

Foreword



PARTNER

Tim Daman, *President* and CEO, Lansing Regional Chamber of Commerce



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As we enter a new decade, the Lansing region, encompassing Ingham, Eaton, Clinton, and Shiawassee counties, is experiencing historic levels of economic growth. There

are \$3.2 billion in current new investments, with hundreds of millions more and thousands of jobs expected. These projects are as diverse as our region's economy ranging from one of the world's leading particle accelerator facilities to a new hospital to mixed-used buildings, insurance headquarter expansions, manufacturing investment, and agricultural processing facilities.

We have successfully positioned our region on the national and global stage, competing for and attracting significant foreign investment and Fortune 500 companies. As our population grows, so does our region's visibility as an attractive location for business and talent.

The Lansing region's unique assets are competitive with regions such as Columbus, Greenville, Des Moines, Madison, Nashville, and Ann Arbor. These assets are being harnessed and enhanced to help develop a more vibrant and prosperous future.

Our collective future is bright in a highly competitive global economy. However, we must accelerate our efforts to compete for future jobs and investments successfully. One of the first steps was to benchmark our region against thriving communities and identify our competitive strengths, opportunities for growth, and a regional vision. We currently do not compare favorably on many measures, which we should view as opportunities. This annual report will actively guide us toward important goals and strategies that will lead to continued growth. It will not be easy, but we must accept this challenge with confidence!

The new and revealing data provided by this study will allow us to learn, analyze, and measure the regional economy, people, and places. It will also enable us to continuously improve our partnerships and competitive efforts to secure a more prosperous, innovative, diverse, and exciting future for the Lansing region.

As we launched our first State of the Region benchmarking report, we did not anticipate a global pandemic and the resulting disruption is not reflected in this report's data. However, we acknowledge the changes and challenges now posed by the COVID-19 crisis. At first, we had to understand the magnitude of the crisis related to the health and safety of our families, neighbors, employees, colleagues, and community. Stay at home orders resulted in many teams working remotely, and business operations were curtailed or closed. We understand the stress that our regional economy is currently under because of COVID-19. Navigating an unknown landscape and unexpected disruption to our daily lives has created a unique set of circumstances that challenges us all. It is so important for business leadership to establish a vision and work together to emerge from this crisis stronger than ever.





We are up to this challenge and invite you to join us!

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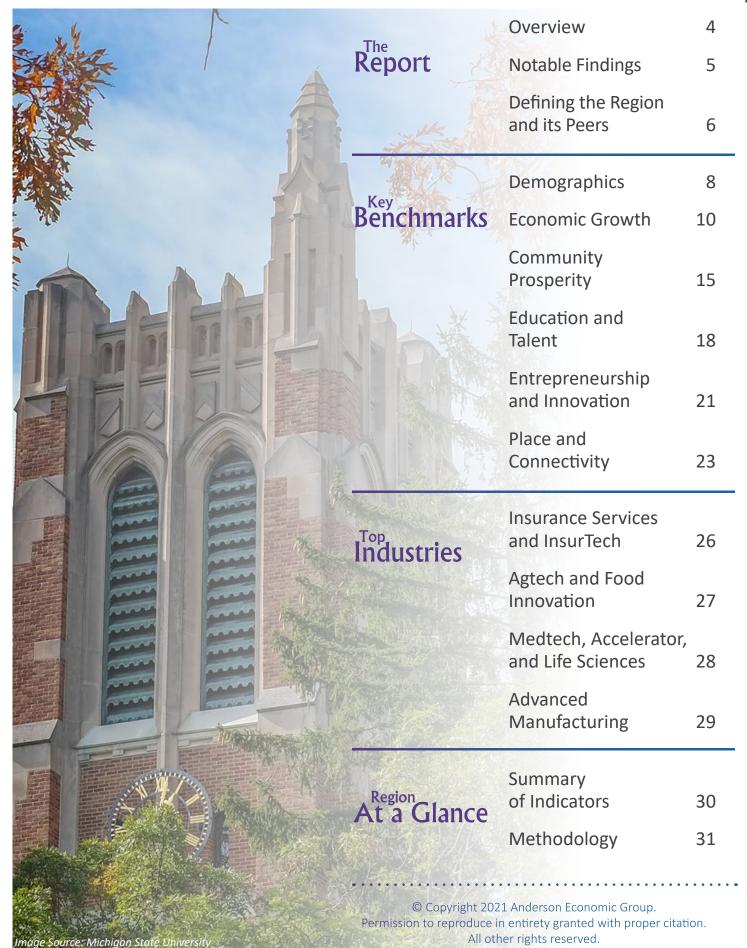












Report

Overview

The Lansing Regional Chamber of Commerce (LRCC) and Lansing Economic Area Partnership (LEAP) have partnered to sponsor this inaugural *State of the Lansing Region* report.

Upon receiving support from the area's business community and local stakeholders, the two organizations commissioned Anderson Economic Group to conduct a benchmarking study for the Lansing region. In this study, we identify peer regions

for the Lansing region, specify benchmarks, collect necessary data, and compare Lansing to its peer regions. The report will be updated twice in the following two to four years to track improvements in each of the rankings.

The resulting report begins by highlighting some notable findings, followed by a definition of the Lansing region and its peer regions. It then moves into an analysis comparing the Lansing region on 42 indicators relative to 11 peer regions. The report concludes with a spotlight on four key regional industries.

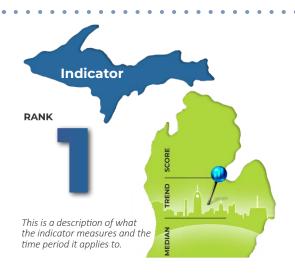
It is important to note that this analysis was conducted in the fall of 2019 and was being finalized in early 2020 as the coronavirus (COVID-19) pandemic emerged. The pandemic has been painful for Lansing area residents and businesses, as it has for our peer regions and for communities across the country. Business closures, high unemployment, and reduced economic activity weigh upon us all. However, as our economy heals from the shock, it is more important than ever for business owners and community leaders to take stock of our strengths and opportunities. For this reason, the factual data contained in this benchmarking study is a critical component in supporting the community's pandemic response.

For Lansing and each of its peer regions, the comparison data were collected before the pandemic, for the years 2014 through 2018. As a result, the data and trends presented here do not reflect any coronavirus-caused impacts.





Images Courtesy of Lansing Regional Chamber of Commerce and LEAP



How to Read this Report

Rank refers to the Lansing region's position relative to its peer regions.

Score refers to the indicator value that the region achieved.

Trend shows if the region is improving, declining, or remaining the same on the indicator.

Median is calculated based on the scores of all peer regions.

Notable Findings

There is room to build upon the Lansing area's many assets. The region currently benefits from Michigan's favorable tax climate and access to excellent higher education and research institutions. Below, we highlight five areas of strength and five areas of opportunity that were identified through our benchmarking study.

Areas of Strength:

Lansing Region

Areas of Opportunity:

Lansing Region



High Gen Z Population Percentage

2nd

This figure indicates the number of workers just entering or about to enter the workforce. A strong share of Generation Z among our population is good for the Lansing region.



Growth in Median Household Income

4th

The Lansing region has one of the fastest household income growth rates. However, our median income of \$58,833 is still low.



Low Housing Costs

12th

Housing costs are not increasing significantly in the Lansing region. Affordability is good, however growth here can also be an indicator for economic growth overall.



Growth in STEM Degrees Awarded

2^{nc}

Science, technology, engineering, and math are essential for a robust economy of the future. The strength of the Lansing region here is a building block for growth.



University Research Expenditures Growth

7nc

Research and development expenditures improve the region's attractiveness to students and talent, and provide an important source of innovation and entrepreneurship.



Population Growth

11th

Total population in the Lansing region has barely grown in the last five years. Population growth indicates how well a region attracts and retains residents.



High-Tech Employment

9th

The Lansing region has a relatively low share of employment in information technology, advanced manufacturing, and research and development. A higher share of high tech employment indicates economic prosperity and strength.



Establishments

12th

The Lansing region has seen no significant business creation in the last five years. New establishments not only support economic and private sector growth, they also help to diversify the economy.



University Startups

9th

A higher number of university-driven start-ups supports entrepreneurship, which could lead to more innovation and a more vibrant regional economy.

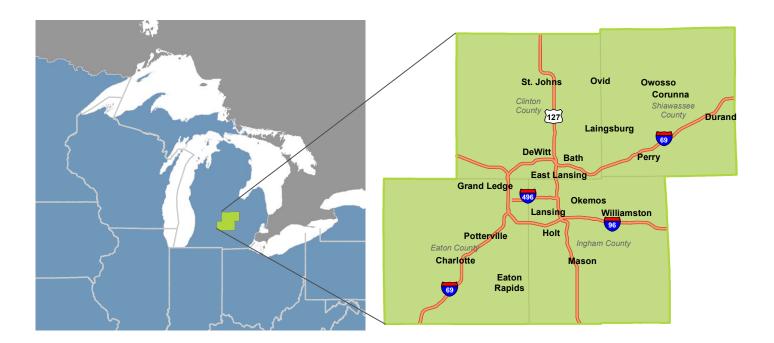


Educational Attainment

Rth

The Lansing region's share of residents 25 and older with an associate's (or higher) degree is below average. The availability of educated talent can promote economic growth in key industries.

Defining the Region

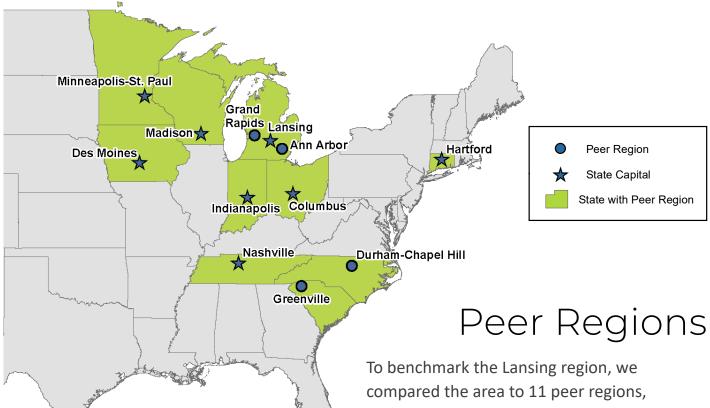


The Lansing region is located in mid-Michigan, at the confluence of three major highways and the Grand River. The Lansing region is home to Michigan's State Capitol, and to one of the top research universities in the world, Michigan State University.

The region has been an industrial powerhouse for more than 100 years, beginning in 1897 with automobiles produced by the Olds Motor Vehicle Company. Lansing's strong manufacturing status has continued into the 21st century. Two of the most advanced General Motors assembly plants in North America and a plethora of automotive suppliers call the region home. Lansing continues to

draw upon its historic reputation for a strong work ethic in manufacturing. The area has now diversified into insurance, health care and life sciences, and agricultural technology; as well as food, medical, and accelerator innovation.

The communities that comprise the four-county Lansing region are vibrant and unique. The major cities of Lansing and East Lansing are surrounded by several townships and smaller rural communities. Recognizing the growing regional connections in the area, Shiawassee County was added to Ingham, Clinton, and Eaton Counties in 2018 to round out the Lansing-East Lansing Metropolitan Statistical Area.



To benchmark the Lansing region, we compared the area to 11 peer regions, including those with exemplary economic development achievements. We assessed numerous criteria to identify Lansing's appropriate peer regions. These criteria included the presence of a major university, state capitals, industry makeup, population, and competitive environment for business.

Overview of Peer Regions		2018 ^a Population	2014-18 Pop. Growth Rate	Major University(s)	
*	LANSING, MICHIGAN	550,085	1.9%	Michigan State University	
	Ann Arbor, Michigan	370,963	3.0%	University of Michigan	
*	Columbus, Ohio	2,106,541	5.2%	Ohio State University	
*	Des Moines, Iowa	692,556	6.6%	(No Sizable Campus)	
	Durham, North Carolina	635,527	6.0%	Duke University + others	
	Grand Rapids, Michigan	1,069,405	3.7%	Grand Valley State Univ.	
	Greenville, South Carolina	906,626	5.4%	Clemson University	
*	Hartford, Connecticut	1,206,300	-0.6%	Trinity College, Univ. of CT	
*	Indianapolis, Indiana	2,048,703	4.0%	(No Sizable Campus)	
*	Madison, Wisconsin	660,422	4.3%	University of Wisconsin	
*	Minneapolis/St. Paul, Minnesota	3,629,190	3.9%	University of Minnesota	
*	Nashville, Tennessee	1,930,961	7.7%	Vanderbilt, Tennessee State	

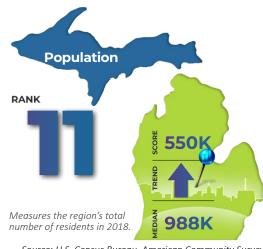
[★] Indicates State Capital

^a Land area varies for the peer regions.

Benchmarks

Demographics

By tracking key demographic indicators over time, we can gauge the region's progress toward prosperity. Growth



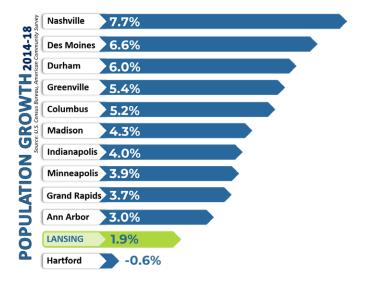
Source: U.S. Census Bureau, American Community Survey

in population and positive net migration are indicators for how well the region attracts and retains residents. Population diversity related to ages and generations reflects how well a region attracts and retains workers.



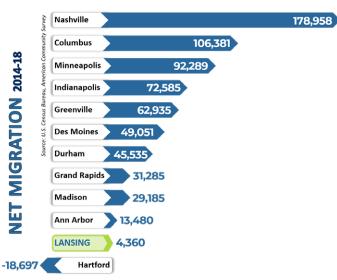
Population Growth

The Lansing region's population has grown each year since 2009, reaching 550,085 in 2018. However, since 2014 the Lansing area population increased by less than 2%, while most peer regions experienced much higher rates of growth.



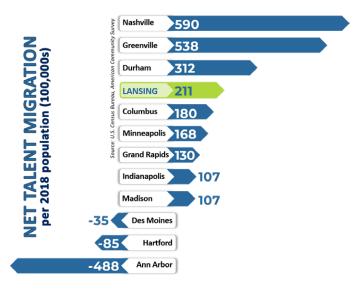
Migration

Net migration is the difference between the number of people coming into an area and the number of people leaving. The Lansing area experienced positive net migration every year between 2014 and 2018. However, our migration growth has been much smaller than that of peer regions.



Talent Migration

Talent migration is the measure of individuals with a bachelor's, graduate, or professional degree coming into the region. Here, the Lansing area performs better than on overall net migration. The region retained more highly educated individuals than it lost in 2018 relative to population size, out-performing eight peer regions. Top regional employers and other regional attractions played a critical role in attracting and retaining this demographic.



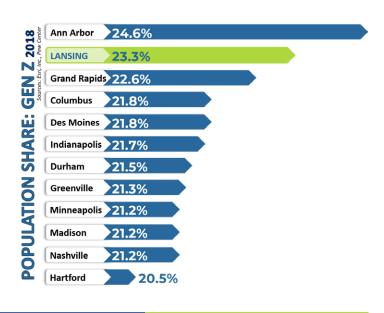




Generational (Age) Variation

In 2018, Lansing has the second highest share of Generation Z residents (those born between 1997 and 2012). This figure is indicative of the number of workers just entering or about to enter the workforce. Lansing's share of Millennial residents is similar to the rates of its peer regions, but because the Lansing area has a smaller overall population than most peer regions, the number of Millennial and Gen Z residents is also smaller.

Lansing also has a relatively high share of Baby Boomers (the population born between 1946 and 1964) at 23%. These residents are at or nearing retirement age, and may have additional time and disposable income to spend in the community.

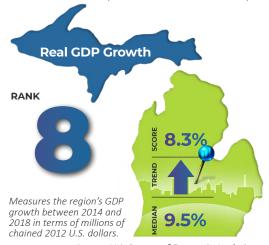


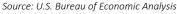
Economic Growth

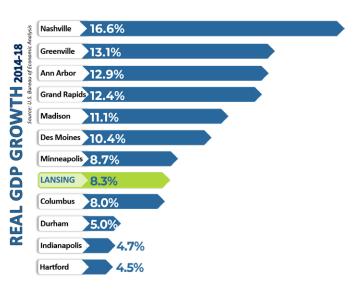
These metrics provide multiple reference points for evaluating the Lansing region's economic performance. High levels of employment, and in particular private employment, are indicative of financial strength and prosperity among the region's residents. Employment in different industries, GDP growth, and exports are some of the primary measures of a region's economic health.

Real Gross Domestic Product

Lansing's regional economy reached almost \$22.5 billion (2012 chained US dollars) in 2018. Gross domestic product (GDP) increased by over 8% between 2014 and 2018. The region's economy has grown in every year since 2014, to a total of \$22,462 million (2012 chained US dollars) in 2018.



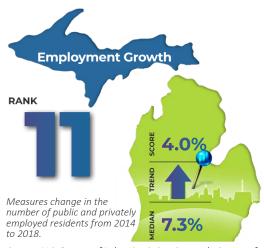




Labor Force and Employment

The Lansing area had one of the lowest rates of labor force growth relative to the peer regions between 2014 and 2018. The labor force (defined as the number of population age 16 and above that is employed or actively looking for work) totaled 281,658 in 2018, an increase of 2.8% since 2014. This places the Lansing region 11th among its peer regions for labor force growth. Similarly, the area ranks 11th among peer regions in job creation since 2014, with a 4% increase in jobs through 2018. This increase in employed residents indicates improvement in the economic strength of the region.

All peer regions, including the Lansing region, saw unemployment go down significantly between 2014 and 2018. The Lansing region's unemployment rate declined from 6.1% in 2014 to 3.6% in 2018. Among peer regions, 2018 unemployment rates ranged from a low of 2.3% to a high of 4.1%, placing Lansing 5th.



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

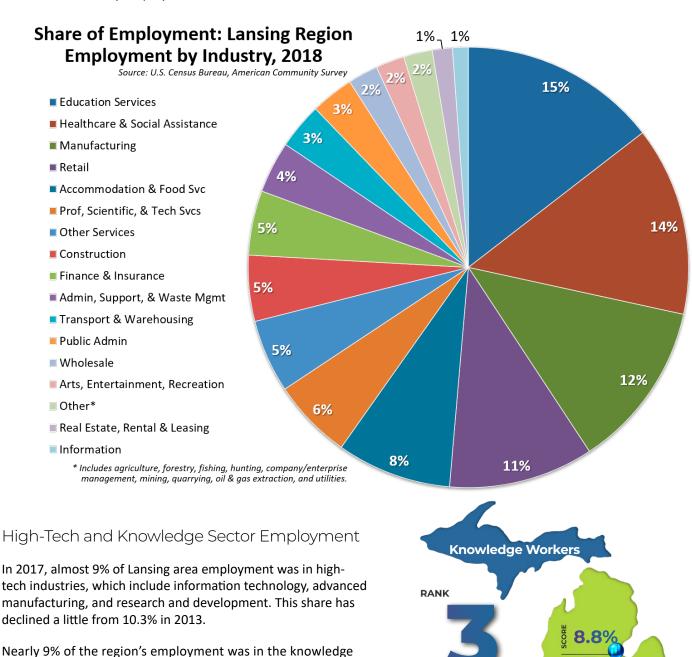
Employment by Industry

sector, which includes education and scientific research. The Lansing region ranks 3rd among peer regions for knowledge

sector employment share, marking a slight decline from 9.4%

in 2013.

Educational services, along with health care and social assistance, are the area's top industries. Each accounted for about 13% of the region's employment in 2018. Similarly, for Lansing and most peer regions, the heath care and education industries had the largest share of employment in 2018. Manufacturing, retail trade, and accommodations and food services are other large industries in the Lansing region. Among peer regions, Lansing's share of educational employment is 3rd largest; for manufacturing employment it is 6th largest. Further, the region boasts the largest share of public administration employment, but has the second smallest share of professional services employment and the smallest share of information industry employment.



Measures the 2018 share

population employed in the knowledge sector.

3.8%

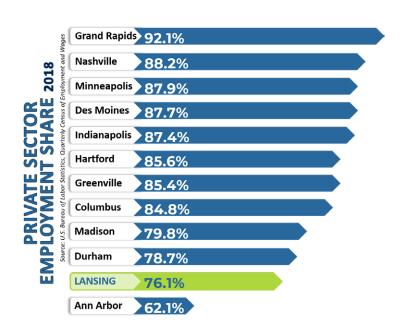
Sources: U.S. Census Bureau, County Business Patterns; IPEDS

of the region's working

Private vs. Public Sector Employment

At 76.1%, the Lansing region's share of private sector employment has remained unchanged since 2014. The area has one of the lowest shares of private employment among the peer regions.

Conversely, the Lansing region maintained the second highest share of employment in the public sector. For this measure, "public" includes government, universities, schools, and public hospitals.



Occupational Opportunities

Overall, employment is projected to increase by about 8% between 2016 and 2026. Computer and mathematical occupations, healthcare practitioners and technical occupations, management, and business and financial occupations are each expected to add more than 1,000 employees in the Lansing region.

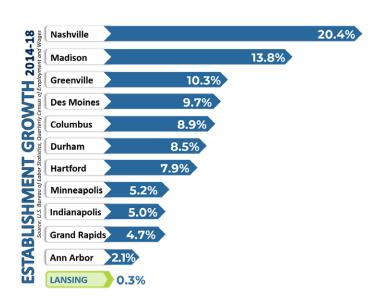
Further, some of the occupations projected to have the highest job growth rate over the next 10 years are many of the occupations critical to the success of the region's growth industries: insurance services and insurtech, agricultural technology and food innovation, medtech, accelerator, and life sciences; and advanced manufacturing.

Fasted Growing Occupations, 2016-2026	Employment Change	% Change
Personal Care and Service	1,140	15.9%
Community and Social Service	605	15.8%
Computer and Mathematical	1,110	14.7%
Healthcare Support	800	14.6%
Construction and Extraction	930	13.9%
Education, Training, and Library	2,745	12.9%
Transportation and Material Moving	1,815	12.8%
Healthcare Practitioners and Technical	1,410	12.2%
Life, Physical, and Social Science	415	12.0%
Architecture and Engineering	415	11.7%
Management	1,475	10.5%
Legal	190	10.5%
Arts, Design, Entertainment, Sports, and Media	425	10.4%
Business and Financial Operations	1,275	10.0%

Source: MI Dept. of Technology, Mgmt., & Budget; Bureau of Labor Market Information & Strategic Initiatives.

Growth in Business Establishments

The Lansing region has a diverse group of large and small businesses. More than 10,000 business establishments were located in the Lansing region in 2018, representing one of the lowest numbers of business establishments among the peer regions. The Lansing region's number of establishments has remained stagnant since 2014, while it has increased substantially in several peer regions.



Top Employers in the Lansing Region

The Lansing region's top employers are the State of Michigan, Michigan State University, and Sparrow Health System. However, the employment picture is far larger than that. The area's top private employers represent automotive, healthcare, insurance, retail and distribution, financial, and manufacturing sectors. Several major national companies are headquartered in the region, including Auto-Own-

ers Insurance Group, Neogen Corporation, and Dart Container Group.

The employers shown in these tables are ordered according to total employment in the Lansing area. The number of employees has not been included, as the pandemic has likely caused changes.

Top Employers by number of Lansing area employees	Industry Cluster		
State of Michigan	Government		
Michigan State University	Education		
Sparrow Health System	Healthcare		
General Motors	Manufacturing		
Lansing Community College	Education		
McLaren Health	Healthcare		
Auto-Owners Insurance Group	Insurance		
Peckham	Manufacturing		
Jackson National Life Insurance	Insurance		
Dart Container Corp.	Manufacturing		

General Motors Automotive **Auto-Owners Insurance Group** Insurance Peckham Apparel Jackson National Life Insurance Co. Insurance Foodservice Dart Container Corp. **Packaging** Meijer Distribution Ctr. Logistics Transportation Dean Transportation Inc. Equipment Delta Dental Insurance **MSUFCU Financial Services** Michigan Farm Bureau Family Of Companies Insurance **Food Processing Quality Dairy** The Shyft Group Automotive Automotive **Dakkota Integrated Systems** Logistics Multi-Packaging Solutions (John Henry) Biotech Neogen Corp. **Bridgewater Interiors (Johnson Controls)** Automotive Medical Device **Orchid Orthopedic Solutions** Pratt & Whitney Aerospace **Financial Services PNC Bank** Automotive Gestamp

Top 20 Private Employers

by number of Lansing area employees

Source: Lansing Economic Area Partnership

Source: Lansing Economic Area Partnership

Industry Cluster

Growth in Exports

The Lansing region exported a total of \$1.4 billion worth of goods in 2018. Over the last five years, exports increased by more than 50% in the Lansing region. Since 2014, the growth rate for the Lansing region's exports has surpassed that of all other peer regions. Ranking 1st on this metric shows that exports are helping to grow the regional economy.

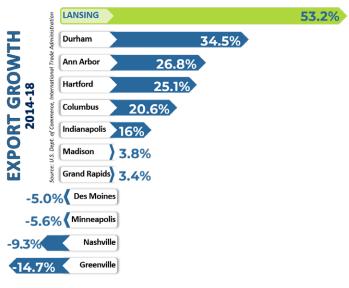


Notable Exports

The Lansing area's top exported goods included transportation equipment, machinery, plastics and rubber products, chemical products, and agricultural crops.



Source: U.S. Department of Commerce, International Trade Administration



Community Prosperity

The indicators in this section show how well the Lansing region's economy is doing and reflect the impact that many regional and state policies have upon area residents. These income, housing, and other indicators illustrate the level of regional prosperity by measuring trends in financial status and security, along with the region's average standard of living. Together, these factors demonstrate how the economic makeup of the region impacts individuals, families, and the community as a whole.

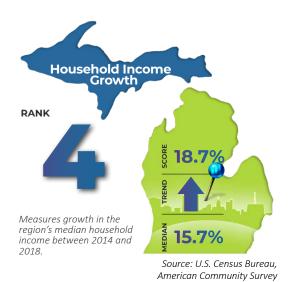
Household Income and Income Growth

Over the last five years, the Lansing region's median household income increased by 18.7%, representing one of the fastest growth rates among the peer regions.

In 2018, the median income reached nearly \$59,000 for Lansing region households. However, this income level is one of the lowest among the peer regions.

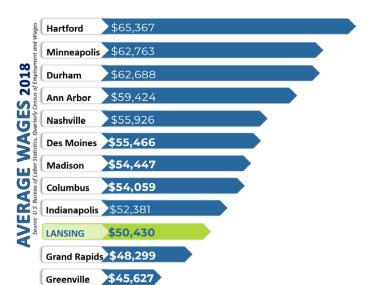
Similarly, the Lansing region's per capita income has increased since 2014, but it remains among the lowest of the peer regions at \$30,836.





Average Wages

Average wages in the Lansing region were \$50,430 in 2018. At that level, they are among the lowest average wages of the peer regions. Average wages continue to increase, however, growing by 10.7% from the \$45,549 average of 2014.

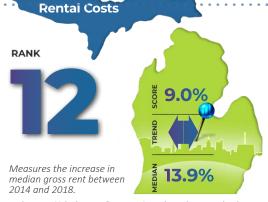




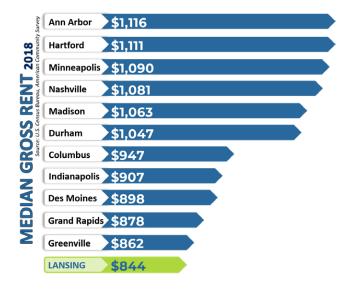
Housing Costs

Median housing values have improved since the end of the Great Recession, increasing in every year from 2014 to 2018. However, the Lansing region still has the lowest median housing value among the peer regions at about \$154K.

Similarly, rental costs increased between 2014 and 2018 in all peer regions, including the Lansing region. The Lansing region had the lowest increase in median gross rent, which includes contract rent plus the monthly cost of utilities. In 2018, median gross rent was \$844 in the Lansing area.



Source: U.S. Census Bureau, American Community Survey



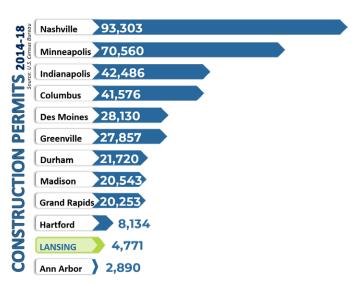


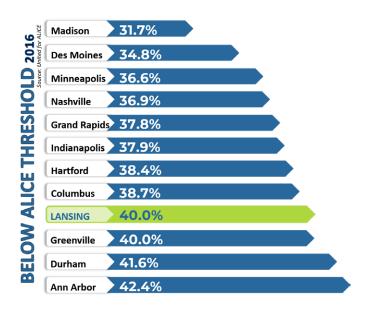


Housing Construction

From 2014 to 2018, the Lansing region experienced improvement in the construction industry, with permits for single-family housing totaling almost 4,800. However, the number of permits per 1,000 residents puts Lansing among the regions with the lowest new residential construction. Lansing's residential construction growth rate was 8.8%, ranking Lansing 11th for single-family housing construction permits.

The pace at which housing stock is created can be viewed as a proxy for growing population and household formation, and for any corresponding economic growth.





Livability and the Working Poor

All regions have a portion of the working population that struggles to make ends meet. One definition for "working poor" was recently put forward by the United Way. This definition is called ALICE (Asset-Limited, Income Constrained, and Employed). According to the 2016 ALICE data (the most recent year for which data is available), about 40% of the Lansing region's households fall below the ALICE threshold. The Lansing region is near the bottom among peer regions for the ALICE-defined share of working households that struggle financially.

Education and Talent

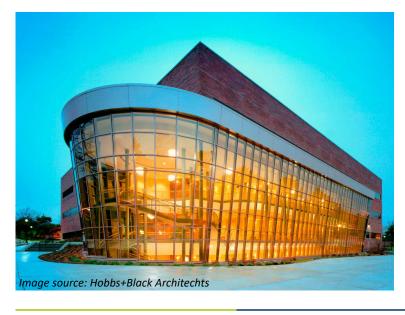
A talented workforce is fundamental to the region's current and future economic prosperity. The Lansing region is home to diverse, top-ranked K-12 schools as well as higher education institutions that include Michigan State University and Lansing Community College. Other higher education institutions in the region include Davenport University, Western Michigan University Cooley Law School, Central Michigan University, and partner institutions at the LCC University Center (Ferris State University, Northwood University, Siena Heights University, and University of Michigan-Flint).

This section's key indicators describe the area's infusion of talent and human resource capital. Measures such as degrees conferred and educational attainment assess the overall quality of the labor pool, while STEM degree metrics indicate how well a region prepares students for highly skilled occupations. Further, higher levels of education point to higher wages for area workers, resulting in increased regional prosperity.



Michigan State University

Founded in 1855, Michigan State University offers more than 200 programs for undergraduate, graduate, and professional study. MSU is one of the nation's top 100 universities and ranks well among the nation's public universities. Its programs are first in the nation for education degrees that include curriculum and instruction, as well as graduate level elementary and secondary education. MSU programs are also first in nuclear physics, supply chain management, organizational psychology, rehabilitation counseling, and African history.

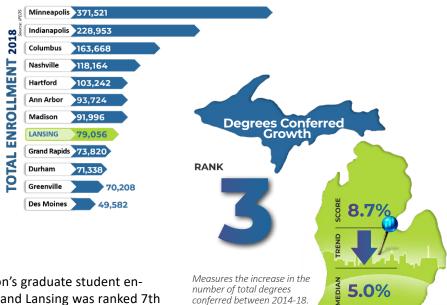


Lansing Community College

Lansing Community College is one of the largest community colleges in Michigan, serving more than 23,000 students each year. LCC offers more than 200 associate degree and certificate programs, in addition to options for career and workforce development and for personal enrichment. LCC regularly ranks among the best schools in the nation for its technical programs, including the on-line construction management degree and coursework for ultrasound technicians.

Higher Ed Enrollment

Due to demographic changes, undergraduate enrollment at Lansing area colleges and universities has declined by 10% since 2014. In 2018, the Lansing region had a student enrollment of 63,355. Almost all peer regions experienced similar declines in undergraduate enrollment. This declining trend is typical for many higher education institutions in the state and elsewhere, due in part to shifting demographics in the K-12 student population.



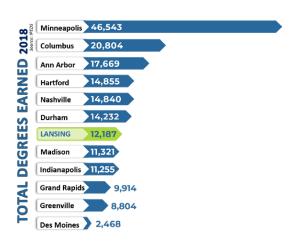
Source: IPEDS

A corresponding decline in the Lansing region's graduate student enrollment occurred between 2014 and 2018, and Lansing was ranked 7th among the peer regions for graduate student enrollment size during this period.

Degrees Earned

The number of degrees conferred by higher education institutions in the Lansing region has grown by 9% since 2014 to over 12,000 in 2018. Lansing ranks 7th in the number of degrees conferred in 2018 and 3rd in growth rate over the last five years.

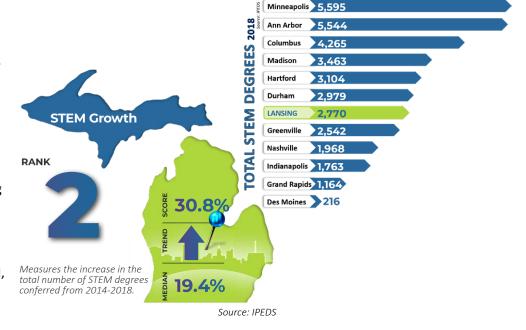
More than 9,300 undergraduate students earned degrees from Lansing area schools in 2018. This 14% increase over 2014 places Lansing 6th among the peer regions. For graduate students, almost 2,900 degrees were awarded in 2018, representing a 6% decline over 2014 and placing Lansing 9th.



STEM Degrees

Nearly 2,800 STEM degrees were awarded in the Lansing region in 2018, representing a 31% increase over 2014. This increase places Lansing 2nd for STEM degree growth rates among the peer regions.

The Lansing area also had among the highest share of STEM degrees earned through regional higher education institutions. STEM degrees accounted for almost 23% of degrees conferred, placing the Lansing region 4th among the peer regions.



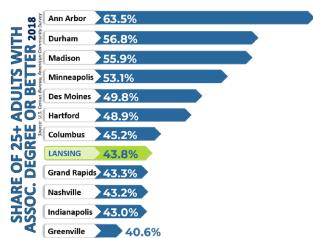


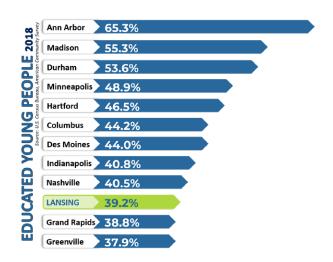
Educational Attainment

In 2018, the share of Lansing area residents aged 25 and older with an associate degree or higher was 43.8%. This figure is partly attributable to local graduates who decide to stay in the region, with more than 46,000 MSU alumni currently residing in the Lansing area.

This measurement, which was lower for Lansing than for most peer regions, shows the availability of educated talent in the region. While the level of talent available in the Lansing region has increased each year since 2014, it was still 6% lower than the peer region average and was outranked by just over half of the peer regions. We note that these peer regions represent some of the most educated places in the country, as each is home to one or more renowned universities.

Educational attainment is a critical factor in growing the quality of the region's talent pool. It is important to retain a high percentage of these graduates in the region, especially for future economic growth.





Educated Young People

In 2018, 39% of Lansing residents age 25 to 34 had earned a bachelor's degree or higher. Most peer regions had much larger shares of educated talent, indicating that the Lansing region is not as good at attracting and retaining highly trained young people. Lansing was 8% lower than the peer region average and was outranked by all but two of its peers in 2018.



Entrepreneurship and Innovation

An entrepreneurial spirit is critical to advancing a community's economic prosperity. The Lansing region strives to support innovation and entrepreneurship by providing the support new businesses need to succeed.



Lansing has a century-old tradition of innovation and entrepreneurship. The celebrated Ransom E. Olds, one of the fathers of the nation's automotive industry, is among Lansing's most well-known entrepreneurs.

University research and development expenditures improve the region's competitiveness in attracting talented students and researchers. MSU's research funds also provide an important spark to ignite innovation and entrepreneurship throughout the Lansing region.

Business Acceleration

Regional efforts to support entrepreneurship, including incubator space and accelerator programming, resulted in the creation of at least 32 companies in 2018, of which 19 were high-tech start-ups. The available amount of incubator space in the Lansing area has recently increased with the opening of the VanCamp Incubator + Research Labs by the MSU Foundation. The region now has a total of 32,000 square feet of space, 22,500 of which can be rented by growing companies.

The region's cohort-based accelerator programs have also nurtured startups. Since 2015, the MSU Foundation's Conquer Accelerator summer program has launched over 20 startups that have raised over \$2M in funding. A quarter of these companies are tenants in MSU Foundation's incubator properties.

Further, among the entrepreneurship activities tracked by LEAP in 2018, almost 30 entrepreneurship events took place in the Lansing region, and local companies attracted almost \$5 million in venture financing or private investment.

Patents

The Lansing region has generated a sizable number of patents in recent years, with more than 1,200 issued between 2000 and 2015. Michigan State University typically generates a large number of patents for the Lansing region, as do IBM, Dart Container, and others.

Research at Michigan State University is vast. From agriculture to health science, complex materials, and nuclear physics, MSU researchers are conducting cutting-edge research. In 2018, 35 patents were awarded to researchers at Michigan State University. Patents help generate potential economic benefits for the institution and for the region. In 2018, MSU gained about \$4.5 million in licensing revenues from its patents, ranking the school 8th among the peer region's universities for the number of patents awarded.

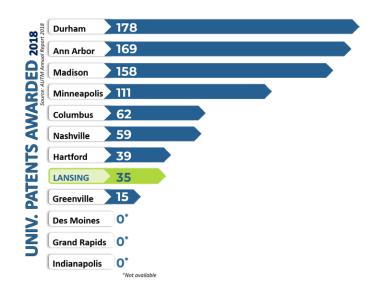
University Start-Ups

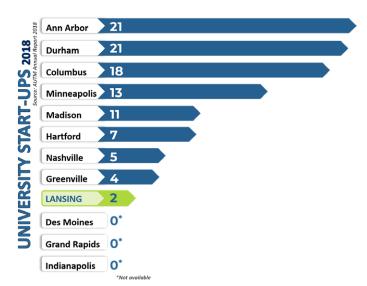
MSU supports entrepreneurship by providing faculty and students with access to experienced business leaders and start-up funding opportunities, and by connecting university-wide entrepreneurship programs and community collaborations. Through its highly-ranked undergraduate program, MSU's Burgess Institute of Entrepreneurship and Innovation encourages students to acquire an entrepreneurial mindset using experiential learning methods. MSU's *Spartan Innovations* provides resources to help launch entrepreneurial ventures including commercial/market assessment, start-up advising, business documentation and support services, mentoring programs, business accelerator programs, business plan development, gap funds and grant funding. In 2018, Michigan State University reported 2 new start-ups in the region due to these efforts.

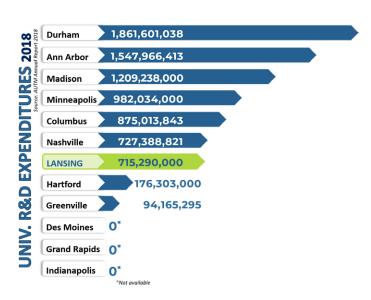
University Research and Development

MSU's 2018 expenditures on research and development exceeded \$715 million to rank the region 7th among its peers. This represents an almost 30% increase over 2015, marking the second highest research expenditure growth rate among the peer regions. Top federal agencies providing funding for MSU research are the Department of Energy, National Science Foundation, Department of Health and Human Services, Department of Agriculture, and Department of Defense. Further, MSU is in the midst of a *Global Impact Initiative* to recruit more than 100 new faculty members. This hiring effort is targeted toward research areas where the university can expand human knowledge, including genomics, environmental science, precision medicine, advanced physical sciences, and computation.

Efforts to facilitate the commercial development and public use of technologies and materials developed by MSU faculty and staff have placed the university 8th overall in 2018 tech transfer among the peer regions' major research universities.







Note: Self-reported data may not be comparable.

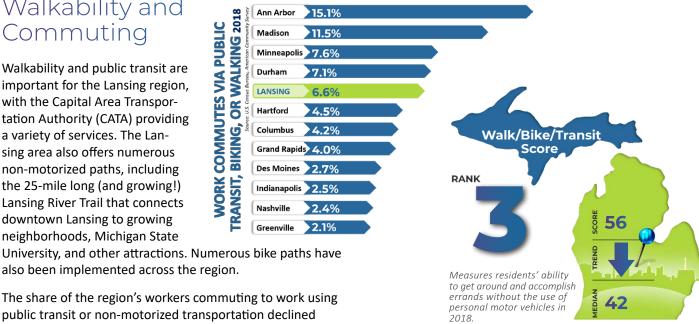
Place, Livability, and Connectivity

The Lansing region has many arts and culture, recreation, and entertainment attractions for visitors and residents alike. From the State Capitol to the beautiful MSU campus, the Broad Art Museum, Lake Lansing, miles of trails and paths, parks and cultural attractions, sporting venues, and popular festivals, the region provides enriching opportunities for all. This section describes key placemaking and connectivity benchmarks for the region.



Walkability and Commuting

Walkability and public transit are important for the Lansing region, with the Capital Area Transportation Authority (CATA) providing a variety of services. The Lansing area also offers numerous non-motorized paths, including the 25-mile long (and growing!) Lansing River Trail that connects downtown Lansing to growing neighborhoods, Michigan State



Source: WalkScore com

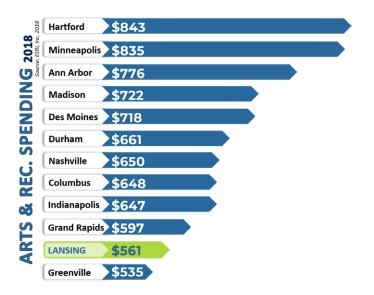
The share of the region's workers commuting to work using public transit or non-motorized transportation declined between 2014 and 2018. With 6.6% of workers taking public transit, biking, or walking to work in 2018, the Lansing region ranks 5th among the peer regions. The average commute time for Lansing workers was 24.1 minutes in 2018, ranking the Lansing region 4th on this measure. This result demonstrates comparatively convenient access to employment for local residents.

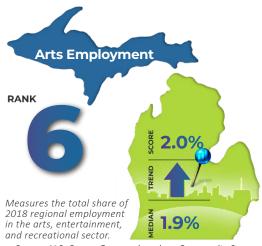
Overall, the region's public transit and bike infrastructure provides some opportunities for area residents to leave the car at home. The Lansing region ranks 3rd among the peer regions for the ability of residents to get around and accomplish errands without using personal motor vehicles.

Arts, Culture, and Entertainment

Placemaking, arts, and culture have become increasingly important to the Lansing region's residents, and to our economy. While Michigan State University's Wharton Center regularly brings Broadway shows and top performers to the area, the region's other venues host smaller, more regional acts. Additionally, the Lansing area now presents close to 100 festivals throughout the year. These upward trends, among others, have produced a slight employment increase in the arts, culture, recreation, and entertainment sector over the last five years, from 1.6% of total employment in 2014 to 2.0% in 2018.

With so many options, it may seem surprising that Lansing is among the lowest in the peer regions for per-household spending on theater, opera, and concert tickets; movies, museums, and parks; admission to sporting events; and participant sports at \$561 per household. This factor is partly attributable to the many area attractions and festivals that are free or relatively inexpensive when compared to the Lansing area's peer regions.





Source: U.S. Census Bureau, American Community Survey





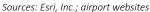
Regional Connectivity

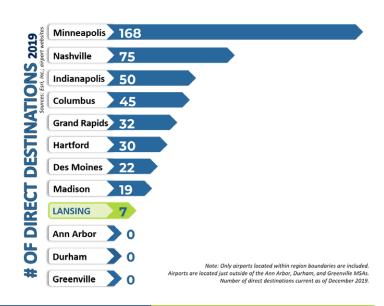
Because the Lansing region is located in the heart of the state, it offers convenient access to major destinations for commerce, personal, and recreational activities. Three major highways intersect in the region, including the I-96, the I-69, and U.S. Route 127. I-96 is the main economic corridor of the state, connecting Detroit to Lansing and Grand Rapids, while I-69 connects the region with the border crossing to Canada and numerous international trade opportunities. The region is located one hour away from Grand Rapids, less than 90 minutes from Detroit or Windsor, and less than four hours from Chicago, Indianapolis, or Columbus. In under two hours, residents can reach numerous state and national parks, campgrounds, resorts, and beaches along Lake Michigan or a multitude of other Michigan lakes and rivers. The multi-modal transportation center connects the Lansing region by rail to numerous Amtrak destinations, including Chicago.

Airport connectivity continues to be important to mid-Michigan. The region is home to the Capital Region International Airport, which provides convenient access to four regular destinations (Detroit, Chicago, Washington DC, and Minneapolis) and additional seasonal destinations. In 2019, the airport provided a total of 7 destinations, placing Lansing 9th among peer regions in airport access. More than 184,000 passengers used the airport in 2018, a decline of 6.4% over 2017. The airport's cargo tenants move approximately 44 million pounds of cargo a year.

From the Lansing region's center, residents also have a number of other opportunities for air travel that can be accessed within an hour. A short drive or a relaxing ride on the region's popular *Michigan Flyer* shuttle bus service gives travelers access to an additional 39 direct destinations from nearby airports.







Industries

Insurance Services and Insurtech

The Lansing region is the hub of Michigan's insurance sector and a logical home-base for industry leaders.

The region is home to the headquarters of six prominent insurance companies, including:

- Jackson National Life **Insurance Company**
- Accident Fund Insurance
- Delta Dental of Michigan
- **Auto-Owners** Insurance
- Farm Bureau Insurance of Michigan
- Michigan Millers Mutual Insurance Company

The region is also home to emerging insurance tech companies like:

- **Quest Software**
- Vertafore
- Dewpoint

Lansing is an ideal location for

the insurance industry because of the growing talent base bolstered by educational institutions offering programs in IT, computer science, mathematics, actuarial science, and insurance and risk management.

Trends ·····

In 2016, employment in related occupations exceeded 8,500 and is now nearing 10,000. By 2026, employment in InsurTech related occupations is projected to increase by more than 10%.

LEAP has created PROTO InsurTech, an accelerator platform that offers equity investment, expert guidance, and connectivity

By 2026, employment in InsurTech related occupations is projected to increase by 13%.

with insurance industry leaders to technology startups geared toward insurance solutions.





Agricultural Technology and Food Innovation

The Lansing market is home to a growing cluster of food processing, distribution, and production companies and facilities.

Agriculture and food chain industries contribute almost \$450 million each year to the local economy and provides more than 5,000 jobs to local residents. Conventional agriculture is becoming increasingly bolstered by new "agtech" companies providing technology-driven solutions for the agriculture and food processing industry across the region. Industry leaders located in the region include:

- Munters Aerotech
- Citizens Elevator
- Agro-Culture Liquid Fertilizers
- Neogen
- JMT US

Michigan State University is a historical land-grant university with world-leading programs in agricultural and biotech research opportunities. The university also promotes product development and commercialization through the MSU Product Center, the Food Processing Innovation Center, and MSU Extension.



Trends ·····

- In 2016, employment in AgTech and food-related occupations was close to 1,000. That number is expected to increase in the coming decade. The new Glanbia facility alone is expected to hire more than 300 employees when fully operational.
- By 2026, employment in regional AgTech-related occupations is projected to increase by 12%.

In September 2018, Glanbia Nutritionals, the world's #1 producer of American-style cheddar cheese, broke ground on a new dairy processing campus in St. Johns.

The new Glanbia facility is designed to process 8 million pounds of milk every day, or nearly a quarter of all milk produced in Michigan.

With investments from the Dairy Farmers of America and Select Milk Producers, the new Clinton County facility will produce a variety of cheese and whey protein products.

MedTech, Accelerator, and Life Sciences

Life sciences research is driving exciting innovation across healthcare and medicine.

Home to one of the world's leading research universities, the Lansing region has an international presence in cutting-edge medical research and a growing cluster of companies specializing in medical isotopes, biotechnology, and medical devices. The region's biotechnology industry is led

by Neogen Corporation, which develops food and animal safety products. Emergent Biosolutions is also a regional leader, developing medical countermeasures for biological and chemical threats, and for emerging infectious diseases.

The Facility for Rare Isotope Beams (FRIB) at MSU will house the most powerful machine of its type in the world, changing the way nuclear research is conducted and expediting discoveries and breakthroughs.

MedTech involves some of the nation's top medical device and particle accelerator companies, including Tecomet, Orchid, Niowave, and Ionetix.

The region's growing labor pool is supported by Michigan State University, which is ranked first in the nation for its nuclear physics graduate program. The university has more than 20,000 students enrolled in programs across engineering, the natural sciences, chemistry, and physics.



Trends

- In 2016, employment in related occupations was approximately 1,300.
- Over the next decade, employment in MedTech, Accelerator, and Life Sciences related occupations is projected to increase by 12%.



McLaren Greater Lansing is building a new \$601 million state-of-the-art hospital, cancer center, and medical services facility due to be completed in 2022. This campus will provide health care delivery, educational opportunities, and medical research. When fully complete, the campus will be home to over 1,000 physicians, researchers, educators, and other staff.

Funded by the U.S. Department of Energy Office of Science, MSU, and the State of Michigan, the Facility for Rare Isotope Beams is expected to open in 2021 and have a substantial contribution to the regional and state economy.

Advanced Manufacturing

The tradition of automotive excellence continues, as Lansing manufacturing expands to other industries and goes high-tech for the 21st century.

Michigan is number one in automotive-related jobs and businesses, and the Lansing region is a significant contributor to that status. The region is home to General Motors' two newest plants—the Lansing Grand River Assembly facility and the Lansing Delta Township facility, which is the first manufacturing facility to be a Gold Certified Leader in Energy and Environmental Design (LEED). Together, these plants employ over 4,400 people. In 2018, GM announced plans to invest an additional \$175 million at the Lansing Grand River Assembly plant to modernize tooling and equipment for the next generation of Cadillac sedans. In 2019, GM announced it would invest \$36 million to prepare the Lansing Delta Township plant for future crossover production.

The Shyft Group, formerly Spartan Motors, is a specialty vehicle manufacturer for the last mile delivery, work truck, and recreational vehicle markets. The company has an expansive 90-acre manufacturing and assembly footprint in the Lansing region, where they produce their own vehicles, components, and upfits while also being a key supplier for global automakers and specialty vehicle OEMs. Major international suppliers have located in the region, in part to support GM and The Shyft Group.

Increasingly, Lansing region is home to a diverse range of advanced manufacturing industries, including advanced nuclear



medicine and pharmaceuticals. Further, Pratt & Whitney (which designs, manufactures, and services jet engines) has two manufacturing locations in the Lansing area.

Trends ·····

- In 2016, employment in advanced manufacturing and related occupations numbered approximately 2,300.
- By 2026, employment in advanced manufacturing occupations is projected to increase by nearly 14%.



Notable News •••••••

In 2019, Lansing-based Niowave Inc. received one of four \$30 million federal grants to produce molybdenum-99, the most frequently used medical isotope in the world.

Aerospace and medical device manufacturer Tecomet has invested more than \$10 million over the last three years to expand and upgrade its Lansing facilities.

Region							(A.	
At a Glanc	e				7			
Summary of Indicators: 2020 State of the Lansing Region Benchmarking Report		2014		2018	Rank Among Peers (2018)	% Change 2014-18	5 Year Trend	Rank Among Peers (Trend
Demographic Indicators	_		_					
Population		540,068		550,085	11th	1.9%	Ŷ	11th
Net-migration		336		5	11th	1.570	T	1101
Net talent migration		-2,196		1,160	8th			
Gen Z population (share of total pop)		_,		23.3%	2nd			
Millennial population (share of total pop)				22.6%	7th			
Baby boomer population (share of total pop)				23.0%	3rd			
Economic Growth Indicators				25.070	5.0			
		20,867	<u>^</u>	22.462	11th	7.6%		8th
Real GDP (in millions of chained 2012 USD)	\$.,	\$	22,462	11th		•	11th
Labor Force growth		273,981		281,327		2.8%	•	
Employment growth		217,429		226,159	11th	4.0%	₽	11th 8th
Unemployment rate Knowledge sector ampleyment (share of total ampleyment)		6.1%		3.6%	3rd	-2.5%		
Knowledge sector employment (share of total employment)		9.4%		8.8%	3rd 9th	1.6% -5.8%	→	10th 11th
High tech employment (share of total employment)		10.3%		8.9%	11th	-0.1%	♠	10th
Private sector employment (share of total employment) Public sector employment (share of total employment)		76.1% 23.9%		76.1% 23.9%	2nd	0.1%	→	3rd
Establishments					11th	0.1%	→	12th
Total export product/sales (in millions)	\$	10,140 936.0	\$	10,175 1,434.1	11th	53.2%	<u>~</u>	12ti
	Ş	930.0	Ş	1,434.1	1101	33.270	T	130
Community Prosperity Indicators						1		
Median household income	\$	49,545	\$	58,833	11th	18.7%	<u> </u>	4th
Per capita income	\$	26,315	\$	30,836	11th	17.2%	Tr.	7th
Average wages	\$	45,549	\$	50,430	10th	10.7%	•	7th
Median housing value	\$	125,284	\$	153,930	12th	22.9%	Tr.	6th
Median gross rent	\$	774	\$	844	12th	9.0%	₽	12th
Housing construction permits		758		825	11th	8.8%	•	11th
Households earning below ALICE poverty/livable level				40.0%	4th			
Education and Talent Indicators						٠		
Student enrollment, undergraduate		70,565		63,355	9th	-10.2%	•	10th
Student enrollment, graduate		17,593		15,701	7th	-10.8%	•	10th
Total degrees awarded, undergraduate		8,140		9,310	6th	14.4%	•	1st
Total degrees awarded, graduate		3,070		2,877	9th	-6.3%	•	12th
STEM degrees awarded		2,118		2,770	7th	30.8%	Ŷ	2nd
Share of STEM degrees awarded		18.9%		22.6%	4th	3.7%	Ŷ	4th
Edu. attainment; (age 25+ with assoc. degree or higher)		41.9%		43.8%	8th	1.9%	₽	11th
Highly educated young ppl (age 25-34 with bachelor's or higher)		37.3%		39.2%	10th	1.9%	1	11th
Entrepreneurship & Innovation Indicators								
University patents issued		40		35	8th	-12.5%	•	8th
University start-ups		1		2	9th	100.0%	•	2nd
University R&D expenditures	\$ 5	58,300,000	\$ 7	15,290,000	7th	28.1%	•	2nd
University tech transfer (average rank on 5 metrics)		6.8		7.6	8th		•	
Place, Livability, and Connectivity Indicators								
Mean commute time (minutes)		23.4		24.1	9th	3.1%	^	5th
Share of workers commuting by bus, bike, or walk		7.7%		6.6%	5th	-1.1%	ı,	11th
Walk, transit, and bike score (average score)				56	3rd			
Average percent of possible sunshine				51.0%	10th			
Average household spend on arts, culture, and entertainment				\$561	11th			
Share of employees in arts, culture, and entertainment		1.6%		2.0%	6th	0.4%	•	3rd
Airport connectivity (# of direct destinations within the region)				7	11th			

Methodology



Anderson Economic Group followed a rigorous methodology to identify peer regions, specify benchmarks, and compare Lansing to its peers.

Lansing Region Definition

In September 2018, the Office of Management and Budget revised the delineation of the Lansing-East Lansing Metropolitan Statistical Area (MSA) by adding Shiawassee County to the three existing counties: Ingham, Clinton, and Eaton. This is the definition used in this report.

Criteria for Selection of Peer Regions

The selection of the peer regions was based on:

- Presence of Big Ten, land-grant or other major university;
- Presence of state government;
- Economic and industry makeup of the region;
- Competitive environment for talent and business attraction;
- · Cultural and geographic similarities; and
- Regional prosperity vision.

Data Sources and Vintage

In general, data was collected and analyzed for the last five years (2014-2018). For some indicators, data was available for the most recent year, but some are based on other years as indicated below.

For Lansing MSA data that did not include Shiawassee County, data was adjusted using a weighted average based on the relevant unit of measurement and data availability. Similar adjustments were made as needed for two other peer regions.

DEMOGRAPHICS: The data for population and migration were obtained from the U.S. Census Bureau, American Community Survey. The 2018 data for age groups was obtained from Esri, Inc.

ECONOMIC GROWTH: The data for employment by industry was obtained from the U.S. Census Bureau, American Community Survey. The data on GDP comes from the U.S. Bureau of Economic Analysis. Data on labor force, employment, and establishments was obtained from the U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Data on occupational employment comes from the U.S. Bureau of Labor Statistics, Occupational Employment Statistics. Data on high tech employment was obtained from the U.S. Census Bureau, County Business Patterns. Knowledge sector employment data was obtained from the County Business Patterns and from the Integrated Postsecondary Education Data System (IPEDS). Data for the most recent year on the largest employers in the Lansing region and on business attraction in the Lansing region was obtained from LEAP. Data on total exports comes from the U.S. Department of Commerce International Trade Administration.

COMMUNITY PROSPERITY: The data for median income, median housing value, and median gross rent, was obtained from the U.S. Census Bureau, American Community Survey. Data on average wages was obtained from the U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Data on housing construction permits comes from the U.S. Census Bureau. 2016 data on ALICE threshold households was obtained from United for Alice.

EDUCATION AND TALENT: Data for student enrollment and degrees awarded was obtained from IPEDS.

ENTREPRENEURSHIP AND INNOVATION: Tech transfer activity, university patent, and R&D expenditure data for 2018 and 2015 come from the Association of University Technology Managers, Inc. (AUTM).

PLACE AND CONNECTIVITY: The data for employment by industry was obtained from the U.S. Census Bureau, American Community Survey. The 2018 data for spending on arts, culture, entertainment, and recreation was obtained from Esri, Inc. Data on airports and airport connectivity was gathered from Esri, Inc. and from airport websites. Data for the most recent year on walk, bike, and transit scores were gathered from Walkscore.com.

ABOUT ANDERSON ECONOMIC GROUP

Founded in 1996, Anderson Economic Group is a boutique research and consulting firm with offices in East Lansing, Michigan, and Chicago, Illinois. The experts at AEG have particular expertise in public policy, economic analysis, and economic development. Relevant publications from the firm include:

- State Economic Competitiveness Benchmarking, compiled for Business Leaders for Michigan, 2012-19.
- Annual Benchmarking of Michigan's University Research Corridor, 2007-19.
- Annual State Business Tax Burden Rankings, 2007-19.
- Annual Technology Industry Report, compiled for Automation Alley, 2006-16.



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