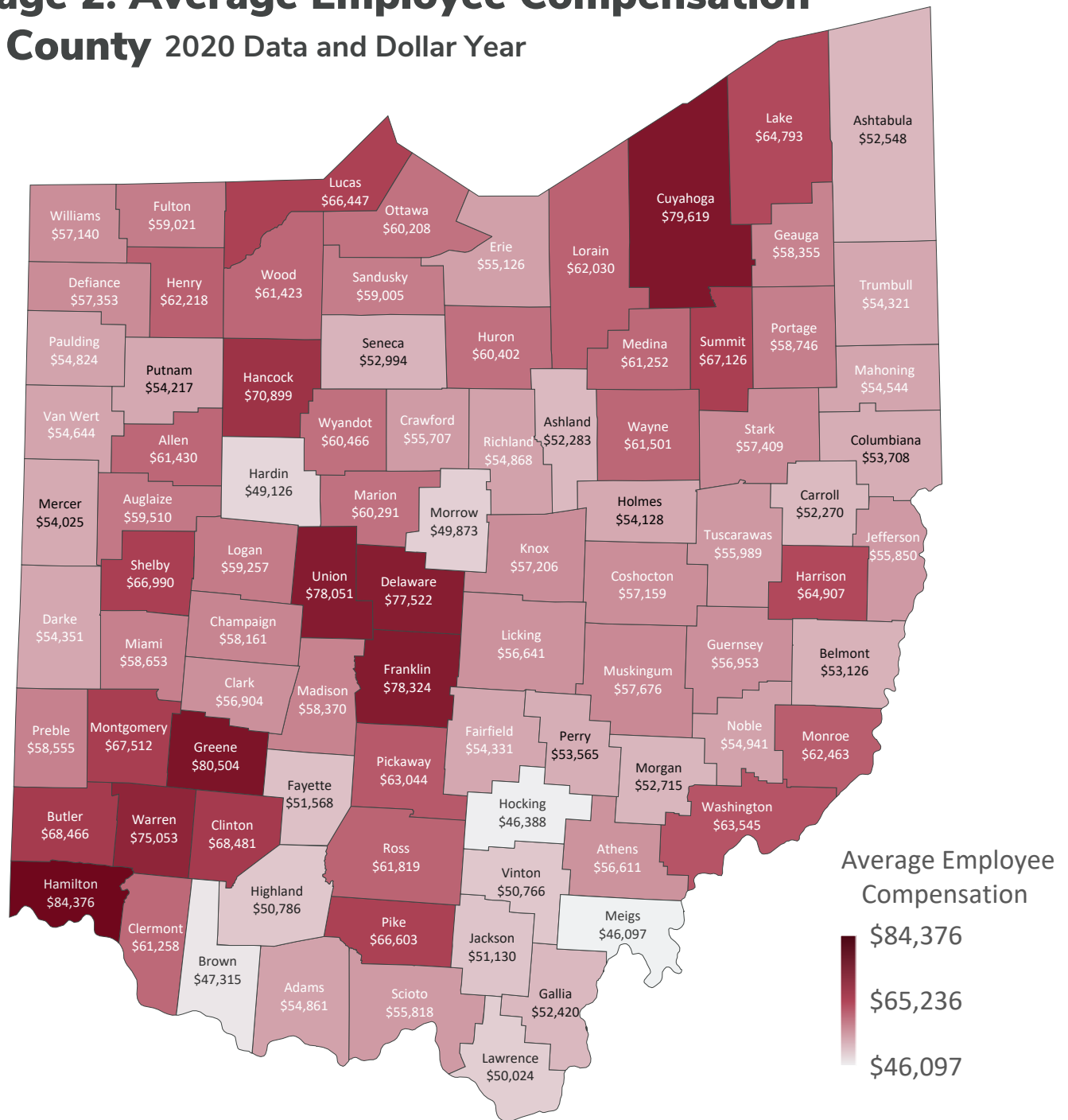
$84,376

$65,236

$46,097

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 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).

Powered by Bing
© GeoNames, TomTom

TEACHING

EXTENSION **RESEARCH**

OSU Extension Community Development IMPLAN Team

Nancy Bowen-Ellzey, Associate Professor and Field Specialist (bowen-ellzey.1@osu.edu)

Joe Lucente, Associate Professor, OSU Extension, CD, and Ohio Sea Grant College Program (lucente.6@osu.edu)

Amanda Osborne, Educator, CD, OSU Extension – Cuyahoga County (osborne.414@osu.edu)

Eric Romich, Associate Professor and Field Specialist (romich.2@osu.edu)

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

comdev.osu.edu