



The Montrose Group, LLC

TRANSFORMING YOUR WORLD

OPPORTUNITY GREAT LAKES GUIDE

A MONTROSE GROUP
WHITE PAPER

FROM THE MONTROSE GROUP, LLC

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MONTROSE GROUP'S CORPORATE SITE LOCATION PRACTICE DRIVEN BY MULTI-DISCIPLINARY TEAM



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OPPORTUNITY GREAT LAKES GUIDE

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EXECUTIVE SUMMARY. SIX GREAT LAKES STATES GROWTH PROSPECTS CONCLUSIONS

The Great Lakes states are primed for an economic renaissance. The Great Lakes Region includes eight states (Minnesota, Wisconsin, Illinois, Indiana, Michigan, New York, Ohio, and Pennsylvania) and two Canadian provinces (Ontario and Quebec) that surround the five interconnected freshwater bodies known as the Great Lakes. The area is home to 107 million people, 51 million jobs, and a GDP of US\$6 trillion – making the Great Lakes Economy a powerhouse on an international level.¹

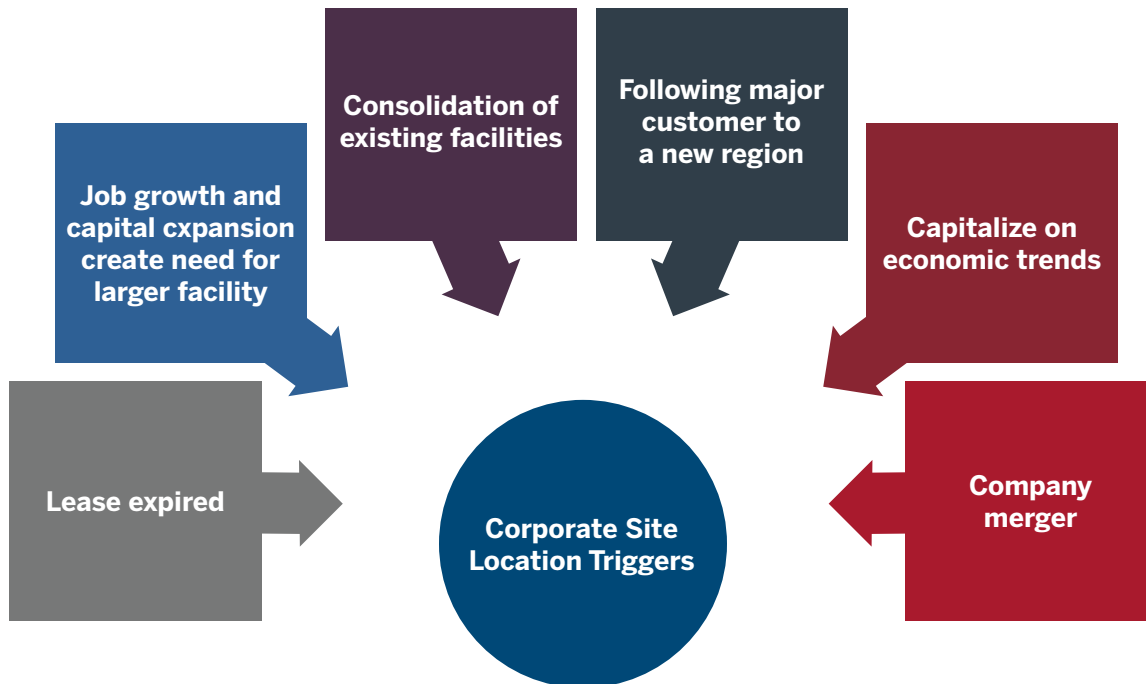
Measuring the economic opportunity of the Great Lakes States is best done from the perspective of a company considering the region for a corporate site location project. Corporate site location projects involve the process where companies decide where to grow or retain jobs and make capital investments. This process is influenced by macroeconomic, demographic, workforce, quality of life, cost of doing business, and industry cluster research as these companies want to invest in growing regions, with lower poverty rates and higher population growth, a competitive cost of doing business and a high quality of life attractive to a skilled workforce connected to common industries with this company. The Great Lakes States of Indiana, Illinois, Michigan, Ohio, Pennsylvania, and Wisconsin compete not just globally for high-wage jobs and capital investment but often with the Southern U.S. states to serve as the manufacturing heartland of the nation. Six economic conclusions about the growth prospects of the Great Lakes states compared to the South are crystal clear.

1. The Great Lakes states are not growing as quickly as Southern states related to population and macroeconomic measures as the long-term Southern and Southwest U.S. state expansion continues in 2023, and this slower population and economic growth serve as a threat to future economic expansion in the Great Lakes Region.
2. The Great Lakes States have a large pool of manufacturing companies and workers, but their manufacturing labor wage rates remain higher than their Southern State competitors.
3. The Great Lakes States have become a less costly place to do business as state income taxes have been reduced but still ensure residents and not just companies bear the burden for the cost of local and state government operations than states that lack an income tax at all.
4. The Great Lakes States have enhanced their quality of life but also have more affordable housing than faster-growing Southern markets which can have an outsized influence on corporate site location decisions as companies remain concerned about the lack of available and affordable workforce housing for their workers.
5. The Great Lakes states remain an industrial powerhouse with every state in the region having an above-average base of manufacturing workers and Indiana leading the way as the number one state in the nation on a per capita basis for manufacturing.
6. The Great Lakes States benefit from highly function regional and state economic development organizations and usually aggressive economic development incentives that can make up for higher labor wage rates for competitive corporate site location projects.

Indiana, Illinois, Michigan, Ohio, Pennsylvania and Wisconsin remain economic powerhouses but operate in a highly competitive market to retain and attract high-wage jobs and capital investment.



Anatomy of a Great Lakes Corporate Site Location Project. The corporate site location process decides where a company locates, and this process is about a lot more than tax incentives. Triggers such as the end of a real estate lease, growth needs beyond their current facility, decay of their existing facility, consolidation of existing facilities, a growth opportunity tied to a customer, a merger of companies, or a company seeking to capitalize on an economic trend tell a company they should undertake a corporate site location project. The corporate site location process begins with defining the project to learn about the industry, the number of jobs, payroll, and capital investment planned by a company, needs for the project site, and geographic markets that fit the company's business plan leading to the creation of potential state and regional target list for the company's location. Next, market research begins to understand the economic analysis of growth, industry cluster, labor shed, transportation, infrastructure, and supply chain of an industry, company, and region and potential real estate options for each of these markets. Sites in these states and regions are reviewed as well as the real estate, labor, and tax policy all impacting the cost of doing business in a region followed by an analysis to review relevant infrastructure finance programs and economic development incentives.



Upon completion of this research, the company will then narrow its search to a handful of sites in multiple states and cities that all would fit the company's business purpose. A confidential Request for Proposal or project letter is then sent from a corporate site location consultant or legal counsel that outlines the nature of the corporate site location project and the specific needs of the company related to the site in question with specific infrastructure, workforce, incentive, and site needs. Regional economic development organizations, most often public-private-partnerships at the local level and a mix of public and private organizations at the state level help guide the corporate site location process once a company is ready to focus on specific geographic markets and sites. In the Great Lakes States, regional economic development organizations could be large multi-county private sector organizations charge with negotiating corporate site location projects such as the Pittsburgh Regional Alliance, One Columbus, Team NEO, Ohio SE, Dayton Development Coalition, Regional Growth Partnership, REDI Cincinnati, Detroit Regional Partnership, Indy Partnership, World Business Chicago, New North and other regional groups in Wisconsin, and state economic development organizations such as the Commonwealth of Pennsylvania Department of Economic and Community Development, Indiana Economic Development Corporation, Intersect Illinois, JobsOhio, Michigan Economic Development Corporation, and the Wisconsin Economic Development Corporation. City and county governments may often be involved as well in supporting corporate site location, negotiating economic development incentives as well as even awarding economic development incentives.



Montrose Group Corporate Site Location Process



Site acquisition, land use entitlements, economic development incentives, and government compensation agreements are then negotiated. Defining the economic prospects, workforce capabilities and cost of doing business in multiple regions is the first step for companies considering an economic expansion.

Great Lakes States Demographic Analysis. The Great Lakes Region’s demographic data offers a mixed bag for corporate site location projects. Key demographic measures that impact corporate site location decisions include total population and population growth which impact the ability of a region to provide skilled workers—the larger the population pool the more chances for creating a skilled worker. Also, homeownership and median home value illustrate whether workers will be able to afford housing. Labor issues such as the level of higher education degree attainment and how many workers are in the active workforce impact a region’s ability to attract certain types of companies and companies at all if they have no room for growth in the active labor market. Quality of life issues such as commute times to work matter as well and overall wealth measures such as median household income and poverty rate impact company location decisions.

Great Lakes Demographic Profile		
Fact	Great Lakes States	United States
Population	60069787	333287557
Population Growth 2020-22	-0.0035	0.006
Home Ownership Rate	68%	64%
Median Home Value	\$183,467	\$244,900
Bachelor's Degree Rate	31%	33%
Civilian Labor Participation Rate	63.75%	63.10%
Commute Time	24.98	26.8
Median Household Income	\$65,719	\$69,021
Poverty Rate	12.20%	11.60%

Source: US Census Bureau

As the table above illustrates, the Great Lakes states of Indiana, Illinois, Michigan, Ohio, Pennsylvania, and Wisconsin are home to over 60 M residents, but the region is not growing from a population standpoint which is troubling. Homeownership rates in the Great Lakes are higher than the national average. The median home value is lower than the national average, which is an advantage, but the bachelor’s degree attainment rate is lower than the national average. Commuting times are below the national average, but the median household income is below the national average. Finally, the poverty rate in the Great Lakes Region is slightly higher than the national average.

The demographic measures of major cities in the Great Lakes states have a big impact on corporate site location decisions. The over 500,000 in Milwaukee create a strong economic base for Wisconsin’s economic future. Affordable home prices are a positive point for Milwaukee, but the city is struggling to grow and has a below-average college-educated population rate which negatively impacts the region’s ability to attract advanced services and tech companies. Milwaukee’s high poverty rate puts it higher than some other Midwestern cities but not at Detroit’s level. Pennsylvania is the nation’s 5th largest state in the union with 12.7 M people, but its strategic location is connected to the Great Lakes in the west and the 50 million East Coast I-95 corridor positions Pennsylvania for corporate site location projects. The demographic measures of major



cities in states like Pennsylvania have a big impact on corporate site location decisions. The 300,000 in Pittsburgh creates a strong economic base for Western Pennsylvania's economic future. Affordable home prices and a highly educated population have helped Pittsburgh transition from a global steel manufacturing center to a tech hub with a continued strong base of manufacturing. Pittsburgh's slightly high poverty rate puts it higher than some other Midwestern cities but not at Detroit's level. Illinois is the nation's 6th largest state in the union with 12.7 M people but its strategic location in the middle of the United States relates to a global airport and driven by the U.S.'s third largest city positions Illinois for corporate site location projects. The demographic measures of major cities in states like Illinois have a big impact on corporate site location decisions. The nearly 3 M residents of Chicago create a global hub for corporate headquarters and other economic development projects. Chicago's large base of college-educated workers illustrates the city's strength as an advanced services jobs center. Also, worthy of note is Chicago's low poverty rate compared with other Great Lakes urban competitors.

Great Lakes Urban Center Demographic Benchmark Comparison						
Fact	Milwaukee	Indianapolis	Pittsburgh	Chicago	Detroit	Columbus
Population	569,330	882,039	300,431	2,696,551	632,464	906,528
Population Change from 2020 to 2021	-1.4%	-0.6%	-0.9%	-0.1%	-1.1%	0.1%
Homeownership Rate	40.90%	54.50%	47.40%	45.60%	48.30%	44.80%
Median Home Value	\$135,600	\$156,300	\$147,600	\$277,600	\$57,700	\$174,400
Bachelor's Degree Rate	25.50%	32.90%	45.70%	41.70%	16.20%	37.90%
Civilian Labor Participation Rate	63.90%	66.80%	64.00%	67.30%	54.30%	70.50%
Mean Commute Time	22.3	23.9	23.9	34.4	25.7	22
Median Household Income	\$45,318	\$54,321	\$54,306	\$66,576	\$34,762	\$58,575
Poverty Rate	24.10%	16.40%	19.70%	17.10%	31.80%	18.40%

Source: US Census Bureau

Population growth is a critical measure of economic success. Growing population centers attract companies struggling to find skilled labor. A growing population base creates a larger pool of workers for companies. As the table below illustrates, Milwaukee along with traditional urban industrial cities like Pittsburgh are not growing at the same pace as faster developing cities such as Columbus, and Indianapolis and southern markets such as Charlotte.

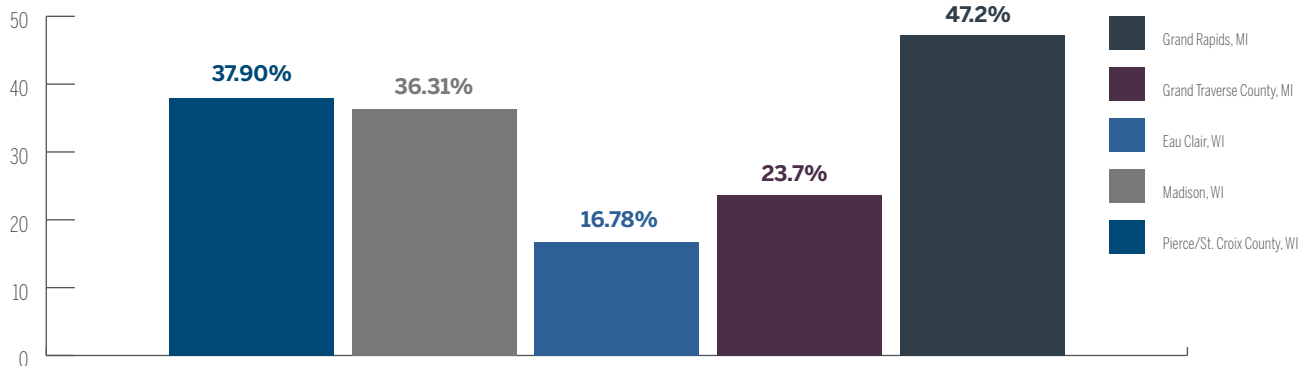
Population Growth							
Year	Columbus	Chicago	Milwaukee	Pittsburgh	Charlotte	Indianapolis	Detroit
2021	906,528	2,696,551	569,330	300,431	879,709	880,104	4,365,205
2020	905,860	2,699,347	576,301	302,777	876,747	869,387	4,385,748
2019	899,908	2,709,534	590,952	300,056	887,928	864,447	4,319,413
2018	891,448	2,718,555	591,961	300,669	874,187	857,637	4,323,861
2017	882,253	2,722,586	594,154	301,606	861,170	853,431	4,322,490
2016	867,384	2,714,017	597,179	304,789	843,989	846,674	4,317,016
2015	855,276	2,717,534	600,607	304,224	826,270	841,449	4,310,146
2014	841,931	2,712,608	600,775	306,080	807,875	835,097	4,311,488
2013	827,994	2,706,101	599,997	307,006	792,408	828,841	4,305,782
2012	812,872	2,702,471	598,627	306,455	773,506	822,006	4,300,923
2011	800,677	2,700,741	597,132	306,117	754,943	815,607	4,291,613
2010	790,942	2,703,466	594,883	305,351	738,446	809,804	4,291,281
Percent Change	14.61%	-0.26%	-4.30%	-1.61%	19.13%	8.68%	1.72%
Number Change	115,586	-6,915	-25,553	-4,920	141,263	70,300	73,924

Source: US Census Bureau



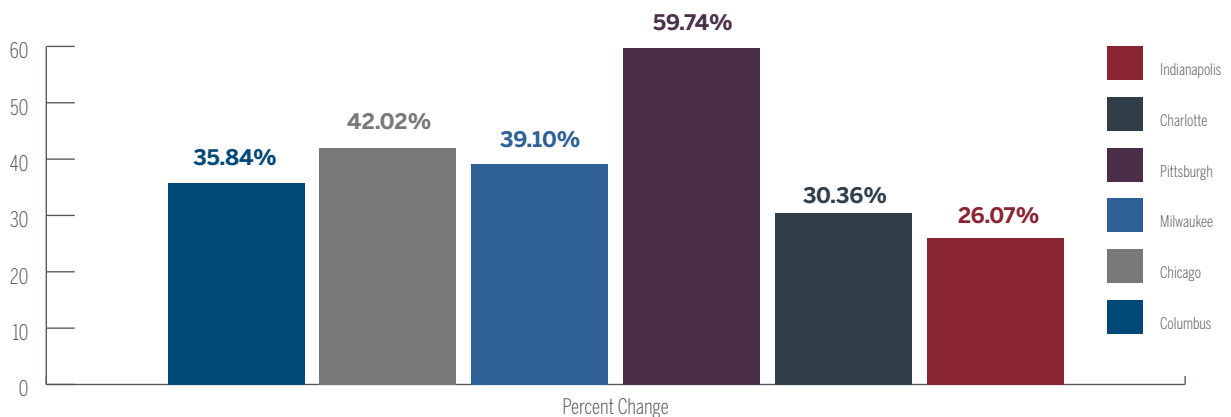
Not all the economic growth is happening in the major urban markets in the Great Lakes states. Mid-sized urban markets in these states have seen substantial population growth—in some cases larger than their big city neighbor. Regions from suburban Minneapolis in Wisconsin to Eau Clair and Madison Wisconsin and Traverse City and Grand Rapids Michigan have all illustrated steady growth while their big city counterparts have lost population. All of these communities have seen double-digit population growth—some over 40% illustrating the strength of not just these regions but of the state to retain and grow a population base critical to economic success. Since 2017, Wisconsin has had a net inflow of families in their prime working age of 25-54. On average, families moving to Wisconsin were larger than those that moved out of the state.

Mid-Sized Great Lakes Community's Population Growth



Median household income refers to the income level earned by a given household where half of the households in the geographic area of interest earn more and half earn less as measured by the U.S. Census Bureau. Median household income is an important demographic measure as it tells companies the relative wealth of a geographic region. The chart below compares the median household income of Milwaukee to competitor metro regions. Pittsburgh is the leader in the Great Lakes states but also has median household growth higher than the southern regional leader of Charlotte.

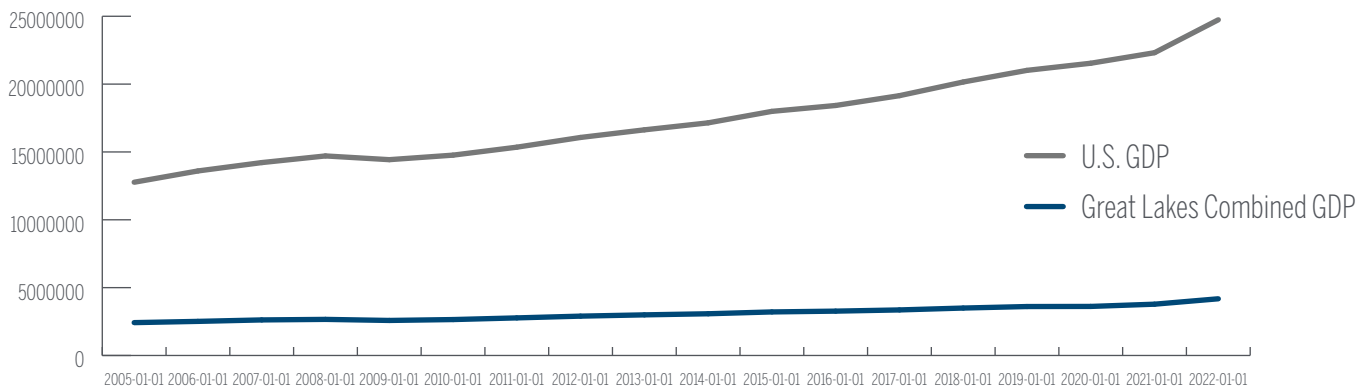
Median Household Income Growth from 2010-2021



Source: U.S. Census Bureau

Great Lakes States Macroeconomic Analysis. The corporate site location process begins with listening to define the project to learn about the industry and number of jobs, payroll, and capital investment planned by a company or project site all leading to the creation of a larger potential state and regional target list for the company's location. Next, market research begins to understand the economic analysis of growth, industry cluster, labor shed, transportation, infrastructure, and supply chain of an industry, company, and region and potential real state options. The economic growth of these states was compared to measuring the vitality of the state through a long-term review of Gross Domestic Product growth. Measuring a state's macroeconomic growth is just the start of the data dive for a corporate site location project. For companies seeking a large pool of skilled workers, large to mid-sized urban markets are often targets for future economic growth. These communities offer an opportunity for economic growth with a skilled and more affordable workforce.

The five Great Lakes States including Indiana, Illinois, Michigan, Ohio, Michigan, Pennsylvania, and Wisconsin have a total economic output as measured by the combined Gross Domestic Product (GDP) of \$ 55,686,386.1 which has grown steadily as illustrated by the chart below. Adding in the two Canadian provinces (Ontario and Quebec), Minnesota and New York that touch the Great Lakes illustrate this region is home to 107 million people, 51 million jobs, and a GDP of US\$6 trillion – making the Great Lakes Economy a powerhouse on an international level.²



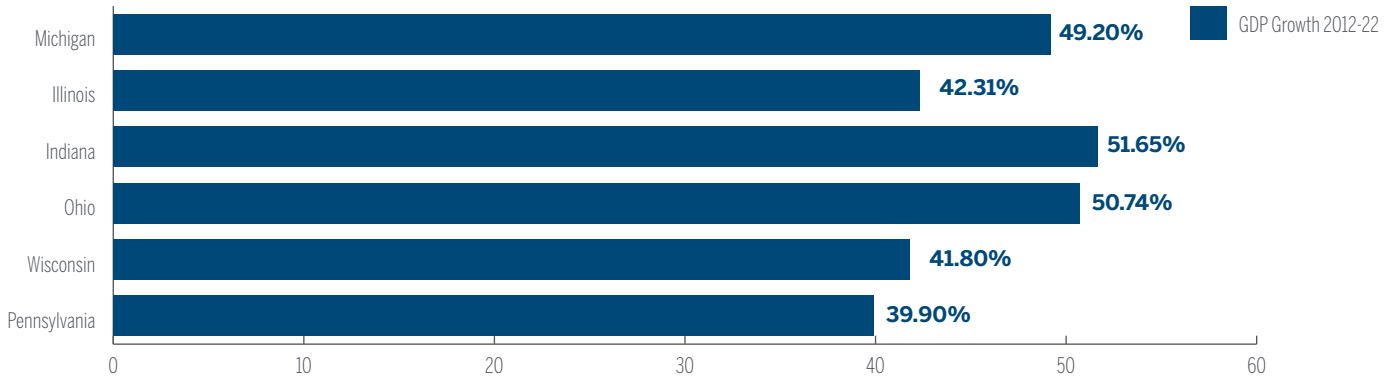
Source: St. Louis Federal Reserve Bank

Comparing regional gross domestic product growth is another critical economic development measure that companies consider. A region's gross domestic product is the sum of its total economic output for the public and private sectors. Regions with growing economies are generally more attractive to companies considering a corporate site location decision. As the chart above illustrates, the Great Lakes states (Indiana, Illinois, Michigan, Ohio, Pennsylvania, and Wisconsin) GDP has grown substantially over the last several years and has been growing by 72% since 2005, illustrating the economic strength of the region. However, the national GDP has grown over 93% during that same timeframe illustrating that the Great Lakes states have some work to do.

At a state level, the Great Lakes states illustrate consistent growth for all the states of Indiana, Illinois, Michigan, Ohio, Pennsylvania and Wisconsin as illustrated by the chart below. The Great Lakes states with the strongest macroeconomic growth are tied to large manufacturing-based economies.



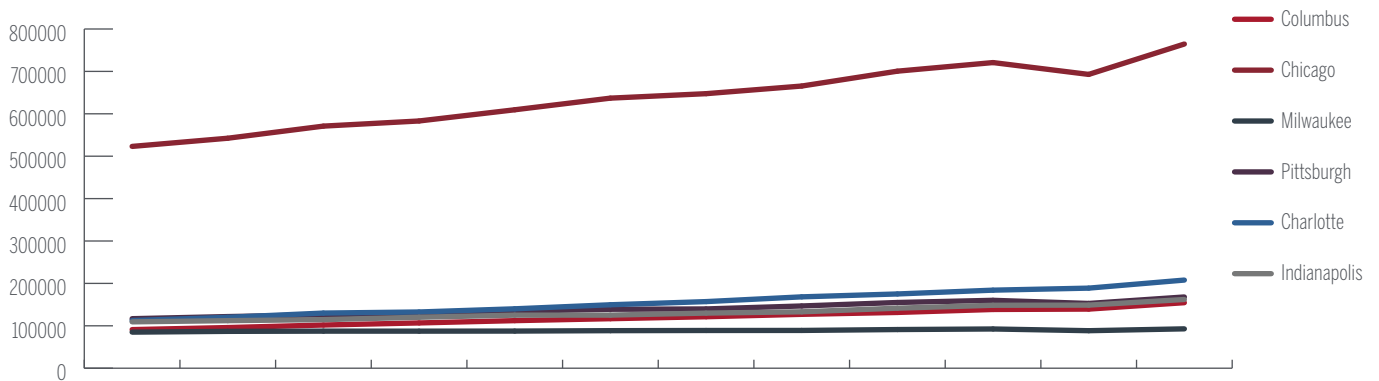
Great Lakes States GDP Growth 2012-22



Source: St. Louis Federal Reserve FRED

As the table above illustrates, Pennsylvania, Wisconsin and Illinois enjoyed growth in its GDP from 2012 to 2022 but the state's overall does not compare well to other Great Lakes states such as Ohio, Indiana and Michigan.

Regional GDP Comparison



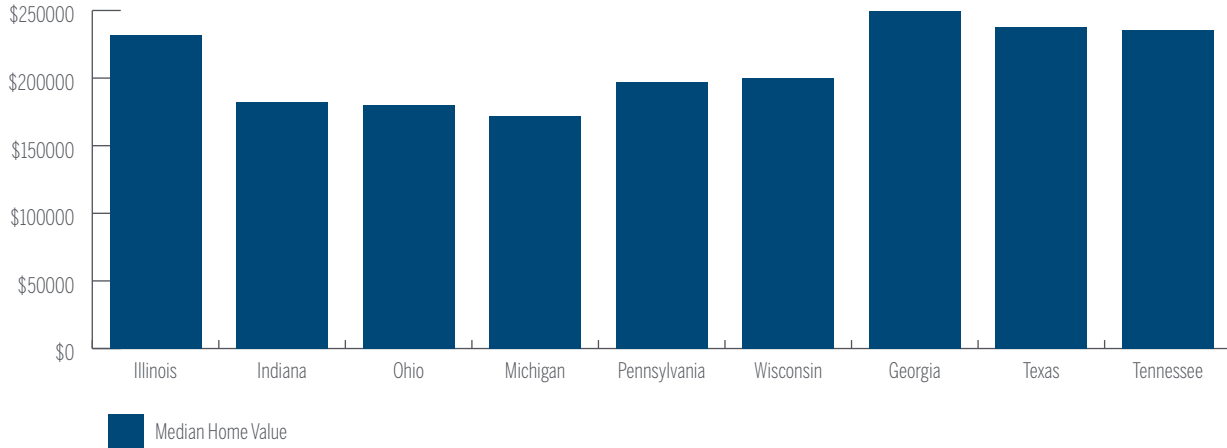
Source: St. Louis Federal Reserve, FRED

As the chart above illustrates, the major metro regions in the Great Lakes are growing economically in lockstep but not at the rate of southern hyper-growth markets like Charlotte.

Great Lakes States Housing Analysis. The Great Lakes region's housing stock is a critical corporate site location advantage. Housing is joining workforce development to become a major corporate site location issue. Regions not growing are failing to develop substantial residential growth. Finally, rural regions are losing population at an alarming rate and desperately need new residential products to retain existing employers and to keep their young people. No matter where you are in the United States, the availability of attainable housing that young and old alike can afford is needed. The simple fact is regions cannot retain and attract companies without workers—workers won't go to regions where they cannot afford housing.



Median Home Value

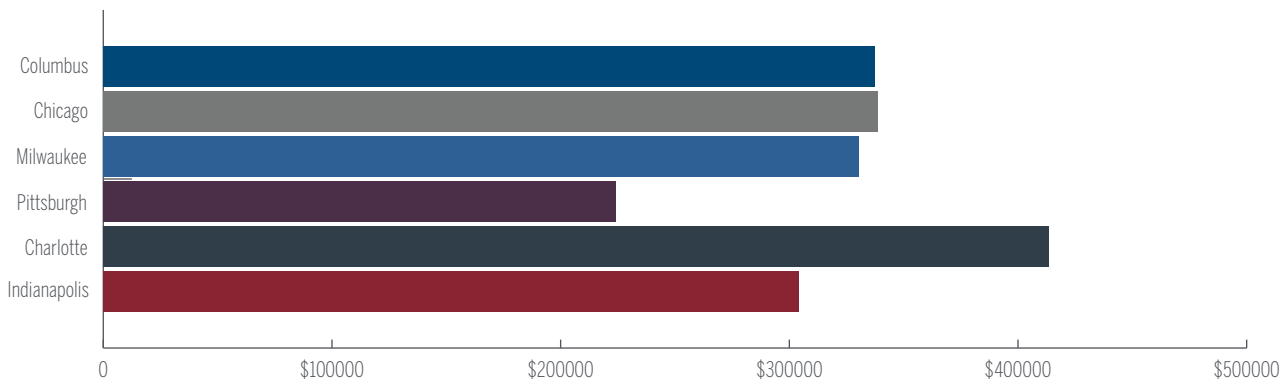


Source: U.S. Census Bureau

As the table above illustrates, the median home value in the Great Lakes states compares well from an affordability standpoint to faster-growing southern states such as Georgia, Tennessee, and Texas. While these southern states have grown substantially from a population and economic standpoint in recent decades, data such as the median home value indicate this fast-growth market is not keeping up with housing demand and this is impacting their cost of doing business from a residential standpoint.

The median residential listing price is another important measure of the strength of the regional housing market. This is an indicator of the current and future strength of the housing market. Also, from a corporate site location standpoint, lower median residential listing prices illustrate markets where a company's employees can afford to buy a home. Many fast-growing markets are simply not keeping up with the housing demand which is dramatically increasing the price of housing.

2022 Median Residential Listing Price

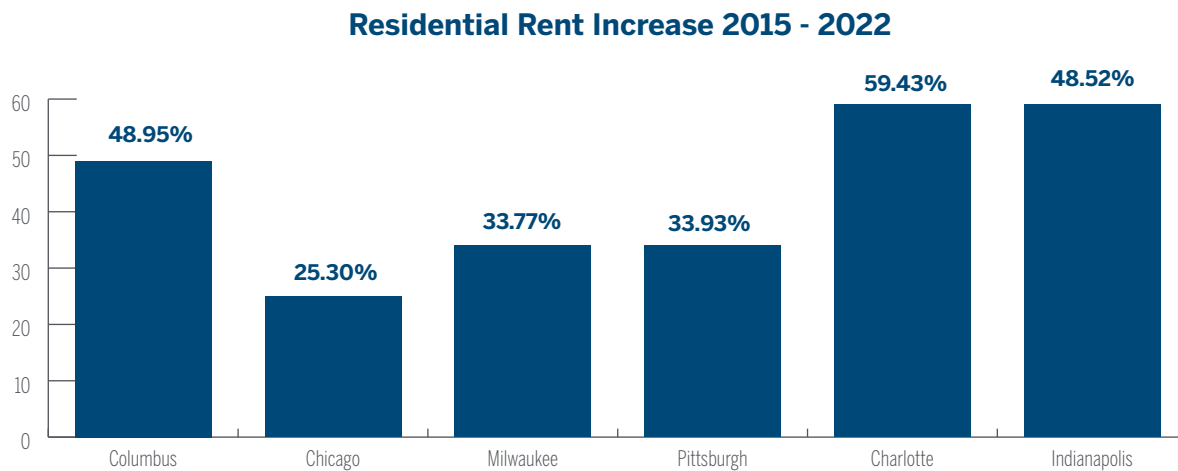


Source: St. Louis Federal Reserve

Pittsburgh's residential costs are below its Great Lakes as well as faster growing southern markets like Charlotte as illustrated by the chart above. However, all the Great Lakes states, even mega-city Chicago offer residential listing prices below faster-growing southern markets offering a housing advantage for the Great Lakes. The housing advantage for the Great Lakes is even clearer when examining the residential rent



increases. As the chart below illustrates, residential rental prices grew the most in Charlotte but the Great Lakes states urban centers such as Chicago, Pittsburgh, and Milwaukee remain competitive for housing costs. Faster-growing Great Lakes markets such as Columbus and Indianapolis have higher rental rate increases than regional peers but again below southern competitors.



Source: Zillow.com

Growing housing that workers can afford is a critical corporate site location issue and Illinois's major urban centers offer comparatively affordable housing that is experiencing price increases with a dwindling supply. Housing is a growing corporate site location issue for all regions of the nation and Ohio falls in line with this national trend.

Great Lakes States Quality of Life Analysis. The quality of life in the Great Lakes is a major regional asset. Placemaking is really a workforce development strategy to retain and attract the best talent by improving the quality of life where those workers will live, work and play. Placemaking is nothing new. The International Economic Development Council has defined placemaking as “the practice of enhancing a community’s assets to improve its overall attractiveness and livability.” The Montrose Group Quality of Life (QLI) Index is a multidimensional analysis that scores key aspects of a community and can be thought of as an analysis of a range of objectively measurable community and social well-being conditions in seven key areas that are measured nationally and at the statewide level. Quality of Life data are weighted to generate a community Quality of Life score that is then compared to a baseline score of one hundred. Communities with a baseline score of one hundred or higher have a ranking that meets or exceeds federal and state statistics, a score between 60-80 indicates a good ranking, and so on. Communities with a higher QLI score have an exceptional competitive advantage over other areas.

The Montrose Group Quality of Life Index is a multidimensional analysis that scores key aspects of a community and can be thought of as an analysis of a range of objectively measurable community and social wellbeing conditions in seven key areas that are measured nationally and at the statewide level. Federal, state, and proprietary data sources are used to collect and analyze Quality of Life data which are weighted to generate a community Quality of Life score that is then compared to a baseline score of 100. Communities with a baseline score of 100 or higher have a ranking that meets or exceeds federal and state statistics, a score between 60-80 indicates a good ranking, and so on. Much like the federal location quotient statistic, communities with a higher QLI score have an exceptional competitive advantage over other areas. The QLI analysis should be used to understand strengths and weaknesses and identify opportunities to drive change via community development strategies, private sector engagement, and multi-jurisdictional cooperation. This wide scope makes QLI research a powerful, practical, and effective measure of socioeconomic development policies and actions.



A *Crime Index* provides a view of the relative risk of crime in a community as compared to the rest of the nation using data from resources such as the Federal Bureau of Investigation’s Uniform Crime Reporting system. A *Housing Index* measures the availability and cost of as the key to ensuring mobile talent considers your community as a viable community to live in and that there is adequate housing stock to choose from. A *Commute Time Index* measures the length of time it takes employees to get to work which impacts productivity for an employee at work and enjoying their personal life. A *Walkability Index* is a nationwide geographic ranking system led by the U.S. Environmental Protection Agency. The Walkability Index uses selected variables on density, diversity of land uses, and proximity to transit to calculate the ease of walking around. Walkable communities vary depending on population and land mass (urban, suburban, rural) and consider access to public transit.³

Quality of Life Index Analysis

<p>Crime</p> <p>Assesses relative risk of crime in seven major crime areas including personal crime, murder, rape, robbery, assault, burglary, larceny, and motor vehicle theft</p>	<p>Housing</p> <p>Ratio of rental cost compared to income, breakdown of home prices by income, eviction rates, and cost of homeownership</p>	<p>Commute Times</p> <p>Average commute times as defined by U.S. Census Bureau compared to state averages</p>
<p>Walkability</p> <p>U.S. Environmental Protection Agency Walkability Index</p>	<p>Healthcare</p> <p>Analyzes premature deaths, adult obesity, uninsured residents, and Primary Care Physicians per resident</p>	<p>Education</p> <p>Assesses statewide performance index rating, high school graduation rate, high school degree or higher attainment, and Bachelors degree or higher attainment</p>
<p>Wealth</p> <p>Measures per capita income, poverty rate, personal savings, and per capita retail sales</p>		

A *Healthcare Index* considers access to healthcare services and helps identify underperforming markets where barriers to health care, such as social, racial, economic, and physical factors may exist, and where there are markets that have the services needed to support healthy living.⁴ An *Education Index* examines educational attainment which impacts the economic success of the region but also the industries likely to be attracted to the region and the quality of the local schools. A *Wealth Index* considers the education and income of individuals and looks at the wealth of a community.

Comparing regional gross domestic product growth is another critical economic development measure that companies consider. A region’s gross domestic product is the sum of its total economic output for the public and private sectors. Regions with growing economies are generally more attractive to companies considering a corporate site location decision. Montrose Group’s Quality of Life Index analysis recently completed for Strongsville, Ohio provides an illustration as to how this research provides an objective measure of a community from a quality of place perspective.



Strongsville, Ohio Montrose Group QLI Analysis

Strongsville Crime Index



Strongsville Housing Index



Strongsville Commute Index



Strongsville Walkability Index



Strongsville Healthcare Index



Strongsville Education Index



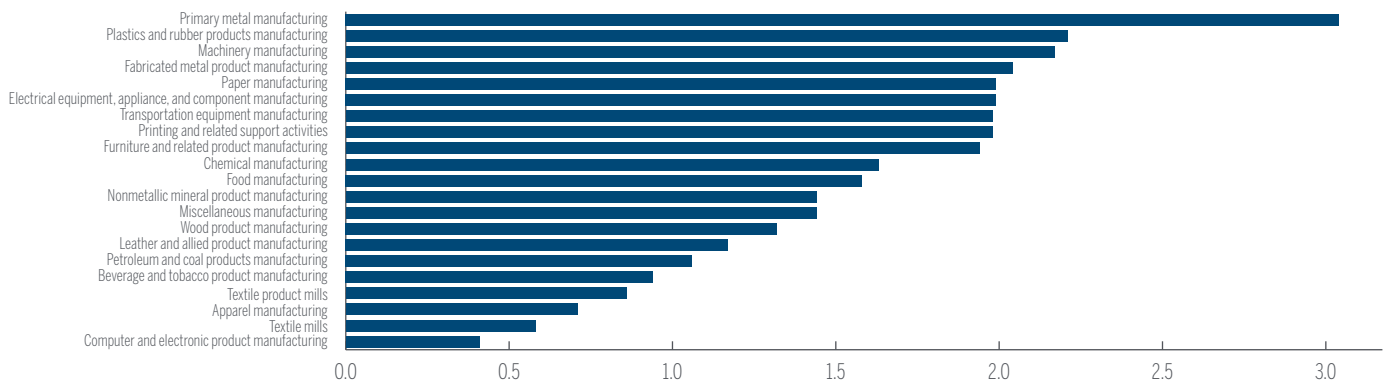
Strongsville Wealth Index



Great Lakes States Workforce and Industry Analysis. The Great Lakes states remain a manufacturing powerhouse. Manufacturing remains at the center of the Great Lakes economy. An important measure for these regions is their concentration in the company's industry. Industry clusters are regional concentrations of related industries.⁵ Clusters consist of companies, suppliers, and service providers, as well as government agencies and other institutions that provide education, information, research, and technical support to a regional economy.⁶ Clusters are a network of economic relationships that create a competitive advantage for the related firms in a particular region, and this advantage then becomes an enticement for similar industries and suppliers to those industries to develop or relocate to a region.⁷ Clusters exist in all types of economies and are more prevalent in locations that achieve better performance relative to their overall stage of development.⁸ It is useful to view economies through the lens of clusters rather than specific types of companies, industries, or sectors because clusters capture the important linkages and potential spillovers of technology, skills, and information that cut across firms and industries.⁹ Viewing a group of companies and institutions as a cluster highlights opportunities for coordination and mutual improvement. A Location quotient is an indicator of the economic concentration of a certain industry in a state, region, county, or city compared to a base economy, such as a state or nation that measures industry clusters in a region. A location quotient greater than 1 indicates the concentration of that industry in the area. A location quotient greater than 1 typically indicates an industry that is export oriented. An industry with a location quotient of 1 with a high number of jobs present is likely a big exporter and is bringing economic value to the community feeding the retail trade and food services sectors.

The Great Lakes states maintain a substantial manufacturing strength in a range of industries. The Great Lakes states of Indiana, Illinois, Michigan, Ohio, Pennsylvania, and Wisconsin have at or near double the national average of jobs in primary metal, plastics, and rubber products, machinery, fabricated metal product manufacturing, paper, electrical equipment, appliance and component, transportation equipment, printing and related support activities, and furniture and related product manufacturing as illustrated by the table below. In fact, these states are above the national average in nearly every industry category measured by the Bureau of Labor Statistics, and with the development of the Intel “fab” project in Ohio and several Electric Vehicle battery and supply chain projects in the region, the manufacturing base of employers should remain strong for the Great Lakes states.

Great Lakes States Manufacturing Industry Strengths



Source: Bureau of Labor Statistics

The Great Lakes states, if measured by a combined Illinois, Michigan, Ohio, Indiana, Wisconsin, and Minnesota—exported a total trade dollar value of \$295.4 billion in 2022, an advance of 12.7 percent from 2021.¹⁰ Prices for the largest export industry in the Great Lakes region, transportation equipment manufacturing, increased in July 2023, and machinery manufacturing export prices also advanced over the same period, and the export price index for chemical manufacturing decreased.¹¹

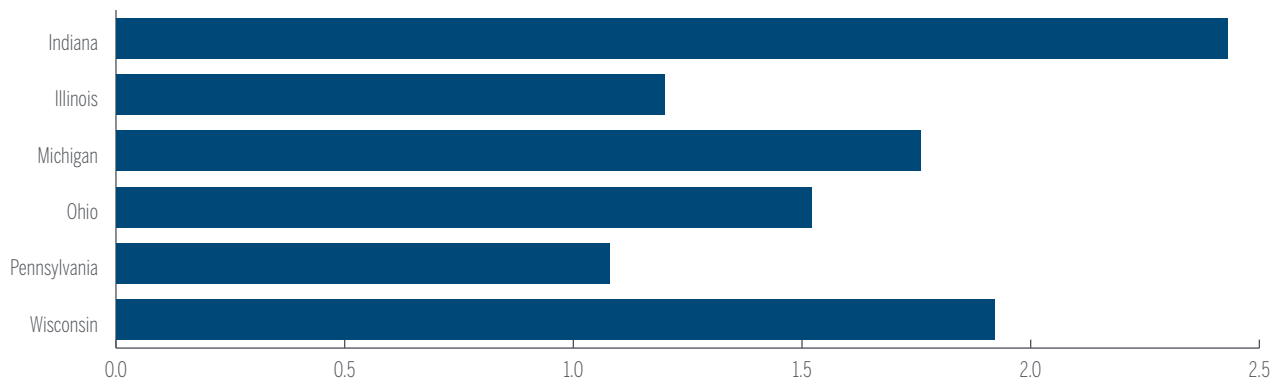


The Great Lakes states exported a combined trade dollar value of \$295.4 billion in 2022, accounting for 14.3 percent of total U.S. exports, and transportation equipment manufacturing was the largest 2022 export industry in the Great Lakes, with the region representing 26.5 percent of total U.S. exports by trade dollar value for the industry.¹² The top 6 Great Lakes export industries of transportation equipment manufacturing, chemical manufacturing and machinery manufacturing accounted for 70.3 percent of the region's U.S. total export trade value in 2022.¹³ The top 3 exporting states within the Great Lakes region—Illinois, Michigan, and Ohio—represented 9.5 percent of total U.S. exports by trade dollar value.¹⁴ Illinois accounted for 26.5 percent of total Great Lakes exports, while Michigan and Ohio represented 20.7 percent and 19.1 percent, respectively.¹⁵ Indiana, Wisconsin, and Minnesota combined for 33.8 percent of Great Lakes exports by trade dollar value in 2022.

The Great Lakes states of Illinois, Indiana, Michigan, Ohio, Pennsylvania, and Wisconsin remain an economic development powerhouse, particularly in the field of manufacturing. Manufacturing jobs, known as production jobs for federal government wage analysis purposes, pay on average \$43,000 constituting high-wage jobs.

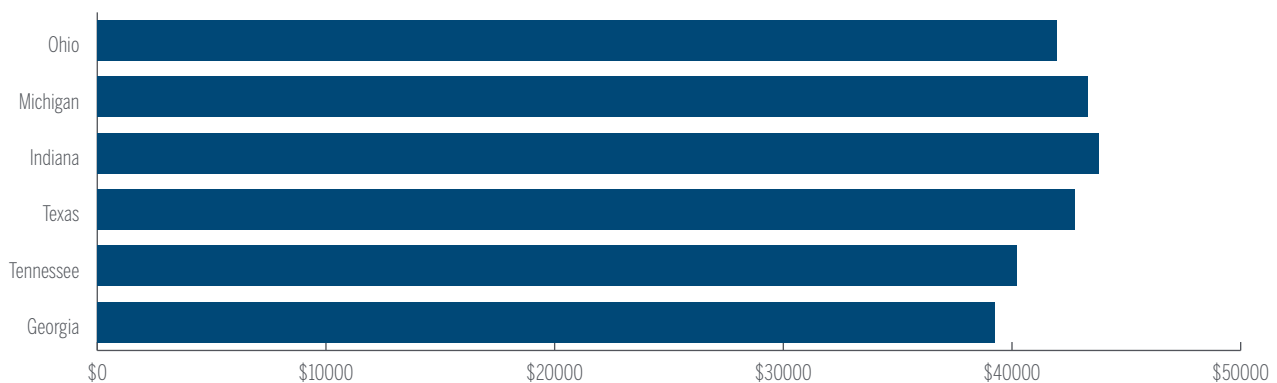
As the table below illustrates, the Great Lakes states all have a higher-than-average number of manufacturing production jobs with Indiana leading the list of having a higher concentration of manufacturing jobs than other Great Lakes states. In fact, Indiana has the highest concentration of manufacturing production workers in the United States with Wisconsin coming in second. The Great Lakes states continue to have a higher manufacturing and production worker wage rate than their southern state competitors as illustrated by the table below.

Production Worker Location Quotient



Source: Bureau of Labor Statistics

Annual Mean Wage for Production Workers

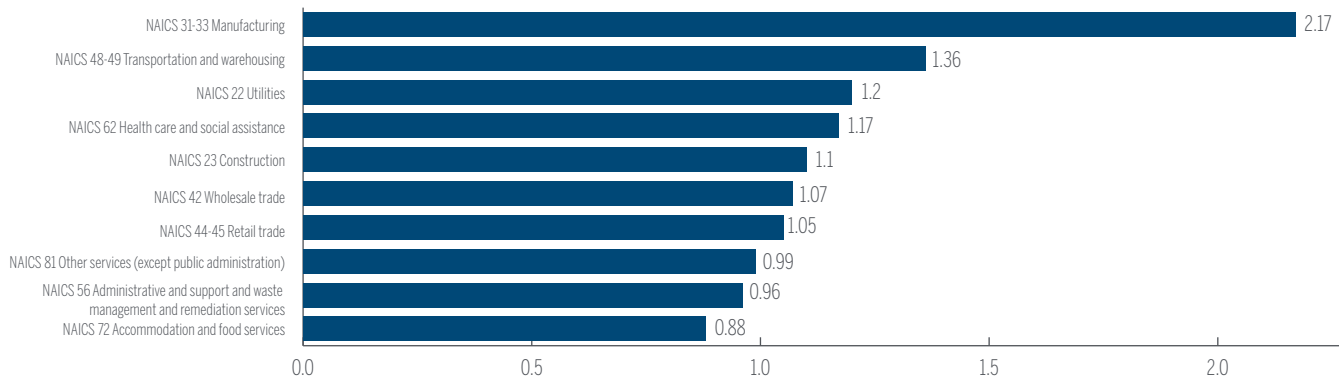


However, this higher manufacturing wage rate has not stopped the Great Lakes states from remaining a global manufacturing center. The top 10 U.S. manufacturing states include many of the Great Lake's states, but also other Midwest and Southern states as illustrated by the table below. The inclusion of Kentucky, Mississippi, Alabama, and South Carolina in the top 10 U.S. manufacturing states list illustrates the success of the southern states over the last fifty years but the Great Lakes and Midwest remain strong industrial markets.

Top 10 U.S. Manufacturing States	
Indiana	
Wisconsin	
Iowa	
Michigan	
Kentucky	
Mississippi	
Alabama	
Kansas	
South Carolina	
Ohio	

Indiana's Industry and Workforce Analysis. Indiana is the nation's 27th largest state in the union with 6.8M people but its strategic location in the Great Lakes Region has made the Hoosier state a long-time leader in the manufacturing industry and an important role in the pharmaceutical and other industries driven by the growing Indianapolis region. Indianapolis, the state's capital and growing mid-sized urban market is the 33rd largest Metropolitan Statistical Area (MSA) in the United States- just behind by a mere 20,000 residents from their neighbor Columbus, Ohio. A review of Indiana's top occupations illustrates again the important role manufacturing plays in the state. As the graphic below illustrates, Indiana's manufacturing industry is nearly double the national average with transportation and warehousing the second largest industry in the state.

Indiana Top Industries

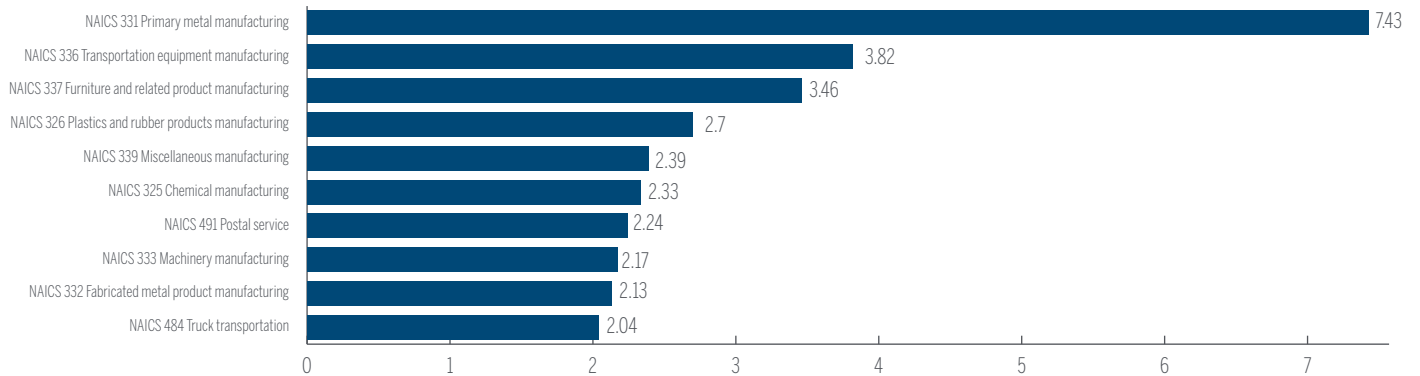


Source: Bureau of Labor Statistics

Within the manufacturing industry, the chart below illustrates the strong manufacturing subsectors in which Indiana is a leader. Indiana's primary metal manufacturing industry that includes Iron and Steel Mills and Ferroalloy Manufacturing, Steel Product Manufacturing from Purchased Steel, Alumina and Aluminum Production and Processing, Nonferrous Metal (except Aluminum) Production and Processing, and Foundries.



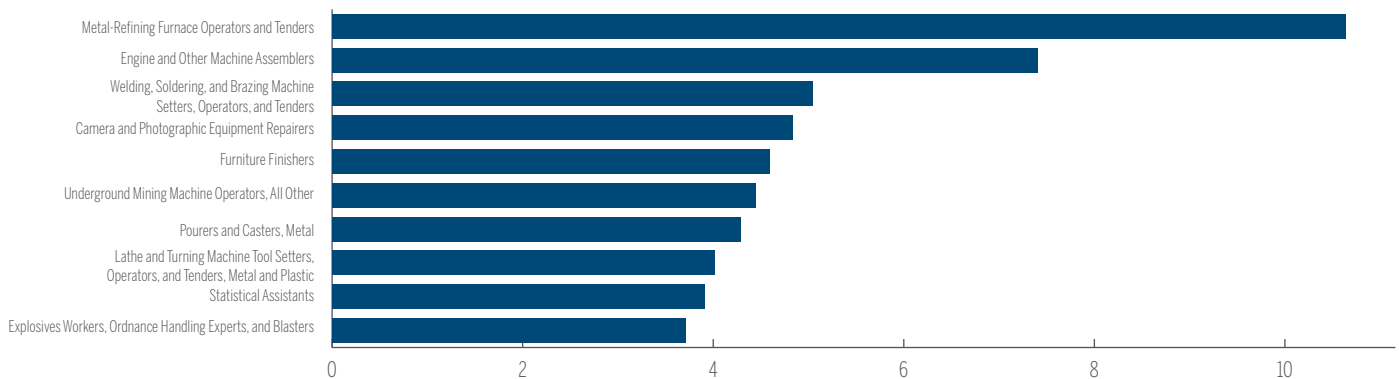
Indiana's Leading Manufacturing Industries



Source: Bureau of Labor Statistics

Indiana's top occupations as outlined below illustrate again the power of manufacturing in the state as most of these occupations are tied to the production of goods.

Indiana's Top Occupations



Source: Bureau of Labor Statistics

Understanding the industries that dominate Indianapolis is also important for many companies seeking a location in Central Indiana following the large, highly skilled population in the region. As the home of Eli Lilly's corporate headquarters, Indianapolis is home to advanced services companies as well as advanced manufacturing in the chemical, metal, and transportation industries. As the table below illustrates, Indianapolis is a major logistics hub serving much of the Midwest, East Coast, and Mid-South regions as illustrated by a Warehousing and storage location quotient three times the national average. These logistics facilities are critical to growing manufacturing as all manufacturers of goods need to deliver them through a logistics network.



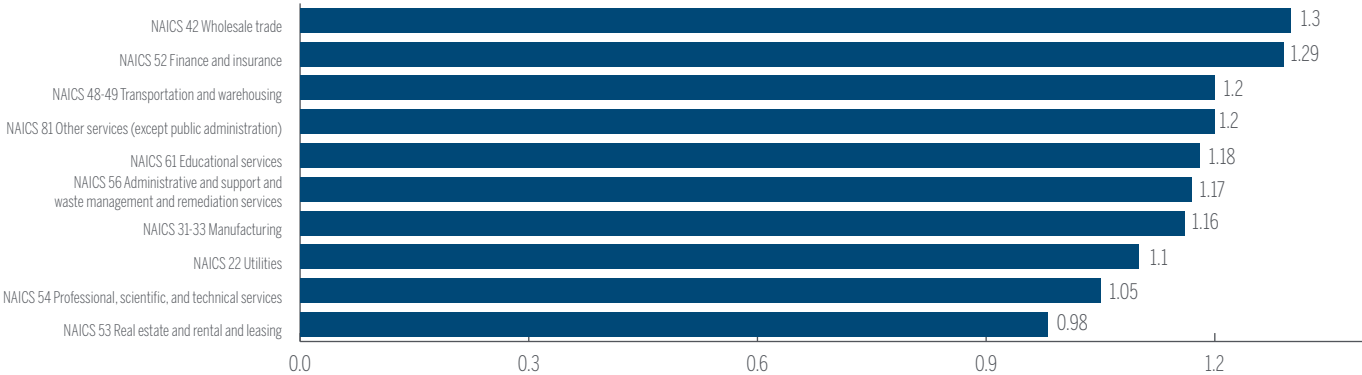
Indianapolis Top Industry Sectors	
NAICS Sub-Sector	Location Quotient Score
Chemical manufacturing	5.03
Warehousing and storage	3.29
Postal service	2.81
Couriers and messengers	2.23
Printing and related support activities	1.93
Performing arts, spectator sports, and related industries	1.78
Fabricated metal product manufacturing	1.43
Beverage and tobacco product manufacturing	1.36
Transportation equipment manufacturing	1.36
Ambulatory healthcare services	1.36

Source: US Bureau of Labor Statistics

Indiana’s success in manufacturing is even more impressive considering the state’s relatively high production worker wage rate as compared to southern state competitors as illustrated by the chart below. It is interesting to note that Indiana’s annual mean wage rate for production workers is higher than regional and southern competitors and yet the state is the number one manufacturing state in the nation on a per capita basis.

Illinois Industry and Workforce Analysis. Illinois is a global leader in advanced services as Chicago remains a hub for major corporate headquarters. As the table above illustrates, the Great Lakes states all have a higher-than-average number of manufacturing production jobs with Illinois leading the list of having a higher concentration of manufacturing jobs than other Great Lakes states. However, with Chicago dominating the state’s economy, Illinois’s manufacturing sector is strong but is not as strong as other Great Lakes states. A review of Illinois’s top occupations illustrates again the important role manufacturing plays in the state. As the graphic below illustrates, Illinois’s advanced services industry includes administration, education, other services, finance and insurance, and wholesale trade industries are all above national averages.

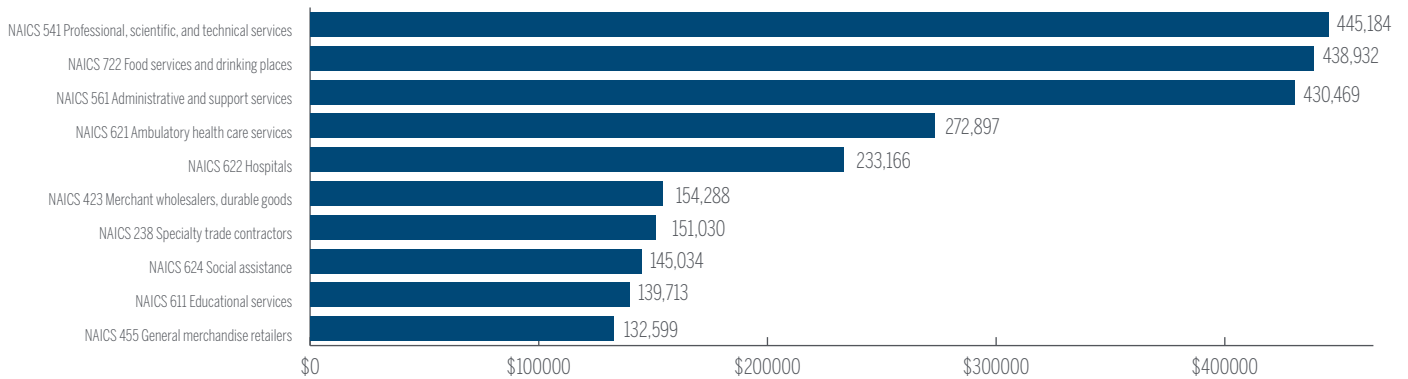
Illinois Top Industry Sectors



Source: Bureau of Labor Statistics

Illinois's top occupations as outlined below illustrate again the power of the advanced services sector in the state.

Illinois Largest Industry Sector by Employees



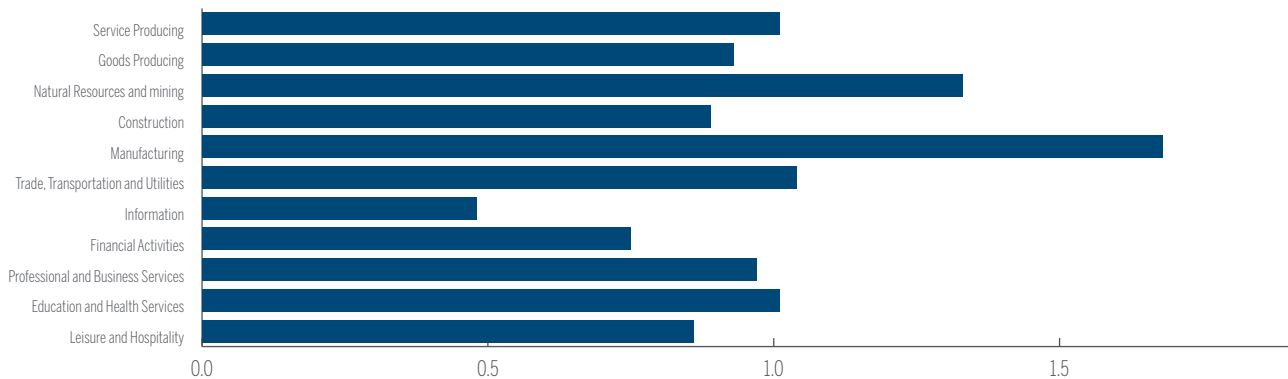
Source: Bureau of Labor Statistics

Michigan Industry and Workforce Analysis. Michigan is a global leader in manufacturing by any measure and in line with the traditional manufacturing strength of the Great Lakes region of the United States.

Source: US Bureau of Labor Statistics

As the Michigan industry cluster analysis above indicates, Michigan is far above the national average in wages created in the manufacturing industry. As the table below illustrates, the top occupations in Michigan are heavily tied to the manufacturing industry.

Michigan Industry Cluster Analysis

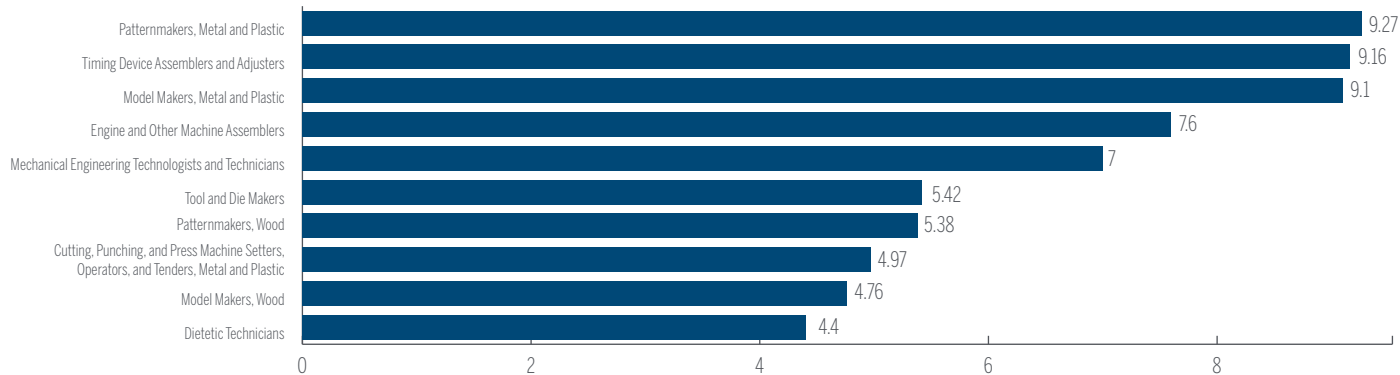


Source: US Bureau of Labor Statistics

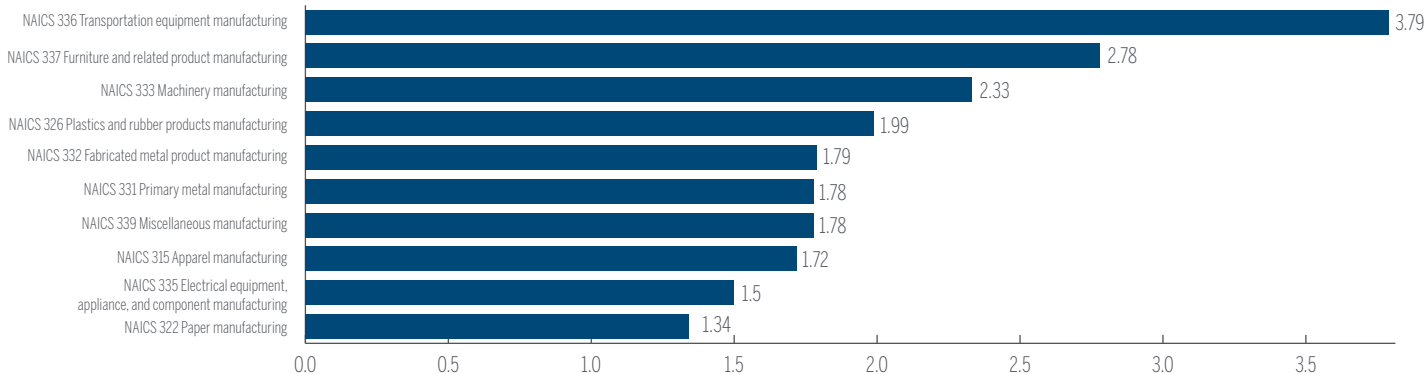
Michigan also has a broad spectrum of products that it manufactures as illustrated by the chart below. It is no surprise that the home of the global auto industry has nearly four times the national average of workers in the transportation equipment manufacturing center.



Top Concentration of Michigan Occupations



Michigan Top Manufacturing Sectors

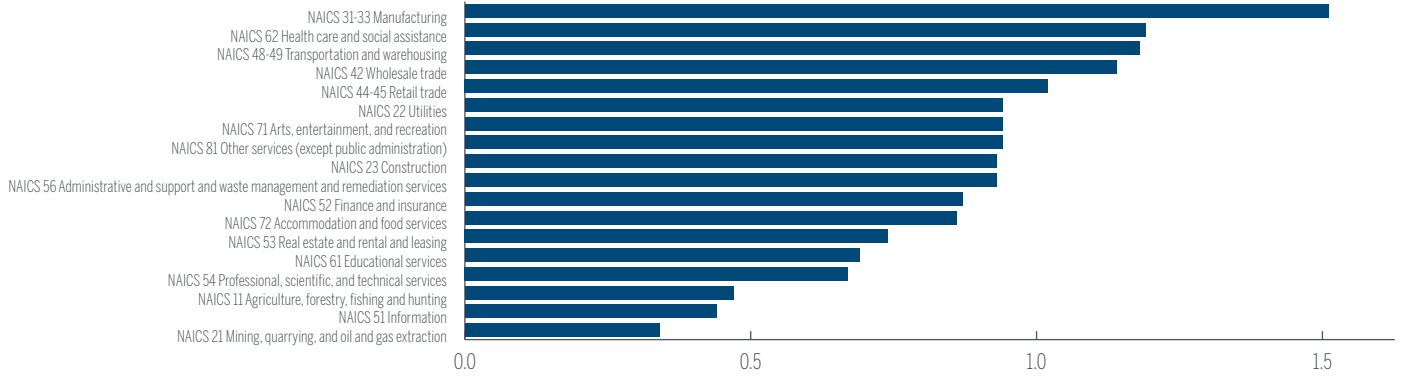


Michigan's success in manufacturing is even more impressive considering the state's relatively high production worker wage rate as compared to southern state competitors. It is interesting to note that Michigan's annual mean wage rate for production workers is slightly lower than their neighbors in Indiana who are known for their low cost of doing business. Michigan remains a manufacturing powerhouse throughout the state.



Ohio's Industry and Workforce Analysis. Ohio operates a manufacturing-centered economy. Company management has the highest job concentration in the Buckeye State compared to other states. Manufacturing jobs are a close second followed by health care, transportation and distribution, trade, retail, and utilities – all of which are above the national average.

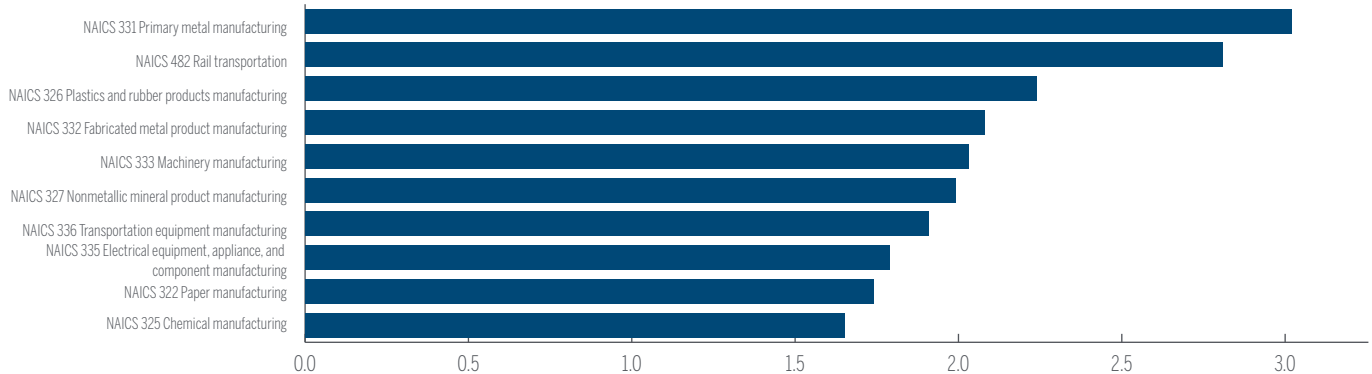
Ohio's Major Industries



Source: US Bureau of Labor Statistics

Digging into Ohio's manufacturing industries does not reveal major surprises. Primary metals, automobiles, plastics and rubber, fabricated metals, machinery, nonmetallic minerals, transportation equipment, electrical equipment, appliance, and component, paper and chemical manufacturing all make the top 10 list for manufacturing companies in the Buckeye State as illustrated by the chart below.

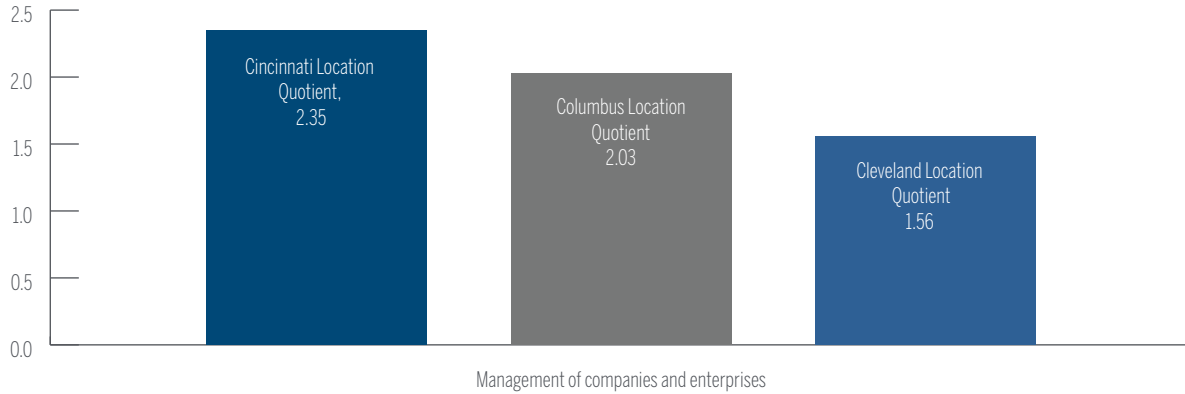
Ohio's Top Manufacturing Industry Subsectors



Source: US Bureau of Labor Statistics

Ohio's three major urban areas also illustrated the strong advanced services and manufacturing base located all over the state. The top occupations and jobs in Cincinnati, Columbus and Cleveland are in the management of companies as illustrated by the chart below—this industry is double the national average in Ohio's major cities.

Ohio Major City Advanced Services Leaders

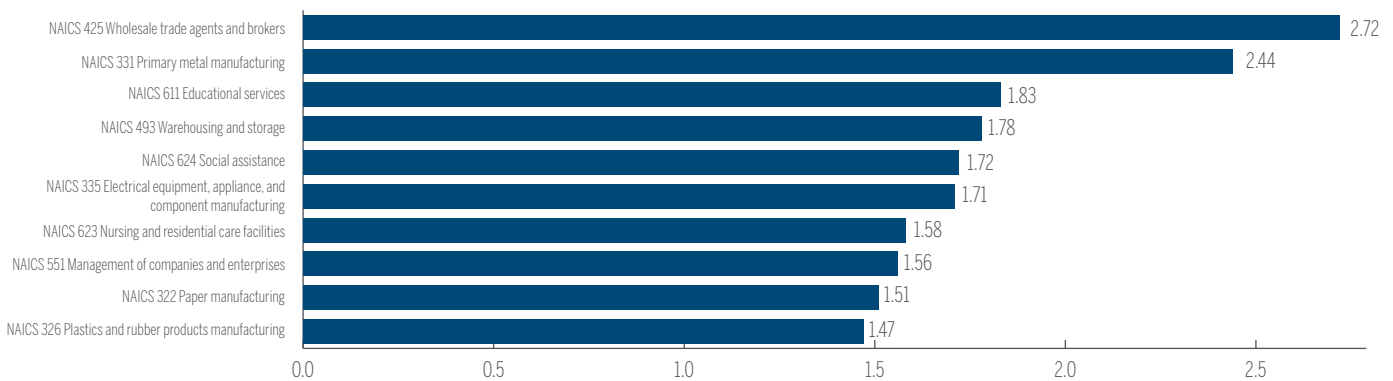


Source: US Bureau of Labor Statistics

Cincinnati and Cleveland are much stronger in the manufacturing sector than the fast-growing Columbus market. Nonmetallic mineral product manufacturing and chemical manufacturing industries are above average in the Columbus market. The Cincinnati market, on the other hand, has above national averages for the location of chemical, primary metal, paper, transportation equipment, textile, beverage, and tobacco products, food, fabricated metal products, machinery, plastics and rubber products, textile, and electrical equipment, appliance, and component manufacturing. Cleveland is even stronger in the manufacturing sector with primary metals manufacturing being nearly three times the national average and fabricated metal products, electrical equipment, appliance, and components, machinery, chemical, printing and related support activities, plastics and rubber products, miscellaneous, nonmetallic mineral product and apparel manufacturing are all above the national average. In fact, Cincinnati and Cleveland have nearly double the manufacturing workers than Columbus among their 10 top manufacturing subsectors.

Pennsylvania's Industry and Workforce Analysis. The state of Pennsylvania continues to be a leader not just in manufacturing but also in education, advanced services, health care, and transportation and logistics as illustrated by the table below. Manufacturing remains a strong market in the Keystone State with an above average location quotient. The Philadelphia market illustrates the large-scale corporate presence tied to the East Coast I-95 with the high concentration of advanced services white collar jobs.

Pennsylvania Top Industry Sub-Sectors by Location Quotient

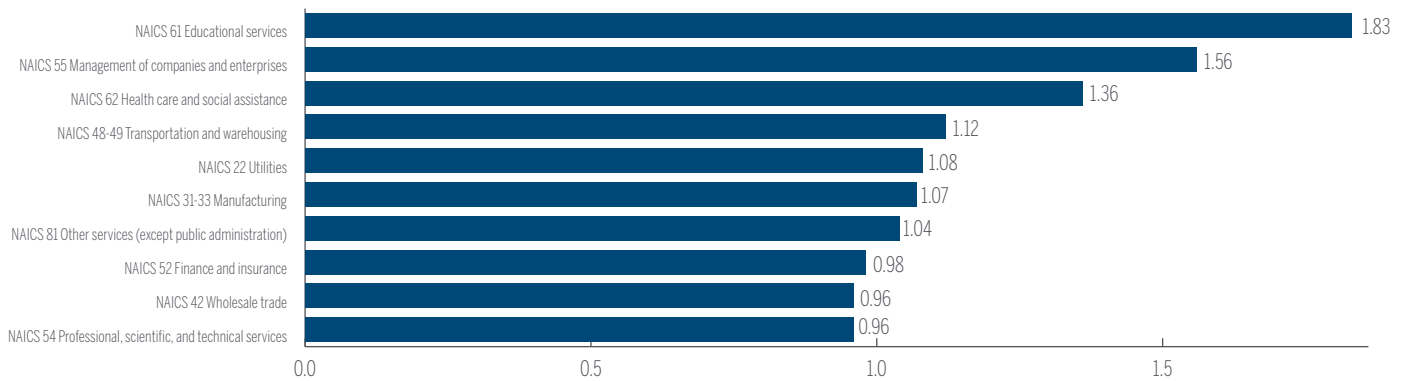


Source: US Bureau of Labor Statistics



The chart below dives a level deeper and illustrates Pennsylvania's industry strengths in wholesale trade, metal manufacturing, education, and advanced services. Pennsylvania has a massive strength in the wholesale trade but also in steel, warehousing, electrical equipment, paper manufacturing, and plastics and rubber manufacturing.

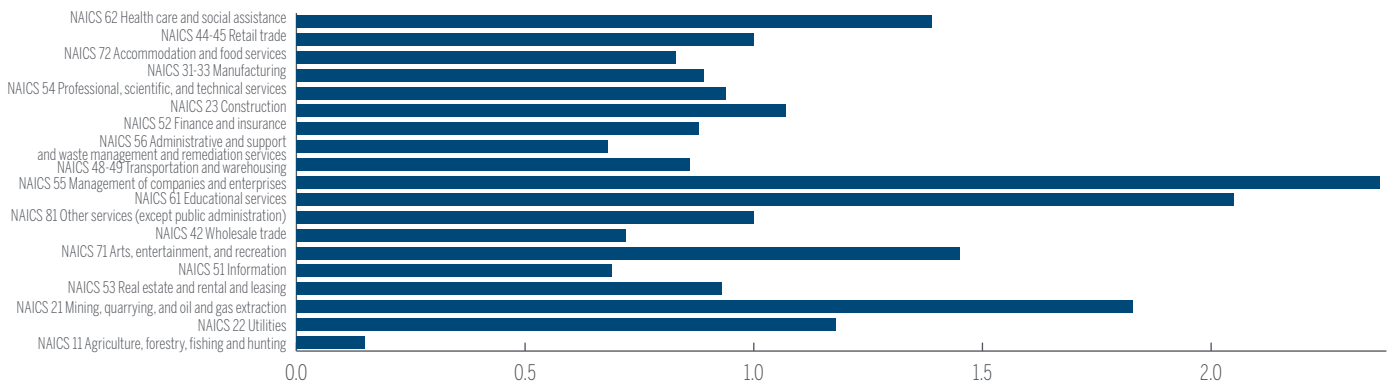
Pennsylvania Top Industry Sectors by Location Quotient



Source: Bureau of Labor Statistics

A review of Pittsburgh's top occupations illustrates again the important role of energy, education, advanced services, arts, and healthcare play in this region as all these industries are above the national average with employees in the Pittsburgh region. Pittsburgh's over 82,000 workers in the manufacturing sector do not constitute an above-average level of workers when this region is compared to other regions in the United States.

Pittsburgh Industry Concentration

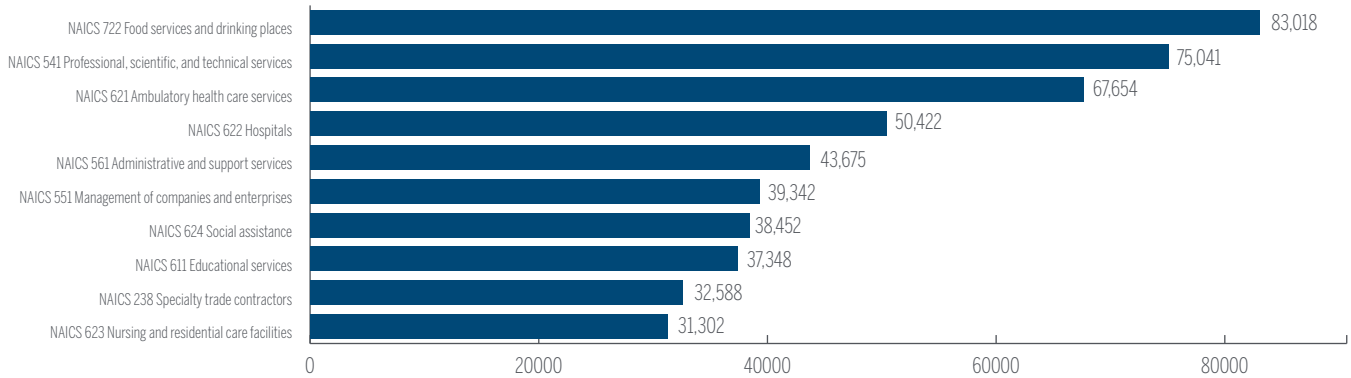


Source: Bureau of Labor Statistics

The Pittsburgh region's largest occupations in raw numbers in industry sub-sectors, as represented by the chart below of its top industry employees, confirms a strong base in food services, advanced services, health care, and educational services.



Pittsburgh MSA Employment by Industry Sub-Sector

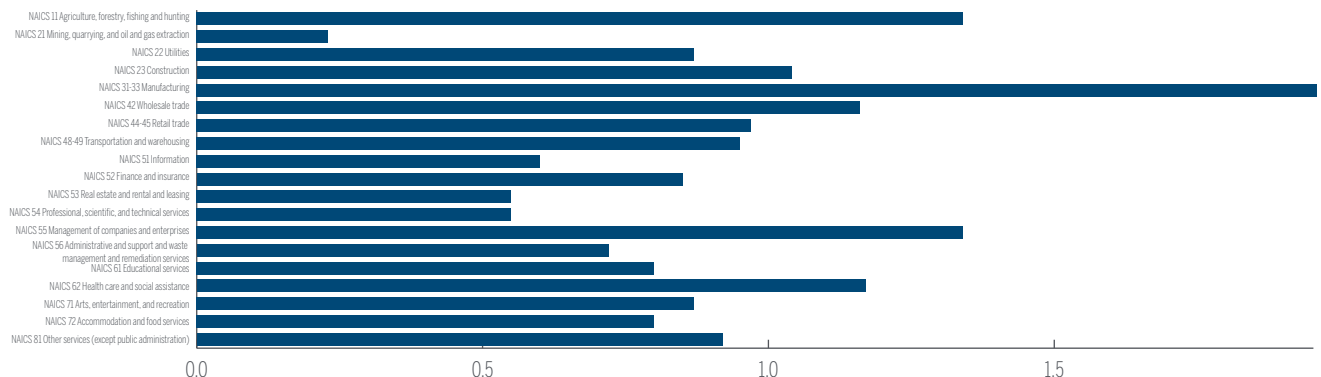


Source: Bureau of Labor Statistics

Wisconsin Industry and Workforce Analysis. The state of Wisconsin continues to be a leader not just in manufacturing but also in health care, company management, wholesale trade as well as agriculture as illustrated by the table below. Manufacturing in Wisconsin is double the national average from a jobs standpoint and the leading industry in the state followed by agriculture, and company management. A couple industry highlights worthy of note for Wisconsin:

- Wisconsin is #1 in cheese production with over 3 billion pounds of cheese made each year, 25% of the U.S. total.
- Wisconsin is #1 in paper production with a 23.77 location quotient in paper mills.
- 8 of the 10 largest food companies in the world have operations in Wisconsin.
- Wisconsin is home to 1,000+ energy companies with \$39 billion in annual sales with 115,000+ jobs.
- Wisconsin is home to nearly 500,000 advanced manufacturing jobs with \$72 B in economic output with 9000 companies.
- Wisconsin has \$1+ billion in bioscience research & development.
- Wisconsin has 230+ companies in the water technology industry with \$15.7 billion in annual sales with 23,000 employees.

Wisconsin Industry Cluster Analysis



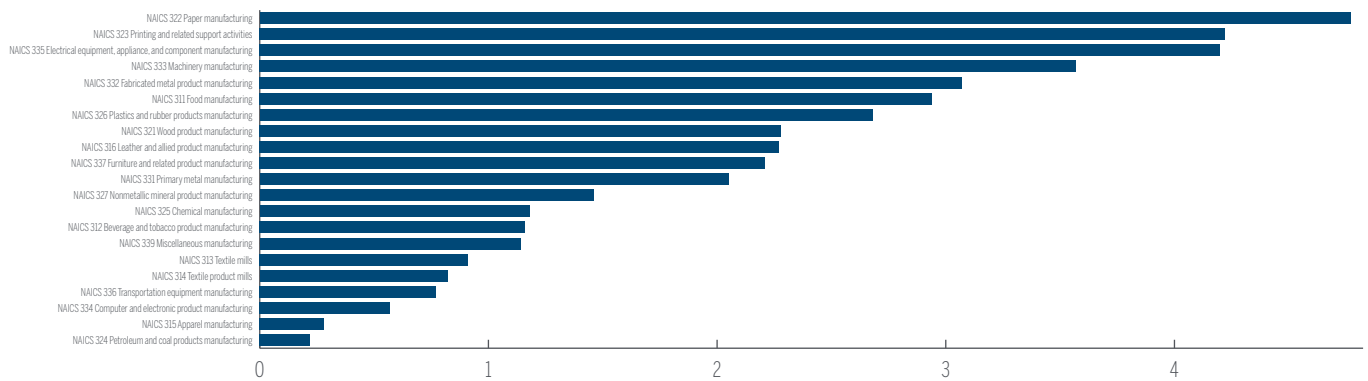
Source: U.S. Bureau of Labor Statistics



The chart below analyzes Wisconsin's manufacturing industry strengths. Wisconsin is home to over 11 manufacturing industry sectors that more than double the industry average for the location of jobs and wages. These industries include:

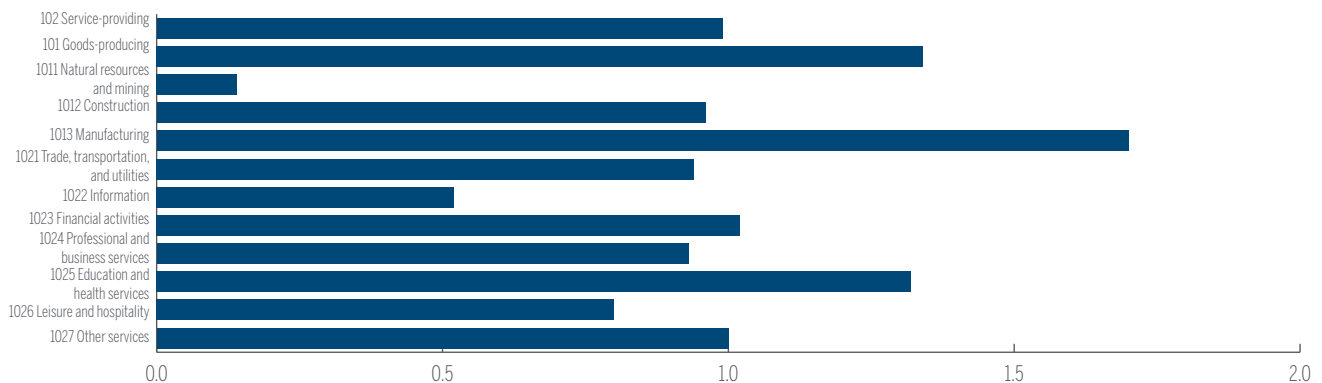
- Printing and related support activities
- Electrical equipment, appliance, and component manufacturing
- Machinery manufacturing
- Fabricated metal product manufacturing
- Food manufacturing
- Plastics and rubber products manufacturing
- Wood product manufacturing
- Leather and allied product manufacturing
- Furniture and related product manufacturing
- Primary metal manufacturing.

Wisconsin's Manufacturing Industry Concentrations



A review of Milwaukee's top occupations illustrates again the important role manufacturing, education, advanced services, and healthcare play in this region as all these industries are above the national average with employees in the Milwaukee region. The Milwaukee MSA has over 113,000 workers in the manufacturing sector paying an average wage of \$77,000. Milwaukee remains a manufacturing center aligned with its heritage and in common with other Great Lakes major mid-sized urban markets.

Milwaukee's Wage Location Quotient



Source: Bureau of Labor Statistics

Milwaukee and the state of Wisconsin remain an industrial powerhouse building on a strong legacy of manufacturing prowess.



Great Lakes's Economic Development Incentives Analysis. Taxes levied by local and state governments have a major impact on a company's corporate site location decisions. Taxes by the state and local governments are a critical component of measuring the cost of doing business in a region. Different local and state governments tax businesses differently. What and how much local and state governments tax business is a policy decision not just to collect the revenues needed to pay for schools, roads, water, public safety, and other essential services but is also a public policy decision impacting a company's corporate site location.

Local and State Business Taxes on Business

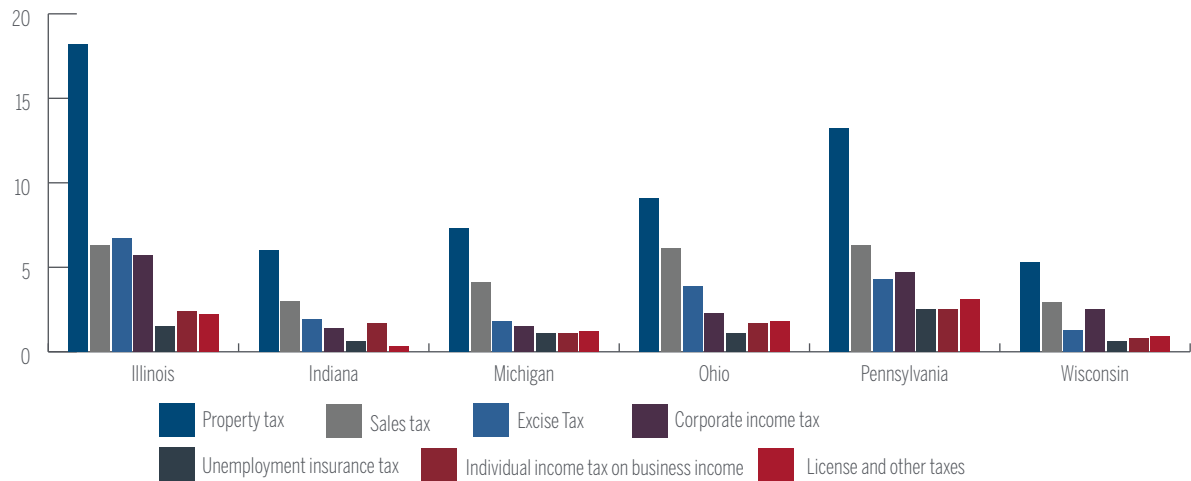
- **Property taxes on real and personal property**
- **General sales taxes paid on purchases of goods and services used in production**
- **Excise taxes on share of motor fuel taxes and other selective sales taxes**
- **Corporate income taxes**
- **Gross receipts taxes**
- **Taxes on insurance premiums and utility gross receipts**
- **Individual income taxes on pass-through business income**
- **Unemployment insurance taxes paid by employers**
- **Business licenses, including general business licenses, specific industry and occupational licenses, and commercial motor vehicle licenses**
- **Severance taxes on mining, natural gas, oil and other natural resources**
- **Gross receipts tax**

Source: Council of State Taxation

Ultimately, how much taxes a company pays at a location impacts its decision as to whether to locate in the region and defines the critical role of economic development incentives. The specific taxes a company will pay at a site is a critical cost of doing business factor the local and state government can directly impact through tax incentives. As the chart below illustrates, Illinois leads the Great Lakes states when it comes to taxing business. Illinois taxes business, according to the Council of State Taxation a total of \$43 B which is \$7B more than Pennsylvania and \$17 B more than Ohio both of which are of similar size. Smaller states such as Illinois and Wisconsin in the Great Lakes charge businesses substantially lower taxes than the larger states. It is worthy of note that property taxes are the highest business tax in nearly all the states and all these states also have some form of an income tax. However, an important factor for companies to consider when reviewing this state and local tax data is what taxes will their company pay more. Large-scale industrial investments will drive up property taxes if the state taxes equipment. Some states have property taxes on inventory again which impacts different companies differently. Finally, companies in the advanced service or white collar or technology industries may not really care about property tax as they have moved to a near virtual office presence and won't pay substantial property taxes.



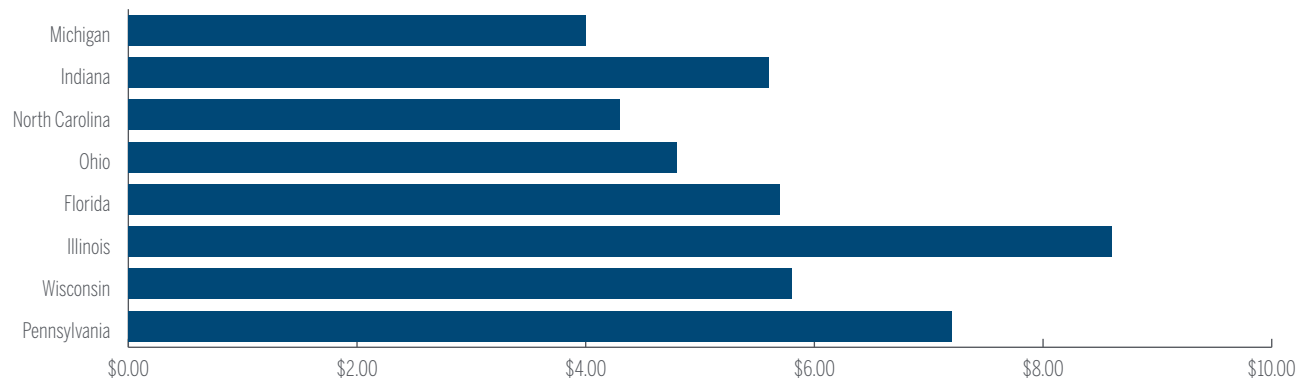
Great Lakes States Business Taxes by Type in Billions



Source: Council of State Taxation

Measuring business taxes on a per-employee basis is a method that can provide a company considering a corporate site location project with a good basis for a state's overall business-friendly attitude. This approach addresses population differences in the states. As the table below illustrates, companies in Illinois land in the middle compared to other Great Lakes states with Illinois and its global mega-city Chicago having the highest taxes on a per-capita basis on businesses while southern states like Florida tax business less than many Great Lakes states. More troubling for Illinois is that Michigan and Ohio companies pay less taxes than companies in Illinois. Wisconsin's business taxes are lower than Great Lakes competitors Pennsylvania and Illinois and more aligned with Indiana.

Business Taxes Per Employee \$thousands

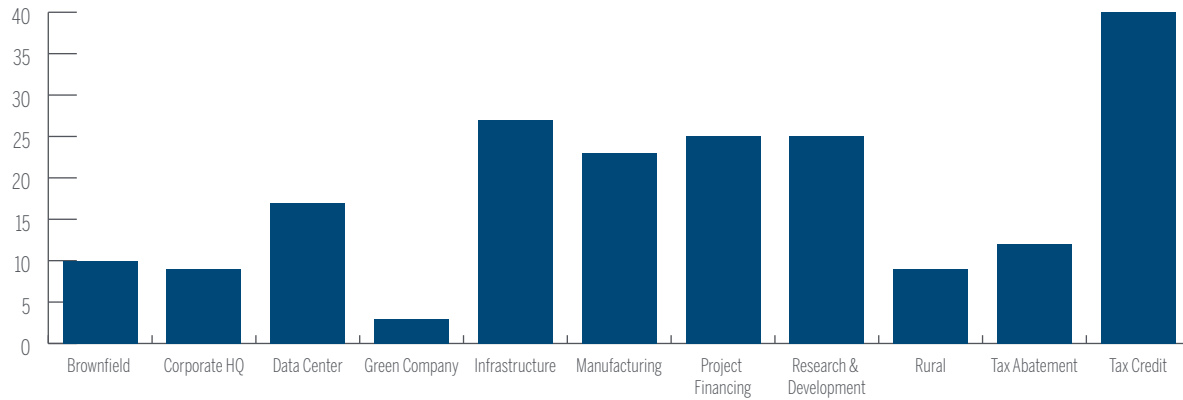


Source: Council of State Taxation

According to the Council of State Taxation, businesses paid \$951.4 B in state and local taxes in FY21, which was 43.6% of all tax revenue at the state and local levels. Businesses paid \$493.7 B in state taxes in FY21, which was 17.0% higher than the prior fiscal year, and \$457.6 B in local taxes, which was 10.2% higher, for a combined year-over-year growth rate of 13.6% over FY20. To address the regional cost of doing business factors, all fifty states offer some form of economic development incentives. As the chart below outlines, infrastructure incentives are provided by all the states in the union followed by tax credits as the second most popular tax incentive program in the nation with efforts to attract data centers and using general tax abatements tying for third. Princeton Economics estimates that state and local governments invest about \$30 B dollars in economic development incentives annually.



Local and State Economic Development Incentive Programs



To address the regional cost of doing business factors, all fifty states offer some form of economic development incentives. As the chart above outlines, infrastructure incentives are provided by all the states in the union except New Jersey where tax incentives have become a challenging political topic. State economic development tax credits follow closely behind infrastructure programs as the second most popular tax incentive program in the nation with efforts to attract data centers and using general tax abatements tying for third. Princeton Economics estimates that state and local governments invest about \$30 B dollars in economic development incentives annually.¹⁶ According to the Council of State Taxation, businesses paid more than \$951 billion in state and local taxes in FY21.¹⁷ Thus, while economic development incentives at times catch media headlines, they still constitute a very small percentage of the tax revenues state and local governments capture for companies. Tax credits are tools private developers, investors, and individual companies use to reduce tax burdens in exchange for economic growth. Tax credits may be either refundable or nonrefundable. A refundable tax credit, a moderate form of negative income tax, can reduce the tax owed below zero and result in a net payment to the taxpayer beyond its own payment into the tax system. A nonrefundable tax credit cannot reduce the tax owed below 0; thus, taxpayers do not receive a refund exceeding their payments into the tax system. Most state economic development tax credits are triggered by high-wage, non-retail job creation, and some level of capital investment. These tax credits in most cases are competitively awarded as there is a limited amount of state government funding available to support them. Thus, higher job growth, higher wages, and larger capital investments from companies attractive for investment are given priority for these tax credits.

To attract new businesses and encourage the expansion of existing businesses, state and local governments also may offer tax abatements as an economic development incentive. Tax abatements temporarily decrease the amount of taxes a business owes. While this tax incentive has a general effect on property taxes, the means employed by state and local governments to achieve this effect varies from program to program. Enterprise Zones are the most common tax abatement program.¹⁸ These programs offer real and personal tax incentives to businesses that expand or locate within designated “Enterprise Zones.” First, the locality must designate an area as an Enterprise Zone. Enterprise Zone designation is based on an area’s poverty and unemployment rate. However, state law may not limit which municipality may use the Enterprise Zone program; thus, Enterprise Zones are as prevalent in wealthy suburban communities as they are in poor, inner-city neighborhoods. This goes against the original intent of the Enterprise Zone program. Once designated, businesses that wish to build or expand in Enterprise Zones can apply for the program’s abatement. The tax incentive permits the local government to offer a full or partial exemption of the real or personal property values attributable to the new development.

States offer outright grants for companies in exchange for the retention and creation of an agreed-upon number of jobs and capital investment. A recent trend is the use of “closing funds” as the dominant form of economic development incentives. States moved to streamline their economic development incentives and focus on the creation of a large fund that makes cash awards to companies through major corporate site location projects. Low or no-interest government-sponsored loans or other project financing programs are an attractive alternative to bank or other private-sector financing for a planned economic development expansion.



Companies with growth potential face new challenges to gain the financing needed to move to the next level and eight states offer some form of a project financing program to attract economic development as outlined below. Port authorities are governmental agencies with few restrictions placed on governments. Port authorities operate across the United States and provide services akin to a public bank providing a range of public finance tools critical to economic development projects. Three states have tax incentives designed to support the operation of local port authorities that include Alabama, Georgia, and Virginia. Arkansas, Ohio, and Wyoming also authorize port authorities to provide what is a sales tax exemption for the construction material in economic development projects that can produce substantial economic development savings.

Along with corporate headquarters, manufacturing jobs with their high wages and long supply chain that can provide a multiplier effect for the jobs have long been sought by economic development leaders across the nation. While every general state tax credit can be used for manufacturing firms, eight states as listed below also have tax credits designed specifically for manufacturing firms. Research and development and technology-related jobs are another major focus for economic development leaders. Technology-based Economic Development initiatives are attractive because they create high-wage “multiplier” jobs with companies in the growth mode for the Information Age economy. Research and development, particularly focused on the recruitment of corporate research and development centers, is an economic development prize, and seventeen states, as listed at www.montrosegroupllc.com, offer economic development incentives focused on gaining research and development centers. Many of these state programs are focused on the retention and attraction of major corporate research and development centers.

Illinois Economic Development Incentives. Illinois has many economic development incentives offered to companies looking to create jobs and make capital investments in the Land of Lincoln state.

Illinois Economic Development Incentives

Data Center Investment Program	Growing Economy Tax Credit	High Impact Business Program
Invest in Illinois	Enterprise Zone	Small Business Emergency Loan Fund
Tax Increment Financing	Reimaging Electric Vehicles	MICRO Act

The Intersect Illinois leads the marketing effort for the state of Illinois for companies considering growing in the state. Illinois, like the other Great Lakes States, offers a wide range of state economic development incentives are provided for job creation and business investment, redevelopment and quality of place, innovation and entrepreneurship, research, and development, site development and skills training, including the following incentive programs:

- Illinois’ Data Center Investment Program provides new and existing, carbon neutral data centers making an aggregate investment of \$250 M over a 60-month period with exemptions from state and local taxes (and a 20% credit towards wages paid for construction workers in underserved areas), and eligible centers must create at least 20 full-time equivalents in aggregate and meet or exceed compensation totaling 120% of the median wage paid to FTEs in the county where the center is located.
- Illinois Growing Economy Tax Credit Program (EDGE) provides annual, non-refundable, income tax



credits to businesses supporting job creation equal to 50% of the income tax withholdings of new jobs created in Illinois (up to 75% if located within an underserved census area) employer eligibility depends upon its number of world-wide employees. A new policy revises Illinois' EDGE Tax Credit with new provisions that substantially ease "but/for" requirements. One impact is that businesses no longer must report on incentives from competing states. It also doubles the credits for retained employees in underserved areas to 50% from 25%. A termination clause gives businesses five years to achieve their job creation and investment commitments.

- Illinois High Impact Business Program supports tax credits for companies with a minimum investment of \$12 M and create 500 FTEs, or \$30 M of investment with a retention of 1,500 FTEs. This program cannot be used in conjunction with the Enterprise Zone Program.
- The Invest in Illinois fund devotes \$400 million to high-priority projects that commit to investing and creating jobs in Illinois. This means that expanding or relocating companies can receive cash assistance to help with up-front costs associated with their projects. Safeguards are in place to ensure that job creation and investment numbers are met, but the process for allocating funds to worthy projects is simple and intended to help large deals close quickly.
- Illinois Enterprise Zone Program awards a mix of state and local tax incentives for reductions in a retailers' occupation tax, state utility tax, and purchases on personal property used in the manufacturing process and local incentives such as Cook County industrial property EZs receives special consideration under the Class 6b – Industrial Program and is generally assessed at 25 percent of market value in the absence of any incentives. This program cannot be used in conjunction with the High Business Program. Recent changes, and recent changes in the EZ act amend the program to expand the size of these zones, allowing for local communities to be more competitive when attracting businesses.
- Illinois Tax Increment Financing captures future property tax growth in a defined district for the redevelopment of substandard, obsolete, or vacant buildings, financing general public infrastructure improvements, including streets, sewer, water in declining areas, cleaning up polluted areas, administration of a TIF redevelopment project, property acquisition, rehabilitation or renovation of existing public or private buildings, construction of public works or improvements, job training, relocation, financing costs, including interest assistance, studies, surveys and plans, marketing sites within the TIF, professional services, such as architectural, engineering, legal and financial planning, and demolition and site preparation. The state of Illinois offers a wide range of economic development incentives for companies considering a corporate site location project.
- Illinois' Reimagining Electric Vehicles (REV) Act, passed in 2021, offers 75-100% income tax withholdings exemptions and credits for workforce training, construction jobs, and investment, to attract companies in the electric vehicle sector with a minimum investment threshold was also lowered to \$2.5 million from \$20 million. Companies are required to create 50 new jobs or a number equivalent to 10% of their global workforce, whichever is lower, within four years.
- Manufacturing Illinois Chips for Real Opportunity (MICRO) Act to attract semiconductor companies looking to relocate or expand in the U.S. The new legislation significantly boosts tax credits for retained employees of semiconductor projects from 25% to 75%, rising even further to 100% for those located in an underserved or energy transition area.

Illinois, like its other Great Lakes counterparts, has a wide array of economic development incentives designed to retain and attract job producing companies.

Illinois remains a global economic powerhouse anchored by the global mega-city of Chicago. Illinois is a global corporate headquarters hub with 33 Fortune 500 corporate headquarters.



Illinois Fortune 500 Corporate Headquarters

Abbott	Abbvie	ADM	Allstate	Arthur J. Gallagher & Co.	Baxter
US Foods	CWH	CDW	Conagra	John Deere	Discover
Dover	Fortune Brands	Exelon	Granger	ITW	Intregdion
JLL	KraftHeinz	LQK	McDonalds	Molson Coors	Modelez
Motorola	Navistar	Northern Trust	PCA	RR Donnelly	State Farm
Tenneco	Ulta	United	Univar	Wallgreens	

Illinois' strategic location and mega-city of Chicago drive substantial economic success. Illinois is a major player in the global economy with over 2000 foreign-owned companies gaining more than \$112B in Foreign Direct Investment (FDI) and international companies employing 380,000 residents of Illinois. Nearly 600,000 Illinois residents work in the manufacturing industry which constitutes 12% of the state's GDP. Illinois is home to over 6,000 agricultural-focused companies, and over 13,000 companies in the fast-growing life sciences industry sector.



Indiana Economic Development Incentives. Indiana has many economic development incentives offered to companies looking to create jobs and make capital investments in the Hoosier state.

Indiana Economic Development Incentives

Economic Development for a Growing Economy Tax Credit	Hoosier Business Investment Tax Credit	HQ Relocation Tax Credit	Skills Enhancement Fund
Data Center Gross Retail and Use Tax Exemption	Film and Media Tax Credit	Community Revitalization Enhancement District	Indiana R&D Expenses Tax Credit and Sales Tax Exemption
Venture Capital Investment Tax Credit	Patent Income Tax Exemption	Industrial Development Grant Fund	Redevelopment Tax Credit
Innovation Development Districts			

The Indiana Economic Development Corporation (IEDC) leads the state’s economic development effort, and a wide range of state economic development incentives are provided for job creation and business investment, redevelopment and quality of place, innovation and entrepreneurship, research, and development, site development and skills training, including the following incentive programs:

- Economic Development for a Growing Economy (EDGE) Tax Credit provides a refundable tax credit to businesses that create new jobs that improve the standard of living for Indiana residents. The credit certification is phased in annually for up to 20 years based on the employment ramp-up outlined by the business.
- Economic Development for a Growing Economy Non-Resident (EDGE-NR) Tax Credit provides a nonrefundable tax credit to businesses that create new jobs that are filled by residents from another state. The credit certification is phased in annually for up to 20 years based on the employment ramp-up outlined by the business.
- Hoosier Business Investment (HBI) Tax Credit provides incentives to businesses to support job creation and capital investment and to improve the standard of living for Indiana residents. The nonrefundable corporate income tax credits are calculated as a percentage of the eligible capital investment to support the project. The credit may be certified annually, based on the phase-in of eligible capital investment, over a period of two full calendar years from the commencement of the project.
- Innovation Development Districts are an IEDC-designated allocation area that captures certain incremental taxes from the district. Funds collected from the district may be used for economic development, infrastructure upgrades, or the training of employees within the designated area.
- Film and Media Tax Credit provides an income tax credit of up to 30% of the qualified expenditures for projects that are filmed or recorded in Indiana. The credit is applicable to feature-length films, television series, music productions, or media productions that are intended for reasonable commercial release.

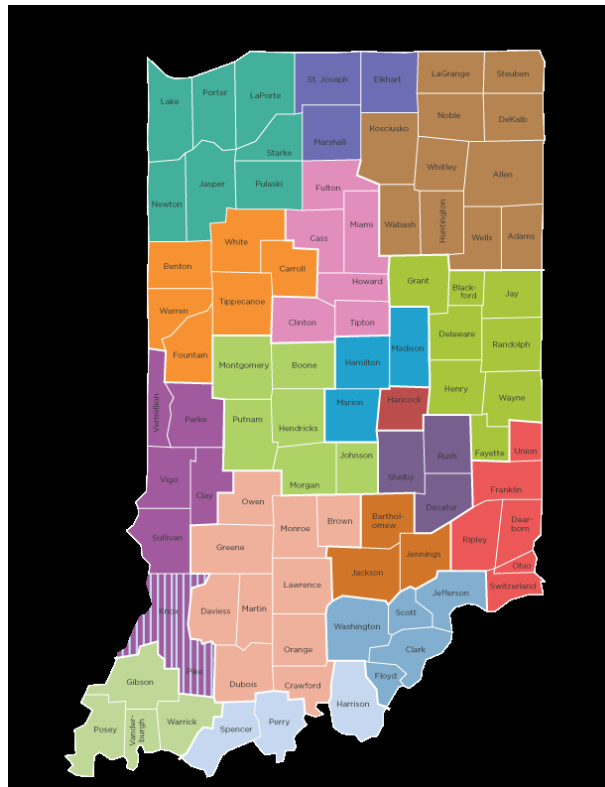


- Headquarters Relocation Tax Credit (HQRTC) provides a non-refundable tax credit to a business that relocates its headquarters to Indiana. The credit is assessed against the corporation's state tax liability.
- Small Headquarters Relocation Tax Credit (SHQRTC) provides a refundable tax credit to a small, high-growth business that relocates its headquarters, or several employees equal to 80% of the company's total payroll to Indiana. The credit is assessed against the corporation's state tax liability.
- Community Revitalization Enhancement District (CRED) Tax Credit provides an incentive for investment in community revitalization enhancement districts.
- Redevelopment Tax Credit (RTC) provides an incentive for investment in the redevelopment of vacant or underutilized land in Indiana. Qualified projects are eligible to receive a tax credit of up to 30%; however, if the project is in an Opportunity Zone or qualifies for a New Markets Tax Credit, an additional 5% may be awarded.
- Industrial Development Grant Fund (IDGF) aids municipalities and other eligible entities with off-site infrastructure improvements needed to serve the proposed project site. Upon review and approval of a local recipient's application, project-specific milestones are established for completing the improvements. IDGF will reimburse a portion of the actual total cost of the infrastructure improvements. The grant will be paid as each milestone is achieved, with the final payment upon completion of the last milestone of the infrastructure project.
- Data Center Gross Retail and Use Tax Exemption provides a sales and use tax exemption on purchases of qualifying data center equipment and energy to operators of a qualified data center for a period not to exceed 25 years for data center investments of less than \$750 million. If the investment exceeds \$750 million, the IEDC may award an exemption for up to 50 years.
- Patent Income Tax Exemption Certain income derived from qualified patents and earned by a taxpayer is exempt from taxation. The Tax Exemption for Patent-derived Income defines qualified patents to include only utility patents and plant patents. The total amount of exemptions claimed by a taxpayer in a taxable year may not exceed \$5 million. The exemption provides that a taxpayer may not claim an exemption for income derived from a particular patent for more than 10 taxable years. The exemption percentage begins at 50 percent of income derived from a qualified patent for each of the first five taxable years and decreases over the next five taxable years to 10 percent in the 10th taxable year. It also specifies that a taxpayer is eligible to claim the exemption only if the taxpayer is domiciled in Indiana and is either an individual or corporation with not more than 500 employees including employees in the individual's or corporation's affiliates or is a nonprofit organization or corporation.
- Venture Capital Investment (VCI) Tax Credit program provides a non-refundable tax credit to individuals or corporate investors who provide qualified debt or equity capital to Indiana companies, improving access to capital for fast-growing Indiana companies. A VCI tax credit certified for an investment made after July 1, 2020, may be assigned to another taxpayer.
- Research and Expense Credits make a taxpayer potentially eligible for a credit on qualified research expenses. The potential value of the credit is equal to the taxpayer's qualified research expense for the taxable year, minus the base period amount of up to \$1 million, multiplied by 15%. A credit of up to 10% is applied to any excess of qualified research expense over a base period amount greater than \$1 million.
- Research and Development Sales Tax Exemption provides a 100% sales tax exemption for qualified research and development equipment and property purchased. Taxpayers may file a claim for a refund for sales tax paid on such a retail transaction should they not purchase it exempt from sales tax at the time of the actual transaction.
- Skills Enhancement Fund (SEF) aids companies to support the training of employees required to support business growth in Indiana. The grant may be provided to reimburse a portion (typically 50%) of eligible training costs over a period of two full calendar years from the commencement of the project, and SEF grants may only support training that leads to a post-secondary or nationally recognized industry credential or is specialized company training. If the training is provided to an existing employee, the company must also provide an increase in wages. Specialized company training should meet the applicable industry standard or be administered by a third party.

The state of Indiana offers a wide range of economic development incentives for companies considering a corporate site location project.



Indiana's General Assembly made substantial investments in the state's economic development programs primarily around two critical strategies: site development and workforce development. Site development has been an Indiana focus for some time. The IEDC reached a significant milestone in the Strategic Sites Inventory (SSI) program this spring, identifying over 300 new, nationally competitive greenfield site opportunities across more than half of Indiana's 92 counties. The SSI program is accelerating economic development opportunities across the state by identifying and vetting the readiness of new development sites. Since launching the program in 2017, the IEDC has partnered with local communities to vet new sites in 47 counties, achieving a faster volume of local site reviews faster than any other state participating in the SSI program. Through the program, the state initially identified 230,000 acres across 1,798 sites, including 69 potential tech mega sites, to review for potential economic development opportunities. So far, Indiana, in partnership with local communities, has strategically reviewed 938 sites, identifying 328 sites that would be top contenders for nationally competitive projects.¹⁹



Indiana recently launched the Regional Economic Acceleration and Development Initiative (READI), a bold, transformational initiative that will dedicate \$500 million in state appropriations to promote strategic investments that will make Indiana a magnet for talent and economic growth. Through this initiative, the state will encourage neighboring counties, cities, and towns to partner to create a shared vision for their future, mapping out the programs, initiatives, and projects that are critical for them to retain talent today and attract the workforce of tomorrow. READI is expected to attract at least \$2 billion of local public, private, and philanthropic match funding that will propel investment in Indiana's quality of place, quality of life, and quality of opportunity. The Indiana General Assembly continued the funding of READI with an allocation of \$500M over the biennium for READI 2.0 and they amended the READI grant fund enabling language such that regional development authorities OR qualified nonprofit organizations may apply for grant funding. The enabling statute does confirm that READI funds may only be used for capital projects and infrastructure projects.

The Indiana General Assembly also created a \$500M per year deal closing fund for use by IEDC, with a 10% earmark for projects located in counties with less than 50,000 residents, and established a \$150M revolving fund for site acquisition to complement IEDC's deal-closing fund. Site development is seen as a critical issue for corporate site location projects as rising interest rates and skyrocketing construction costs have slowed much industrial development. Indiana's Next Level Jobs Workforce Ready Grant program also received \$34 M



in the state budget. The Next Level Jobs Workforce Ready Grant is a grant program that covers the tuition and fees of qualifying certificate programs across Indiana for Indiana residents looking to work in one of 150 targeted industries that include Advanced Manufacturing, Building and construction, Health and Life Sciences, IT & Business Services, and Transportation & Logistics. Indiana’s workforce development grant programs in total received well over \$60 M in state funding in the new budget as workforce development continues to be a focus for states seeking corporate site location projects.

Indiana remains an economic powerhouse that punches far above its weight driven in large part by smart public policy decisions that keep the states’ cost of doing business at a competitive rate, developing job-ready sites, and having a highly-skilled, prepared workforce.

According to the Indiana Economic Development Corporation, Indiana in 2022 had a strong year from a corporate site location standpoint:

- a record \$22.2 billion in new committed capital investment for the state representing a 260% increase from 2021 paying an average wage of \$34.71 and generating \$1.7 B in new payroll and over 24,000 jobs,
- expected average wages 22% higher than in previous years and 27% higher than the state average,
- an inaugural global economic summit hosting more than 900 guests and 29 international delegations,
- critical new investments in the economy of the future industries, including electric vehicles and Microelectronics,
- \$500 million READI deployment that is on track to yield over \$9 billion in economic impact, and
- recognition as a global top 40 destination for entrepreneurship.

The IEDC established its first LEAP (limitless exploration/advanced space) mega site—LEAP Lebanon Innovation District, the next location of global innovation. Strategically located on Indiana’s I-65 Innovation Corridor, the LEAP Lebanon mega site will help attract high-growth sectors to shape and support the economy of the future. This 9000-acre site is anchored by a \$2.1 B investment from Eli Lilly to bolster its global pharmaceutical manufacturing production.

Stellantis and Samsung SDI launched a joint venture to build a new, next-gen EV battery manufacturing facility in Kokomo, creating 1,400 new jobs. General Motors announced plans to invest \$491M in its Marion metal plant to upgrade its operations and support the company’s EV production. Soulbrain MI picked Kokomo for its new manufacturing facility, investing \$75 million to increase production of high-purity electrolyte for lithium-ion batteries, helping to power electric vehicle batteries. SkyWater Technology plans \$1.8 billion semiconductor R&D and production facility in West Lafayette. November IEDC invests in WestGate One, a new microelectronics hub in Daviess County near the Naval Surface Warfare Center, Crane Division. NHanced Semiconductors, Everspin Technologies, Trusted Semiconductor Solutions, and Reliable Microsystems make plans to locate at the new hub, investing \$300M+ and creating more than 500 new jobs. Also, 32 international companies announced plans to grow in Indiana adding up to \$7.25 B in capital investment and up to 6,400 new jobs.

Michigan Economic Development Incentives. Michigan offers a wide array of economic development incentives to spur the retention and attraction of high-wage jobs to the state.

Michigan Economic Development Incentives

Michigan Business Development Program (MBDP)	Critical Industry Program (CIP)	Strategic Site Readiness Program (SSRP)
Jobs Ready Michigan	State Essential Services Assessment (SESA) Exemption and Alternative State Essential Services Incentive Programs	Michigan Community Revitalization Program (MCRP)



The Michigan Business Development Program (MBDP) is the state's prime economic development incentive program awarded by the Michigan Economic Development Corporation. The MBDP is a performance based economic development incentive that is available to eligible businesses that create qualified new jobs and/or make qualified new investment in Michigan. Michigan Business Development Program provides grants, loans, and other assistance to a business located in the State, creating 50 new jobs (25 new jobs if in a county with a population less than 90,000), and support capped at \$10,000,000.

MBDP Qualifications				
CATEGORY	STANDARD	RURAL	INNOVATION	MICRO
Qualified new jobs	50	50	25	Several qualified new jobs acceptable to the Michigan Strategic Fund
Company Stage	Second	Second	Second	Second
Other Qualifications	None	County population less than 90,000	The project must fall within an "innovation industry"	Must meet one of the following: • MEDC "Strategic Focus Industry" or "Regional Impact Industry"

The MBDP is targeted to the key industries include: basic chemicals, resins and synthetic rubbers, fibers, and filaments, pesticides, fertilizers, and other agriculture chemicals, pharmaceuticals and medicine, plastics products manufacturing, agriculture, construction, and mining machinery, industrial machinery, commercial and service industry machinery, engines, turbines, and power trans, equipment, computers and peripheral equipment, communications equipment, audio and video equipment, semiconductors and other electronic components, navigation, measurement, and control instruments, motor vehicles, motor vehicle bodies and trailers, motor vehicle parts, aerospace products and parts, medical equipment and supplies, software publishers, satellite telecommunications, data processing and hosting, architecture and engineering, computer systems design, scientific research and development and medical and diagnostic laboratories.

Michigan also offers the Critical Industry Program (CIP) to provides qualified investments to qualified businesses for deal-closing, gap financing, or other economic assistance to create or retain qualified jobs because of a technological shift in product or production or make capital investments, or both, in Michigan as determined by the MSF board. Administered by the MEDC on behalf of the MSF, this tool provides access to grants, loans, or other economic assistance. The criteria for the Michigan CIP Program awards include community support, the project is a catalyst for revitalization, clear company financial need, creation or retention of qualified jobs as a result of a technological shift in product or production at the project location, level of other public and private funds, financial stability of company, use of sustainable development tactics, level of environmental contamination, impact on existing Michigan industries, proximity to rail and utility, risk of obsolescence of the project, products, and investments in the future, ROI for Michigan, and impact on food supply.

The Michigan Strategic Site Readiness Program (SSRP) provides financial incentives to eligible applicants to conduct eligible activities on, or related to, strategic sites and mega-strategic sites in Michigan, for the purpose of creating investment-ready sites to attract and promote investment in Michigan. Eligible activities of SSRP funding includes: land acquisition and assembly; site preparation and improvement; infrastructure improvements that directly benefit the site, including without limitation, transportation; infrastructure, water and wastewater infrastructure, and utilities necessary to service the site; any demolition, construction, alteration, rehabilitation, or improvement of buildings on the site; environmental remediation; and architectural, engineering, surveying, and other predevelopment work required to commence construction on site improvements; or to develop a spending plan and proposal for capital investment in site readiness.

The availability of industrial sites is a key corporate site location issues facing nearly every state in the Union. Tennessee's successful Mega Site Program has spurred states like Michigan and others to address the need for major industrial site development in preparation for large scale job producing centers. Michigan's SSRP eligible applicants include local political subdivisions, local economic development corporations, private developers, and end users.



The Jobs Ready Michigan program was created by the Michigan Strategic Fund to meet the talent needs of companies that are expanding or relocating to Michigan. The program is designed to be flexible and responsive to the specific talent needs of companies and to address the costs associated with recruiting and training individuals for occupations that are high-wage, high-skill, or high-demand. Jobs Ready Michigan Program Funds can be used for employee recruitment, development of customized training development plans, instructor and training materials costs, purchase of equipment related to training, and construction of training facilities, and on-the-job training costs.

To attract new businesses and encourage the expansion of existing businesses, state and local governments also may offer tax abatements as an economic development incentive. Tax abatements temporarily decrease the amount of taxes a business owes. While this tax incentive has a general effect on property taxes, the means employed by state and local governments to achieve this effect varies from program to program. Michigan's State Essential Services Assessment (SESA) Exemption Projects located in eligible distressed areas (EDAs) that result in \$25 million or more of qualifying investments in eligible manufacturing personal property may be considered for a State Essential Services Assessment ("SESA") exemption. Projects that are not located in a distressed area that result in \$25 million or more of qualifying investment in eligible manufacturing personal property may be considered for an Alternative SESA if the MSF board determines the project, is a transformational project. The MSF will consider the following factors when reviewing a SESA Tax Exemption project: out-of-state competition, net-positive return to this state, level of investment made by the eligible claimant, business diversification, reuse of existing facilities, near-term job creation or significant job retention because of the investment made in eligible personal property, and strong links to Michigan suppliers.

Michigan has no shortage of economic development incentive programs designed to support the retention and attraction of high-wage jobs and capital investment; however, it is critical for companies seeking these incentives to understand the criteria in which the Michigan program funds are awarded.

Driven by a business friendly tax code, skilled manufacturing labor pool, service as the home of the global auto industry, and big batch of economic development incentives, Michigan is enjoying their fair share of corporate site location victories. Electric Vehicle production is just one area worthy of note to highlight Michigan's economic development success. For sure, Michigan has not been left out of the boom of EV megaprojects. According to the Michigan Economic Development Corporation, since 2019, Michigan has created over 35,000 auto jobs. Investments include:

- Stellantis announced the first new plant in Detroit in nearly 30 years, creating 6,000 jobs.
- Ford announced a \$1.45 billion investment creating 3,000 jobs to help produce the first-ever electric F-150, and a \$3.5 billion investment, creating 2,500 good-paying jobs, in a new EV battery manufacturing facility in Marshall, and an investment of \$2 billion, creating more than 3,200 jobs in plants across Michigan to support electric vehicle manufacturing growth and secure internal combustion engine portfolio in the state.
- GM announced a \$2.2 billion investment to build Factory Zero creating 2,000 jobs, and announced the planned creation of 4,000 jobs and retaining 1,000 jobs to convert Orion Township assembly plant to build full-size electric vehicle pickups and build Ultium's third U.S. battery plant in Lansing.
- LG Energy Solution announced a \$1.7 billion expansion creating 1,200 jobs in Holland manufacturing batteries.
- Canadian electric vehicle charging network operator FLO announced an investment of \$3 million for the company's first-ever U.S. manufacturing facility in Auburn Hills.
- Michigan-based Our Next Energy announced a \$1.6 billion investment to establish its first cell and electric vehicle battery pack gigafactory in Van Buren Township, creating up to 2,112 jobs.
- Gotion announced a \$2.36 billion investment for a new manufacturing facility in Big Rapids, creating up to 2,350 jobs.

Michigan, like other auto producing states, is in the middle of the EV facilities boom and more investment in this market is likely to continue.



Ohio Economic Development Incentives. Ohio, like its Great Lakes counterparts, offers a wide range of economic development incentives at the local and state government level as listed below.

Ohio Economic Development Incentive Programs

JobsOhio Economic Development Grants	JobsOhio Growth Loan Fund	JobsOhio Workforce Development Grants	JobsOhio Revitalization Program
JobsOhio Site Inventory Program	Ohio Building Demo Fund	Ohio Brownfield Redevelopment Fund	Ohio Community Reinvestment Tax Abatement
Ohio Data Center Tax Abatement	Ohio Enterprise Zone Tax Abatement	Ohio Historic Preservation Tax Credit	Ohio Job Creation Tax Credit
Ohio Megaproject Tax Incentives	Ohio Municipal Job Creation Tax Credit	Ohio New Market Tax Credit	Ohio Rural Industrial Loan Program
Ohio Transformational Mixed Use Tax Credit	Ohio 629 Roadwork Grant Program	Ohio Tax Increment Financing Program	Ohio Water and Waste Water Infrastructure Grant Program

- Jobs Ohio Economic Development Grant promotes development, business expansion, and job creation by providing funding for eligible projects in the State of Ohio
- JobsOhio Workforce Grant was created to promote economic development, business expansion, and job creation by providing funding for the improvement of worker skills and abilities in the State of Ohio. The program requires job creation and training of employees within a specified period and may consider the amount of proceeds per job created and employee trained. JobsOhio may consider aiding for eligible projects that improve operational efficiencies or production expansion, along with the retention of jobs.
- JobsOhio Growth Fund Loan provides capital for expansion projects to companies that have limited access to capital and funding from conventional, private sources of financing. JobsOhio will consider loans to companies that are in the growth, established or expansion.
- JobsOhio Revitalization Program Loan and Grant Fund is designed to support the acceleration of redeveloping sites in Ohio. Businesses, non-profits, or local governments where the entity committing the jobs has signed an agreement such as a letter of intent, option, lease, or holds title for the project site and has a specific business plan, financing plan and schedule for redevelopment and job creation to occur are eligible to apply. An eligible site is an abandoned or under-utilized contiguous property where redevelopment for the immediate and primary purpose of job creation and retention is challenged by significant redevelopment constraints. Revitalization projects typically retain and/or create at least twenty jobs at a wage rate commensurate with the local market. Priority will be given to job creation and retention projects within JobsOhio targeted industry sectors, those making additional capital investment beyond remediation and redevelopment, and/or projects with wages higher than the average local wage rate. Typical loan funding is between \$500,000-\$5 million and between 20% and 75% of eligible costs. Typical grant funding is up to \$1 million.



- Ohio Brownfield Redevelopment Fund is a collection of funding sources that can be used to help plan, assess, and remediate brownfields throughout the state. A brownfield is a piece of property whose redevelopment is complicated by the potential presence of environmental contaminants such as hazardous substances, asbestos, lead-based paint, and petroleum. Brownfield redevelopment allows a community to reclaim and improve its lands, making property viable for new development.
- Ohio Building Demolition Fund provides grants coordinated through Ohio's county landbanks for the demolition of non-brownfield buildings for sites planned to be used for housing and economic development purposes.
- Ohio Community Reinvestment Area program is an economic development tool administered by municipal and county governments that provides real property tax exemptions for property owners who renovate existing or construct new buildings. Community Reinvestment Areas are areas of land in which property owners can receive tax incentives for investing in real property improvements.
- Ohio Data Center Tax Abatement provides a sales-tax exemption rate and term that allow for partial or full sales-tax exemption on the purchase of eligible data center equipment. Projects must meet minimum investment and payroll thresholds to be eligible.
- Ohio Enterprise Zone Program is an economic development tool administered by municipal and county governments that provides real and personal property tax exemptions to businesses making investments in Ohio. The Enterprise Zone Program can provide tax exemptions for a portion of the value of new real and personal property investment (when that personal property is still taxable) when the investment is made in conjunction with a project that includes job creation.
- Ohio Historic Preservation Tax Credit Program provides a state tax credit of up to 25% of qualified rehabilitation expenditures incurred during a rehabilitation project, up to \$5 million. The tax credit can be applied to applicable financial institutions, foreign and domestic insurance premiums, or individual income taxes.
- Ohio Job Creation Tax Credit is a refundable and performance-based tax credit calculated as a percent of created payroll and applied toward the company's commercial activity tax liability awarded to companies creating at least 10 jobs (within three years) with a minimum annual payroll of \$660,000 and that pay at least 150 percent of the federal minimum wage and final approval from the Ohio Tax Credit Authority is required.
- Ohio Mega Site Economic Development Incentive program was designed to attract large scale industrial, headquarters, office and research and development projects. Before a business may qualify for any of enhanced Megaproject incentives, it must either operate a "megaproject" or sell tangible personal property to one. A Megaproject is a development project that satisfies all the following conditions:
 - *Wages*. The operator must compensate the project's employees at 300% of the federal minimum wage or more with a federal minimum wage is currently \$7.25 per hour for nonexempt employees this income threshold would equal \$21.75 per hour and this wage threshold is calculated exclusive of employee benefits and must be met at the time the project is approved for an Ohio Jobs Creation Tax Credit (JCTC).
 - *Capital Investment and Payroll*. The operator must either make at least \$1 billion in fixed-asset investments in the project or create at the project at least \$75 million in annual Ohio employee payroll, i.e., payroll subject to Ohio income tax. If the project qualifies based on Ohio employee payroll, the operator must maintain at least \$75 million in annual payroll at the project throughout the term of the JCTC.
 - *Sites and Workforce*. The project requires "unique sites, extremely robust utility service, and a technically skilled workforce."
 - In addition to the megaproject's operator, certain suppliers of a megaproject are eligible for the bill's incentives. Specifically, any business that sells tangible personal property may qualify for the incentives if it satisfies both of the following requirements: the business makes at least \$100 million in fixed-asset investments in Ohio, and the business creates at least \$10 million in annual Ohio employee payroll and maintains that level of payroll throughout the term of the JCTC.
 - Finally, Ohio Governor Mike DeWine has proposed to the Ohio General Assembly the development of a \$2.5 B All Futures Ohio Fund whose goal will be to create mega sites primed for large-scale economic development projects across the state. Debate on this potential new program is ongoing and is likely to be included in the state's upcoming operating budget which must be adopted by July 1, 2023.
 - Ohio has no shortage of economic development incentives used primarily to address taxes applied to companies primarily at the local government level.



- Ohio Municipal Job Creation Tax Credit provides an income tax credit tied to the providing of an agreed upon high-wage jobs and capital investment in various Ohio cities.
- Ohio New Markets Tax Credit Program provides an incentive for investors to fund businesses in low-income communities.
- Ohio Roadwork Development (629) funds are available for public roadway improvements, including engineering and design costs. Funds are available for projects primarily involving manufacturing, research and development, high technology, corporate headquarters, and distribution activity. Projects must typically create or retain jobs.
- Ohio Rural Industrial Park Loan Program (“RIPL”) promotes economic development by providing low-interest direct loans to assist eligible applicants in financing the development and improvement of industrial parks and related off-site public infrastructure improvements.
- Ohio Transformational Mixed-Use Development Program provides a tax credit against Development costs incurred during the construction of a project that will be a catalyst for future development in its area.
- Ohio Tax Increment Financing (TIF) is an economic development mechanism available to local governments in Ohio to finance public infrastructure improvements and, in certain circumstances, residential rehabilitation.
- Ohio Water and Wastewater Infrastructure Grant will provide \$250,000,000 to help Ohio communities make necessary investments in water and wastewater infrastructure.

Ohio not only benefits from having the seventh largest economy among the fifty states, but it also has substantial economic diversification and operates one of the best-funded state economic development programs in the nation through JobsOhio that has produced substantial corporate site location wins. Ohio’s recent corporate site location investments are substantial as well with wins all over the state. In January 2022, Intel announced plans to invest more than \$20B in the construction of two new leading-edge chip factories in Ohio to boost production to meet the demand for advanced semiconductors, power a new generation of innovative products from Intel, and serve the needs of foundry customers. Spanning nearly 1,000 acres in Licking County, the mega-site can accommodate up to eight chip factories as well as supporting operations and ecosystem partners and is projected to create up to 3000 permanent jobs and to have a \$2.8 B impact on Ohio’s GDP. Site excavation work began in the summer of 2022 with production expected to come online in 2025. In November 2022, Bechtel was selected to design and build Phase 1 of the project. New factories have a goal to be powered by 100% renewable energy, achieve net positive water use, and achieve zero total waste to landfill in support of Intel’s 2030 sustainability goals. Data centers have been another big focus for the state of Ohio. The Buckeye state has gained 26 enterprise data center sites and 97 colocation data center sites are driven by Ohio’s substantial Data Center Sales Tax incentive program as well as local property tax abatements.

JobsOhio Target Industry Sector Job Growth			
JobsOhio Targeted Sector	2010 (000s)	2022 (000s)	Key Themes Impacting Outlook
Logistics & Distribution	135	226	E-Commerce, Omni-Channel Distribution, Data Driven Supply Chains
Advanced Manufacturing	202	212	Additive/3D Printing, Advanced Materials, Automation/Robotics, Reshoring
Financial Services	161	173	FinTech, InsurTech, Cost Efficiencies
Information Technology	76	106	Cloud Computing, Data Analytics, Digital Transformation, Cybersecurity
Automotive	82	100	Smart Mobility, Electrification, Lightweighting, Chip Shortage
Military & Federal	95	94	Capitalize on Surge in Federal Investment, Advanced Air Mobility Initiatives
Healthcare	78	98	Gene & Cell Therapy, Cutting-Edge R&D, Critical Goods Leadership
Energy & Chemicals	85	88	Leverage World’s Lowest Natural Gas Prices, Improved Pipeline Infrastructure
Food & Agribusiness	60	72	Complete Ground-to-Consumer Value Chain, Cold Storage
Aerospace & Aviation	34	34	OEMs and Supply Chains Recovering, eVTOLsand Autonomous Mobility

Source: JobsOhio



As the table above illustrates, Ohio has added nearly 200,000 jobs in the key targeted industries identified by JobsOhio with a payroll increase of \$11.5 B. Ohio's economic development strategy to create a private sector economic development corporation and fund it by transferring ownership of the state of Ohio liquor profits is paying huge dividends for the Buckeye state.

Pennsylvania's Economic Development Incentives. Pennsylvania has many economic development incentives offered to companies looking to create jobs and make capital investments in Keystone state.

Pennsylvania Economic Development Incentives

WEDnetPA	Pennsylvania Manufacturing Tax Credit	Qualified Manufacturing Innovation and Reinvestment Deduction
Pennsylvania Industrial Development Authority	PA First	Keystone Opportunity Zones

- WEDnetPA program provides qualified employers with training funds for new and existing employees. Funding can be used for a wide range of incumbent worker training. The training must be skill-building for the employee's current job or for advancement or promotion. Funding eligibility requires that: Employees to be trained must be residents of and employed in Pennsylvania; Employees to be trained must earn at least 150% of the current federal minimum wage, excluding benefits; and employees to be trained must be permanent, full-time employees and eligible for full-time benefits. An individual employee can qualify for up to \$2,000 in job skills training. Company participation is limited to two years in a row and three out of the past five years. Training must occur from July 1 to June 30 of the fiscal year of the funding award.
- Pennsylvania Manufacturing Tax Credit (MTC) Program provides tax credits to taxpayers who increase their annual taxable payroll by \$1,000,000 through the creation of new full-time jobs. Tax credit awards shall be equal to 5% of the taxpayer's increase in annual taxable payroll if increased by at least \$1,000,000 above a pre-determined base year amount. Those eligible to apply are qualified taxpayers who increase their annual taxable payroll by \$1,000,000 through the creation of new full-time jobs.
- Keystone Opportunity Zones provide certain state and local tax abatement to businesses and residents located in designated zones. Businesses, property owners and residents that are in a KOZ, KOEZ/KOIZ are eligible to receive significant state and local tax benefits. Pennsylvania businesses relocating to a KOZ/KOEZ must either: Increase their full-time employment by 20% within the first full year of operation or make a 10% capital investment in the KOZ/KOEZ property based on their prior year's gross revenues. Eligibility for benefits is based upon annual certification. To receive benefits, any entity applying must be compliant with all local and state taxes and building and zoning codes.
- Pennsylvania Qualified Manufacturing Innovation and Reinvestment Deduction encourages increased investment and job creation through manufacturing in Pennsylvania. Qualified businesses are eligible to deduct five percent of their private capital investment from their corporate net income tax liability if they invest more than \$100 million in the creation of new or refurbished manufacturing capacity. Eligible applicants are manufacturing entities registered to do business in PA and subject to Corporate Net Income Tax and can obtain and maintain state tax compliance clearance status with the laws and regulations of the Commonwealth of Pennsylvania. Eligible projects will include the creation of new manufacturing capacity or improvements to existing manufacturing capacity at an identified project site. Limited to the mechanical, physical, biological, or chemical transformation of materials, substances, or components into new products, that are the creations of new items of tangible personal property for sale. The deduction will be equal to five percent of the private capital investment utilized in the creation of new or refurbished manufacturing capacity per tax year for a period of five (5) years.

- Pennsylvania Industrial Development Authority (PIDA) provides low-interest loans and lines of credit for eligible businesses that commit to creating and retaining full-time jobs and for the development of industrial parks and multi-tenant facilities. This money can be used for: Land and building acquisitions; Construction and renovation costs; Machinery and equipment purchases; Working capital and accounts receivable lines of credit, multi-tenant facility projects, Industrial Park projects. A variety of different industry sectors are eligible for PIDA financing including manufacturing, industrial, agricultural, research and development, hospitality, defense conversion, recycling, construction, child day-care, retail and service, export, and computer-related service enterprises. The PIDA program finances a portion of total eligible project costs.
- PA First is a comprehensive funding tool to facilitate increased investment and job creation within the Commonwealth. Funding can be used for Machinery/equipment; Job training; Infrastructure; Land and building improvements; Environmental assessment/remediation; Acquisition of land, buildings, rights-of-way; Working capital; Site preparation. Businesses, Municipalities, Municipal Authorities, Redevelopment Authorities, Industrial Development Authorities or Corporations, and Local Development Districts are all eligible for PA First funding in the form of grants, loans, and loan guarantees. Competitive projects must offer substantial economic impact, either for the Commonwealth as a whole or for the locality or region in which a business will locate or expand; private match required; job creation/preservation required. Pennsylvania, like their other Great Lakes counterparts, has a wide array of economic development incentives designed to retain and attract job producing companies.

The Western Pennsylvania market has transformed from a heavy industry dominated economy to a modern advanced services market.



Pennsylvania has enjoyed recent substantial corporate site location success in a wide range of industries.

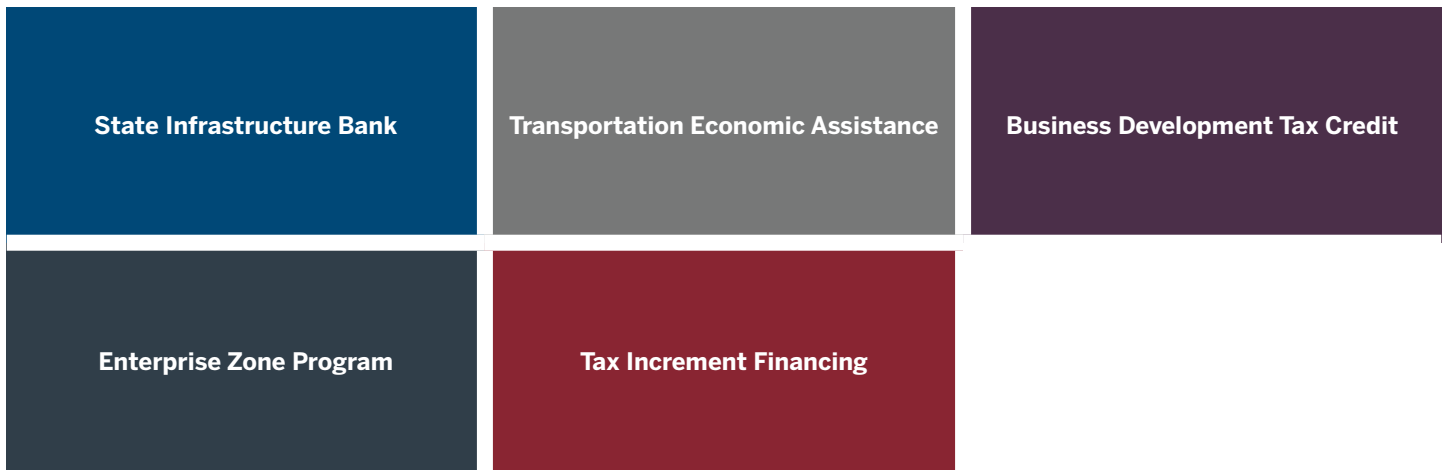
- Semiconductor Supply Chain: EMD Electronics announced a \$300 million investment in semiconductor specialty gases manufacturing that will create nearly 200 jobs in Schuylkill County, including 68 permanent union jobs.
- Advanced Manufacturing: Re: Build announced an \$81 million investment to create a major, innovation-focused manufacturing operation in western PA that will create 300 high-quality jobs.
- Food Production: Shank's Extracts: Specialty ingredient, flavors and botanical extracts company investing \$30.5 million, creating at least 83 new jobs in Lancaster County.



- Life Sciences: Purolite: Manufacturer of high-quality resins used to make life-saving drugs, will expand and create the first U.S. operations of its Global Biologics Division in Chester County, and the company, which will invest at least \$190 million into the local economy and create a minimum of 170 new jobs.
- Energy: Shell Petrochemicals Polymer “Cracker” Plant opened which will be a transformative project for Pennsylvania’s economy and the plastics industry opened in November 2022 is strategically located within a 700-mile radius of 70 percent of the U.S. polyethylene market, offering customers shorter supply chains and access to polyethylene pellets, and will add nearly \$4 billion every year to the state economy.

Wisconsin Economic Development Incentives. Wisconsin has many economic development incentives offered to companies looking to create jobs and make capital investments in the Badger state.

Wisconsin Economic Development Incentives



- Wisconsin’s Department of Transportation’s State Infrastructure Bank Program is a revolving loan program available to communities to preserve, promote, and encourage economic development via efficiency and safety in public transportation initiatives. SIB loans carry lower than market rate interest, and longer payback periods, and may be used in conjunction with other programs or to finance a project entirely. Counties, cities, villages, and towns may apply on a first-come, first serve basis for projects improving access to nearby industrial sites, or improvements to, and construction of, roads and bridges.
- Wisconsin’s Department of Transportation’s Transportation Economic Assistance (TEA) program provides matching state grants to governing bodies for road, rail, harbor, and airport projects that help attract employers to Wisconsin or encourage businesses and industry to remain and expand in the state.
- Wisconsin Business Development Tax Credit Program offers refundable tax credits to reduce the eligible businesses’ income tax liability for newly created jobs equal up to 10% of annual wages paid to employees earning at least 150% of the federal minimum wage, may cover up to 50% of eligible job training costs, up to 3% of capital investment in business personal property (5% in real property), and up to 10% of annual wages for positions created or retained at corporate headquarters.
- Wisconsin Enterprise Zone Program awards refundable tax credits up to 7% of annual wages for newly created jobs, up to 100% of job-training costs, up to 10% for capital expenditures, and up to 1% of supply chain expenses for up to 12 years to eligible companies for job creation, job retention, capital investment, and training to reduce state income tax liability or provide a refund in locally designated EZs designated on a case-by-case basis.
- Wisconsin Tax Increment Financing permits a local government to define a Tax Increment District (TID), the entity identifies projects to encourage desired development, as property values rise, the municipality uses the property tax above a frozen base to pay for the identified public improvement projects until the project costs are paid and the TID is closed.

Wisconsin competes for the retention and attraction of business on a global scale with competitive business tax policy as well as a core of economic development incentives. In fact, Wisconsin has seen their share of big corporate site locations win recently. As outlined in the table below, Wisconsin alone in 2023 has gained more than \$500 M in corporate site location capital investment that are slated to create over 900 jobs.

2023 Wisconsin Corporate Site Location Wins	
Company	Wisconsin Location
Commodore Homes, LLC	Dorchester
GEA Mechanical Equipment US, Inc.	Janesville
Wisconsin Aluminum Foundry Company, Inc.	Manitowoc
Fiserv Solutions, LLC	Milwaukee
BOH Electronics, Inc.	River Falls
Watco Companies, LLC	Wausau
Sysco Eastern Wisconsin, LLC	Jackson
Expert Institute - Milwaukee	Milwaukee
Powernail Company, Inc.	Genoa City
Saputo Cheese USA Inc.	Franklin

These 2023 corporate site location wins represented jobs for five manufacturing companies, two food processing, a corporate headquarters and a high-wage advanced services firm. 2022 saw 28 Wisconsin corporate site location wins bringing in over one billion in capital investment and over 6700 jobs.

Wisconsin has had substantial FDI success stories.

- HARIBO is a German based manufacturer of gummy candies, most famous for its classic Goldbears that employes 7,000 associates and operates 16 production sites in 10 countries. HARIBO decided to investment in Kenosha County, Wisconsin for a \$300 M state of the art factory bringing 385 direct jobs driven by the site's strategic location along I-94.
- Komatsu Mining Corp., based in Milwaukee, announced plans to build a new state-of-the-art headquarters and manufacturing campus in Milwaukee—a \$285 million project with the potential to create more than 400 jobs. WEDC and Komatsu have reached a substantive agreement that would provide the company with \$59.5 million in state income tax credits over the next 12 years tied to job creation.
- Milwaukee Tool announced the development of a new campus in Menomonee Falls that constitutes its fourth expansion in just five years including two new buildings in Brookfield, with a combined 316,300 square feet of space; a \$32 million research and development center in Brookfield; an expansion of manufacturing facilities in Mukwonago and Sun Prairie. Together, these expansions represent an estimated \$174 million in capital investment and are expected to create more than 1,800 new jobs.

Wisconsin is enjoying substantial success with corporate site location.



ENDNOTES

- ¹ <https://councilgreatlakesregion.org/the-great-lakes-economy-the-growth-engine-of-north-america/#:~:text=The%20Great%20Lakes%20Region%20includes,powerhouse%20on%20an%20international%20level.>
- ² <https://councilgreatlakesregion.org/the-great-lakes-economy-the-growth-engine-of-north-america/#:~:text=The%20Great%20Lakes%20Region%20includes,powerhouse%20on%20an%20international%20level.>
- ³ Ibid.
- ⁴ <https://www.esri.com/en-us/industries/health/focus-areas/access-to-care.>
- ⁵ <https://www.ibrc.indiana.edu/ibr/2015/spring/article2.html>
- ⁶ Ibid.
- ⁷ Ibid.
- ⁸ <https://clustermapping.us/content/clusters-101>
- ⁹ Ibid.
- ¹⁰ <https://www.bls.gov/mxp/publications/regional-publications/great-lakes-exports.htm#:~:text=The%20Great%20Lakes%20states%E2%80%94composed,equipment%20manufacturing%2C%20increased%20in%20June.>
- ¹¹ Ibid.
- ¹² Ibid.
- ¹³ Ibid.
- ¹⁴ Ibid.
- ¹⁵ Ibid.
- ¹⁶ <https://economics.princeton.edu/2023/01/06/new-data-on-state-and-local-business-tax-incentives-across-the-u-s/>
- ¹⁷ <https://cost.org/globalassets/cost/state-tax-resources-pdf-pages/cost-studies-articles-reports/2023-business-tax-burden-study---final.pdf>
- ¹⁸ Ian Pulsipher, Evaluating Enterprise Zones, (Washington, D.C., National Conference of State Legislatures, Feb. 26, 2008) retrieved from <http://www.ncsl.org/programs/econ/evalentzones.htm>.
- ¹⁹ <https://thetimes24-7.com/2023/05/indiana-leads-nation-on-strategic-site-identification-spurring-economic-opportunity/>

